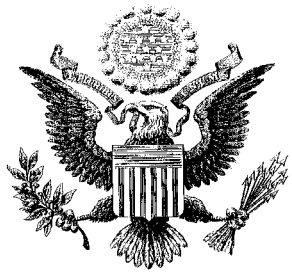
LIABILITY FOR MEDICAL MALPRACTICE: ISSUES AND EVIDENCE

A JOINT ECONOMIC COMMITTEE STUDY



Vice Chairman Jim Saxton (R-NJ)

Joint Economic Committee
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Executive Summary

The past several years have witnessed a considerable increase in the cost and impact of medical malpractice litigation. The result has been higher malpractice insurance premiums for health care providers, which in turn has led to higher costs for the health care system as well as reduced access to medical services. In 2001, premiums for medical malpractice insurance topped $21 billion, double the amount ten years earlier.

This paper presents an analysis of the current medical malpractice system and examines the proposed federal reform legislation. The benefits of reforming of the medical liability system are significant and could:

- Yield significant savings on health care spending;
- Reduce unnecessary tests and treatments motivated out of fear of litigation;
- Encourage systematic reform efforts to identify and reduce medical errors;
- Halt the exodus of doctors from high-litigation states and specialties;
- Improve access to health care, particularly benefiting women, low-income individuals and rural residents;
- Produce $12.1 billion to $19.5 billion in annual savings for the federal government; and
- Increase the number of Americans with health insurance by as many as 3.9 million people.

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LIABILITY FOR MEDICAL MALPRACTICE: ISSUES AND EVIDENCE

I. INTRODUCTION

The past several years have witnessed a considerable increase in the cost and impact of medical malpractice litigation. Between 1994 and 2001, the typical medical malpractice award increased 176 percent to $1 million. The result has been higher malpractice insurance premiums for health care providers, which in turn has led to higher costs for the health care system as well as reduced access to medical services. In 2001, total premiums for medical malpractice insurance topped $21 billion, more than double the amount ten years earlier.

The liability system exists for two goals: to compensate the negligently injured, and to penalize and deter negligent acts. Unfortunately, in the medical arena the liability system fails on both accounts: the system does not direct appropriate compensation to victims of negligence, nor does it effectively deter negligent behavior. To the contrary, the medical liability system impedes efforts to improve patient safety, and may actually increase the number of errors. Moreover, the medical liability system imposes exorbitant costs on the health care system both directly and indirectly, costs that increase the number of Americans without health insurance and add to the federal deficit. Although some individuals fare well under the present system, the system as a whole does not meet the needs of the negligently injured or the general population. The negative aspects of the medical liability system have a particularly adverse effect on women, low-income individuals and rural residents.

For these reasons, medical malpractice reform has received considerable attention in the U.S. Congress and state legislatures. Reform of the medical liability system could yield significant benefits that could:

- Yield significant savings on health care spending;
- Reduce unnecessary tests and treatments motivated out of fear of litigation;
- Encourage systematic reform efforts to identify and reduce medical errors;
- Halt the exodus of doctors from high-litigation states and specialties;
- Improve access to health care, particularly benefiting women, low-income individuals and rural residents;
- Produce $12.1 billion to $19.5 billion in annual savings for the federal government; and
- Increase the number of Americans with health insurance by up to 3.9 million people.

This paper presents an analysis of the current medical malpractice system, focusing on the cost and impact excessive litigation has on the affordability and accessibility of health care. Legislative remedies are described, as well as the potential impact of such reforms.

II. THE PRESENT SYSTEM FOR MEDICAL LIABILITY

The liability system has two ostensible goals: to compensate the negligently injured, and to deter negligent behavior. In health care, the tort system allows individuals who are injured through the negligence of their health care provider to seek compensation through litigation. In theory, negligent behavior is deterred by making the negligent party bear the burden of the award.

Medical malpractice claims are mainly initiated in state courts. Although laws vary by state, in general the legal standard for malpractice has four elements:[1]

- The presence of a physician-patient relationship that establishes the duty of care;
- An adverse outcome (actual injury or harm);
- Negligence by the provider (failure to meet the standard of care); and
- Direct causality between the negligence and the adverse outcome

In the context of medical malpractice, negligence depends on "conduct which falls below the standard established by law for the protection of others against unreasonable risk of harm."[2] For doctors and other health care providers, this standard means that doctors should provide the level and type of care that is customary and usual in the medical community or in their specialty field.

The most common claim for medical harm is the medical malpractice claim, which applies directly to the negligent physician. However, medical malpractice is not the only legal option available to claimants seeking redress for damages.[3] Physicians are also open to claims of intentional torts.[4] Medical device and pharmaceutical manufacturers can be sued under such legal doctrines as product liability, negligence, strict liability and breach of warranty. Hospitals and managed care organizations, which may be exempt from many malpractice claims, can be sued under the principles of vicarious liability, joint and several liability and corporate negligence.

Extent of Medical Malpractice

The best estimates on the frequency of malpractice are based on two separate large-scale studies of hospitalizations, one in New York and the other in Colorado and Utah. Although the studies were done nearly a decade apart, they revealed remarkable similarities in the pattern of malpractice claims. In the New York study, based on 1984 data, 1.0 percent of hospitalizations

[1] W. Page Keeton et al., *Prosser and Keeton on the Law of Torts*, 5th edition (St. Paul, MN: West Publishing Co., 1984), 164-165.
[2] American Law Institute, *Restatement (Second) of Torts* (St. Paul, MN: American Law Institute Publishers, 1965), §282.
[3] For a review of these issues, see: Dan B. Dobbs, *The Law of Torts* (St. Paul, MN: West Group, 2000), 666-671, 674-679; and U.S. General Accounting Office, *Medical Liability: Impact on Hospital and Physician Costs Extends Beyond Insurance*, GAO/AIMD-95-169 (September 1995), 21.
[4] Henry Cohen, "Medical Malpractice Liability Reform: Legal Issues and Fifty-State Survey of Caps on Punitive and Noneconomic Damages," Congressional Research Service, Report RL31692, 2/6/2003.

were found to have injuries caused by negligence.[5] By comparison, the Colorado and Utah study, based on 1992 data, indicated that less than 1.0 percent of hospitalizations had injuries due to negligence.[6] The malpractice rate for the health care system as a whole is likely significantly lower.[7]

The incidence of malpractice, however, is quite distinct from the filing of malpractice claims. A defining feature of the medical liability system is that most events of malpractice do not result in a legal claim, and most claims of malpractice are not tied to any act of negligence. Overall, approximately 80 percent of malpractice claims show no signs of a negligent injury.[8] Conversely, only about 3 percent of injuries due to negligence result in a claim.[9] These figures suggest that the medical liability system malfunctions on a fundamental level.

It is not clear why such a small portion of negligent injuries lead to a malpractice claim. One possible reason is that the injury was too minor to warrant a lawsuit. Data show that most negligent injuries are only moderately incapacitating.[10] Another possible reason is that attorneys, who typically work on contingency fees arrangements, are only willing to take on claims for "attractive" clients (i.e., sympathetic victims with large damage claims). Alternatively, some people are simply not litigious in nature, or do not wish to damage a long-standing relationship with their doctor, especially if the doctor exhibits good communication and empathy skills. Yet another explanation is that patients simply do not recognize that they have suffered an injury due to negligence.

The Market for Medical Liability Insurance

The role of malpractice insurance is to pay for legal defense costs and damages inflicted through negligence by a doctor or medical professional. The market for malpractice insurance consists of two broad categories of insurance: conventional and alternative. The conventional market provides coverage through traditional insurance companies like A.I.G., C.N.A Insurance or the St. Paul Companies. Malpractice insurance purchased through traditional means totaled $7.2 billion in 2001.[11] This figure, however, excludes the much larger alternative market. The alternative market comprises mechanisms such as joint underwriting associations, captive

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[5] Harvard Medical Practice Study, *Patients, Doctors and Lawyers: Studies of Medical Injury, Malpractice Litigation and Patient Compensation in New York* ([Cambridge, MA?]: 1990), 3.

[6] Eric J. Thomas et al., "Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado," *Medical Care* 38 (2000): 261.

[7] Preventable injuries are more likely to occur among more complicated cases, such as those requiring hospitalization. Presumably, therefore, medical care provided outside of a hospital setting would have a much lower rate of malpractice, thus lowering the overall rate.

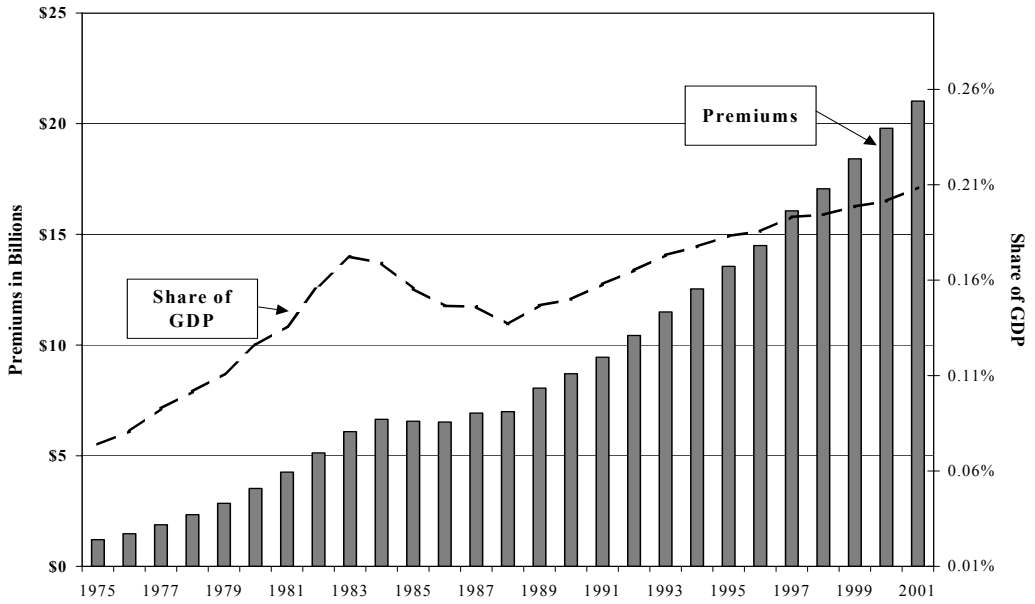
[8] Published data indicate 83 percent of New York claims and 78 percent of the Colorado-Utah claims did not involve negligence. Harvard Medical Practice Study, 7-34; and Studdert et al., 253.

[9] Published data indicate that there was no malpractice claim for 97 percent of New York and 97 percent of the Colorado-Utah incidents of negligent injuries. Harvard Medical Practice Study, 7-37; and Studdert et al., 255.

[10] See A. Russell Localio et al., "Relation between Malpractice Claims and Adverse Events Due to Negligence," *New England Journal of Medicine* 325, no. 4 (July 1991), 247 (showing that 58 percent of negligent injuries required less than six months of recovery); and Thomas et al., 267 (showing that about 95 percent of negligent injuries resulted in non-permanent disability).

[11] A.M. Best data cited in Insurance Information Institute, *The I.I.I. Fact Book 2003* (New York, NY: Insurance Information Institute, 2002), 27.

Figure 1. Medical Malpractice Premiums



Source: Tillinghast-Towers Perrin.

insurance companies and risk retention groups, all of which are ways groups of individuals, organizations or trade associations can come together and form an insurance company that they themselves run.[12] The alternative market for malpractice insurance is roughly twice as large as the traditional market. Altogether, total premiums for medical malpractice liability insurance amounted to $21.0 billion in 2001, according to the actuarial consulting firm Tillinghast-Towers Perrin.[13] Physicians purchased the bulk (60 percent) of malpractice insurance, followed by hospitals (28 percent) and other insureds (12 percent).[14]

Over the last ten years (1992-2001), premiums for medical malpractice insurance more than doubled, increasing an average of 8.1 percent per year. That rate is three times faster than the overall rate of inflation over the same period, and double the rate of inflation for medical care.[15] Relative to the size of the economy, measured as share of gross domestic product (GDP), malpractice insurance has increased every year since 1989 and stands three times the level it was in 1975. Figure 1 displays the pattern of premium levels and GDP share for 1975 to 2001.

Accompanying the rise in premiums has been a remarkable change in the structure of the malpractice insurance market. Most of the growth in malpractice insurance in the past decade has occurred in the alternative markets. Roughly 70 percent of premium growth over 1992-2001 is attributable to the increase in alternative markets, versus just 30 percent due to traditional

[12] For more information on alternative markets, see Conning & Co., *Alternative Markets: An Ever-Evolving Mosaic* (Hartford, CT: Conning & Co., 1999).
[13] Tillinghast-Towers Perrin, *U.S. Tort Costs: 2002 Update – Trends and Findings on the Costs of the U.S. Tort System* (New York, NY: Tillinghast-Towers Perrin, 2003), Appendix 2.
[14] *Ibid*., 16.
[15] U.S. Department of Labor, Bureau of Labor Statistics, "Consumer Price Index," [March 2003], online at http://www.bls.gov/cpi/home.htm.

markets. The term alternative markets, as used in this paper, refers to forms of malpractice insurance that do not go through a traditional third-party insurer. Common alternative insurance mechanisms include self-insurance (where a firm or group of firms assume all or much of their risk exposure themselves), captive insurers (which are wholly-owned subsidiaries of the firms they insure) and risk retention groups (a group of firms or individuals that come together to form a limited-purpose insurer). Alternative forms of malpractice insurance are often created for the sole, dedicated purpose of providing such coverage and are controlled by the medical professionals they serve. Alternative insurers focus more on providing stable coverage rather than on maximizing profits, thus limiting the risk such organizations will exit the market due to adverse market conditions.[16] These features, combined with the decrease in the availability of traditional coverage described below, have made alternative markets a very popular source for malpractice insurance.

A crucial reason for the growth of the alternative market is rapid deterioration in the financial performance of the sector. For much of the 1990s, the medical malpractice line of insurance was highly profitable. This profitability attracted many firms to compete for malpractice coverage, moderating price increases. Recent trends, however, have created an environment that has reduced revenues and increased costs, causing medical malpractice to become one of the most unprofitable insurance lines. In 2001, malpractice insurers paid out $1.34 in claims and costs for every $1.00 it received in revenue (including investment income).[17]

Four factors account for the structural changes that undermined the profits of malpractice insurers, according to James Hurley of the American Academy of Actuaries.[18] First, a key component of the financial deterioration has been the escalating size of malpractice claims. The increase in the average cost of settlements and jury verdicts (discussed below), particularly very large awards, led to many rate increases. Second, insurers have faced increased reinsurance costs. Reinsurers, who provide insurance to insurance companies, posted weaker financial results in recent years, forcing them to charge their clients (i.e., insurers) higher rates. A third contributing factor has been deteriorating returns on the investment assets of insurers, although the overall impact of this factor has often been overplayed as stocks only account for about 15 percent of assets held by insurance companies. Finally, in the early and mid-1990s, insurer financial results benefited from favorable reserve development. In practical terms, what happened is that some money set aside for potential claims filed in the 1990s turned out to be unnecessary, and was eventually converted to profits. This short-term phenomenon has run its course and thus insurers no longer can count on this "bonus" profit.

Recent developments in the medical malpractice market reflect these trends. Of particular concern is the recent decrease in the availability of malpractice insurance. Weak financial results have driven several insurers from the market. According to the American Academy of Actuaries, the industry's premium capacity has dropped 15 percent.[19] The

[16] For more information on these trends, see Conning & Co., *Medical Malpractice Insurance: A Prescription for Chaos* (Hartford, CT: Conning & Co., 2001), 6, 81-91.
[17] James Hurley, American Academy of Actuaries, Prepared Testimony to the Subcommittee on Health, Committee on Energy and Commerce, U.S. House of Representatives, 2/27/2003.
[18] *Ibid*.
[19] *Ibid*.

decrease in firms willing to provide malpractice insurance is evidenced by the complete withdrawal from the market of several malpractice insurers, including Phico, MIIX, Frontier and Reciprocal of America. In addition, St. Paul (the largest commercial insurer, covering 42,000 doctors) has ceased writing or renewing policies for malpractice.[20]

The combination of deteriorating profitability, reduced supply and the structural market changes has created an environment where coverage can be extremely difficult to obtain and in which reduced competition makes significant price increases more common. Moreover, these changes are not merely part of a short-term insurance cycle. Rather, the negative developments (such as increasing claim size and rising reinsurance costs) are likely to be permanent in nature while the positive developments that boosted profits in the past (such as favorable reserve development) are short-lived. In fact, insurers do not exit an insurance market completely simply due to short-term cycles. They only do so if the long-term outlook is so bleak as to make continued business operation untenable.[21]

The growth in aggregate premiums reflects the growth in premiums charged to individual doctors. Table 1 lists the median rate increases for medical liability insurance premiums for the last three years by area of practice.[22] As the data show, internists have experienced three consecutive years of at least 15 percent premium hikes. The typical rate increase has tripled for general surgeons and doubled for obstetricians/gynecologists (Ob/Gyn). The high cost of the current medical liability system most adversely impacts obstetricians, most surgical-related specialties (especially neurosurgeons), and emergency room physicians.[23]

Table 1. Median Rate Increases in Malpractice Premiums by Specialty

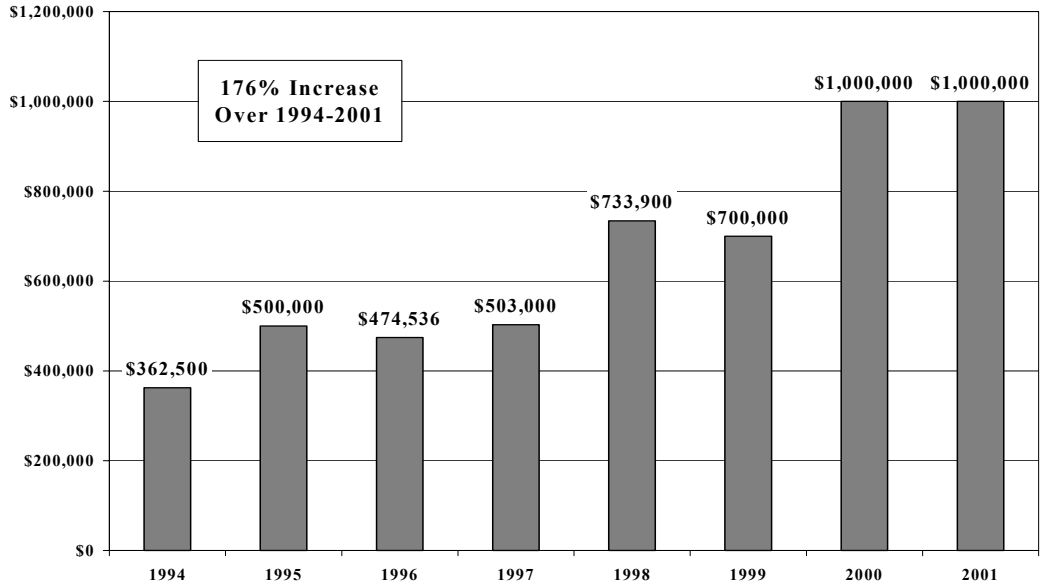
	2000	2001	2002
Internists	15.0%	15.0%	17.6%
General Surgeons	9.6%	14.6%	29.1%
Obstetricians/Gynecologists	7.0%	12.5%	15.3%

Source: *Medical Liability Monitor*.

Although the direct payment of malpractice insurance premiums falls on the insured doctor or hospital, the costs are passed on to insured individuals, to one degree or another, in the form of higher premiums. In 2001, malpractice premiums averaged about $87 per insured individual, or close to $350 per family of four. These estimates do not include the costs of defensive medicine (treatment decisions motivated to avoid litigation rather than to benefit the patient), which can be three to six times greater than malpractice premiums. It is inevitable that those costs passed on to consumers adversely impact the affordability of health insurance.[24]

[20] Joseph B. Treaster, "Doctors Face a Big Jump in Insurance," *New York Times*, 3/22/2002
[21] See Conning & Co., *Alternative Markets*, 65.
[22] Figures include only rate increases, though rate decreases in the past three years have become increasingly uncommon. "Hard Market Wallops Physicians; Average Rate Increases More Than Double Those in 2001," *Medical Liability Monitor* (October 2002); and "Medical Liability Rates Continue Their upward Swing," *Medical Liability Monitor* (October 2001).
[23] See *infra* notes 67 to 85.
[24] See the sections "Demand for Health Insurance: Impact on Affordability" and "Impact on the Number of Uninsured" below for a more detailed discussion of this effect.

Figure 2. Medical Malpractice Damage Awards -- Median



Source: Jury Verdict Research.

Malpractice Damage Awards

One of the key drivers of costs for medical malpractice insurance is the recent surge in the size of damage awards in lawsuits. As Figure 2 shows, the typical (median) damage award in medical malpractice cases jumped 176 percent from 1994 to 2001, according to the research firm Jury Verdict Research.[25] The latest data indicate that the median award amount now tops $1 million, representing annual growth of 15.6 percent per year over 1994-2001, while the average award reached $3.9 million in 2001. The Physician Insurers Association of America (PIAA), representing firms that provide insurance to physicians, estimates that the average out-of-court settlement in 2001 was approximately $299,000 per individual defendant,[26] although most malpractice claims involve at least two defendants.[27]

[25] Jury Verdict Research, *Current Award Trends in Personal Injury: 2002 Edition* (Horsham PA: LRP Publications, 2003), 18. The only alternative national source of annual data on malpractice settlements is the National Practitioner Data Bank (NPDB) in the U.S. Department of Health and Human Services. However, both the General Accounting Office and the Inspector General's office have reported on extensive data problems in the NPDB that make its data unreliable, incomplete and biased. U.S. General Accounting Office, *National Practitioner Data Bank: Major Improvements Are Needed to Enhance Data Bank's Reliability*, GAO-01-130 (November 2000); and U.S. Department of Health and Human Services, Office of the Inspector General, *Managed Care Organization Nonreporting to the National Practitioner Data Bank: A Signal for Broader Concern*, OEI-01-99-00690 (May 2001).

[26] Lawrence E. Smarr, Physician Insurers Association of America, Prepared Testimony to the Committee on the Judiciary, U.S. Senate, 2/11/2003.

[27] The median number of defendants in medical malpractice tort cases was 2.0 in 1996. U.S. Department of Justice, Bureau of Justice Statistics, *Tort Trials and Verdicts in Large Counties, 1996*, NCJ 179769 (Washington, DC: Bureau of Justice Statistics, 2000), 2.

There has also been a large jump in million-dollar verdicts. In 1995-97, a little more than one in three (36 percent) cases resulted in an award of $1 million dollars or more. By 1998-99, the rate of million-dollar awards reached 43 percent. By 2000-01, more than one-half (54 percent) of medical malpractice awards were at least $1 million dollars, and one-quarter of all awards today exceed $2.7 million.[28]

The basis of malpractice claims against physicians generally falls into one of three categories. Data from a large malpractice insurer indicate that failure to diagnose is the most common basis for a claim, at 28 percent of claims. Surgery-related claims account for 27 percent claims, and improper treatment 26 percent of claims.[29] The remaining 19 percent were for claims such as adverse reaction to anesthesia, injection site injuries and lack of informed consent.

Punitive damages are relatively infrequent in malpractice cases, occurring in 2 percent of cases during 1999-2001.[30] This figure somewhat understates the impact of such awards, however, since punitive damages can be enormous. A survey of jury verdicts in malpractice cases in 1996 found that the median amount of punitive damages, when awarded, was $2.5 million.[31]

The large majority of malpractice claims never reach a trial, as seen in Table 2. Three-fifths (61 percent) of claims are either dropped or dismissed, while one-third (32 percent) are settled out of court prior to trial.[32] Of those cases that do go to court, defendants prevail 60 percent to 80 percent of the time.[33] The relatively low success rate is consistent with the assertion that many malpractice claims are without merit. Even if most claims that reach trial lose, health care professionals still incur large costs to defend themselves. According to the Physicians Insurer Association of America, defense costs averaged close to $86,000 per claim in cases where the defendant won at trial (Table 2).[34] Even in cases where the claim was dropped or dismissed, defense costs averaged nearly $17,000.

Table 2. Claims Disposition and Defense Costs

Claim Disposition	Share of Claims	Average Defense Cost
Dropped or Dismissed	61%	$16,743
Settled	32%	$39,891
Trial Verdict		
Defense verdict	6%	$85,718
Plaintiff verdict	1%	$91,423

Source: Physician Insurers Association of America.

In terms of compensation for negligent injuries, the system undoubtedly provides substantial compensation to some claimants, such as in cases of gross negligence or when the patient exhibits severe damages. However, there is evidence that the tort system provides

[28] Jury Verdict Research, 43.
[29] U.S. General Accounting Office, *Medical Liability*, 20-21.
[30] Jury Verdict Research, 20.
[31] U.S. Department of Justice, 7.
[32] Smarr.
[33] Smarr (reporting a plaintiff recovery rate at trial of 20 percent); U.S. Department of Justice (reporting a plaintiff recovery rate at trial of 23.4 percent); and Jury Verdict Research, 46 (reporting a plaintiff recovery rate at trial of 39 percent).
[34] Smarr.

uneven and inappropriate levels of payments. As noted above, the vast majority of negligent injuries do not lead to a claim. By definition, if injured parties do not file claims, then the tort system provides them with no compensation. Among those claims that are filed, the vast majority shows no signs of an injury or harmful event. If such claimants receive a payout, then the tort system is providing compensation to the wrong people. Even when legitimately injured parties are able to prove negligence, plaintiffs' lawyers routinely take 33 percent and sometimes 40 percent (or more) of that award as payment for legal fees.[35] The unevenness also stems from awards for pain and suffering. Since pain and suffering (or non-economic) damages are intrinsically impossible to measure objectively, the size of such payments varies considerably across homogenous groups of claims (i.e., different amounts for the same injury in different people).

A drawback of the medical liability system is the incentives for unwarranted, or nuisance, lawsuits. The potential for sizeable awards can lead to significant fraud and abuse of the tort system.[36] The large dollar size of successful action, the ability to seek non-economic pain and suffering awards, and the availability of contingency fees for plaintiffs' attorneys all could affect claiming rates. Although the data indicate that the number of claims has not climbed in recent years, these factors could encourage marginal cases to be pursued. Pain and suffering damages, in particular, could supply a powerful incentive to file nuisance claims. The tort system as a whole pays out more for pain and suffering than it does for measurable economic loss,[37] and it has been reported that up to one-half of all payments to individuals in medical malpractice claims are for pain and suffering.[38]

Another shortcoming of the malpractice liability system is the length of time negligently injured parties must wait before receiving payment. According to survey data gathered by Jury Verdict Research, there is a median wait of more than two years (25 months) between the time of the incident and the time the claim is filed. The litigation process, from date of filing to a jury verdict takes the typical claim another two years (26 months). Altogether, injured parties can expect to wait more than four years (51 months) between the time of the alleged malpractice incident and a jury verdict.[39] This prolonged wait has a particularly severe impact on low-income victims of malpractice. Such claimants may lack the financial resources to wait out the process and instead settle more quickly than might be warranted by their injury.

III. MEDICAL MALPRACTICE AND THE QUALITY OF HEALTH CARE

One of the primary goals of the medical liability system is to improve the quality of health care by penalizing negligent behavior. In order to accomplish this goal, the tort system

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[35] See Patricia M. Danzon, "Report on Awards for Noneconomic Loss," in *Medical Malpractice Policy Guidebook*, ed. Henry G. Manne (Jacksonville, FL: Florida Medical Association, 1985), 141-142 (reporting a median contingency fee of 38 percent for large medical malpractice claims); and Deborah R. Hensler et al., *Compensation for Accidental Injuries in the United States* (Santa Monica, CA: RAND, 1991), 135-136 (reporting a median contingency fee of 33 percent for accidental injury claims)

[36] Stephen J. Carroll, Allan F. Abrahamse, M. Susan Marquis, and Mary E. Vaiana, *Liability System Incentives to Consume Excess Medical Care* (Santa Monica, CA: RAND, 1995).

[37] Tillinghast-Towers Perrin, 17.

[38] Danzon, "Report on Awards for Noneconomic Loss," 136.

[39] Jury Verdict Research, 19-20.

must exhibit accuracy in both the assignment of negligence and in the size of damage awards. The available data on this aspect of the tort system strongly indicate that there is significant discrepancy between actual acts of negligence and tort-system-assessment of negligence. As previously noted, about 80 percent of malpractice claims exhibit no evidence of malpractice. In fact, most claims are not even tied to any injury.[40] The discordance between claims and negligence makes it very difficult, if not impossible, for health care providers to recognize and thereby avoid negligent behavior.

One study followed a sample of malpractice claims for a period of ten years to identify the relationship between negligence and payments to claimants.[41] The study's authors found that in cases where there was no evidence of negligence, 43 percent of claims resulted in payment for the claimant. By contrast, those claims where there was an injury caused by negligence, only 56 percent ended with payment. This evidence supports the contention that the tort system not only fails to compensate negligent injuries, but also fails to penalize negligent behavior.

Other evidence supports this conclusion. A 1997 study by Bryan Liang shows that doctors have little knowledge of the legal system, largely disagreed with jury verdicts in malpractice cases, and are unable to predict what juries will do in such cases. These findings led Liang to observe:

> If the actors within the incentive structure [i.e., doctors] and the lay agents who assess their behavior [i.e., juries] are under different understandings regarding appropriate versus inappropriate care, it is unlikely that the incentive structure goals of optimal deterrence and cost-effective provision of care will be fulfilled in any meaningful way.[42]

A range of other studies report findings consistent with this conclusion. For example, a 1996 study of family doctors in Florida found that better doctors (those with greater levels of medical knowledge) are more likely to be sued than other doctors.[43] Likewise, multiple studies have reported that good communication skills are more important than quality of care in predicting malpractice claims.[44] Other empirical evidence indicates that damage awards are more a function of injury severity than quality of care.[45]

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[40] Studdert et al., 253; Harvard Medical Practice Study, 7-36.

[41] Troyen A. Brennan, Colin M. Sox, and Helen R. Burstin, "Relation between Negligent Adverse Events and the Outcomes of Medical Malpractice Litigation," *New England Journal of Medicine* 335 (1996): 1963-1967.

[42] Bryan A. Liang, "Assessing Medical Malpractice Jury Verdicts: A Case Study of an Anesthesiology Department," *Cornell Journal of Law and Public Policy* 7, no. 1 (Fall 1997), note 6.

[43] John W. Ely et al., "Malpractice Claims against Family Physicians: Are the Best Doctors Sued More?" *Journal of Family Practice* 48, no. 1 (January 1999).

[44] Wendy L. Levinson et al., "Physician-Patient Communication: The Relationship with Malpractice Claims among Primary Care Physicians and Surgeons," *Journal of the American Medical Association* 227, no. 7 (February 19, 1997): 553-559; and Philip J. Moore et al., "Medical Malpractice: The Effect of Doctor-Patient Relations on Medical Patient Perceptions and Malpractice Intentions," *Western Journal of Medicine* 173, no. 4 (October 2000): 244-250.

[45] Henry S. Farber and Michelle J. White, "Medical Malpractice: An Empirical Examination of the Litigation Process," National Bureau of Economic Research Working Paper 3428 (September 1990) (showing that quality of care explains only a small portion of variance in award amounts, while injury severity exhibits much greater

Taken as a whole, the medical liability system appears to be, quite simply, ineffective at consistently penalizing negligence. Appropriate acts of medical care can easily result in large damage awards, while true acts of negligence go unpunished. As one critic has observed, "It's like a traffic cop giving out lots of tickets to people not speeding and lots of speeders are not getting tickets."[46]

Given the dramatic increase in health care liability, an observer might suppose that health outcomes had deteriorated over the last several years. Ironically, however, the surge in medical malpractice litigation costs has occurred at the same time as a general improvement in key indicators of the health status of Americans. As seen in Table 3, there has been a marked decrease over the last decade in some of the leading causes of death in the U.S.[47] In addition, the infant mortality rate has improved by 25 percent and the average life expectancy at birth has increased by a year and a half.[48] These indicators suggest that health care in the U.S. is generally improving and dispels the notion that widespread negligence in medicine has hurt the overall quality of health care.

Table 3. Mortality Rates, 1990-2000

	1990	2000	Change
Heart Disease*	321.8	257.5	-20.0%
Cancer*	216.0	200.5	-7.2%
Stroke*	65.5	60.2	-8.1%
Accidents*	36.3	33.9	-6.6%
Influenza & Pneumonia*	36.8	24.3	-34.0%
Infant Mortality†	9.2	6.9	-25.0%
Life Expectancy (years)	75.4	76.9	+2.0%

* Age-adjusted death rate per 100,000 population.
† Deaths per 1,000 live births.
Source: U.S. Department of Health and Human Services.

While the above analysis indicates that health care liability fails as an effective deterrent to medical malpractice, an equally strong argument can be made that the liability system actually impedes improvements in the delivery of health care and may even increase the rate of errors. First, to the degree that the threat of legal liability induces doctors to practice defensive medicine, patients are subjected to additional tests and treatments which themselves expose patients to additional risk of injury. Moreover, medical liability can make doctors averse to recommending treatments that might be considered riskier, but that are also more medically appropriate.[49]

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explanatory power); and Brennan, Sox, and Burstin (showing injury severity was more predictive of claims payments than was negligence).

[46] Troyen Brennan, as quoted by Samuel Jan Brakel, "Using What We Know about Our Civil Litigation System: A Critique Of 'Base-Rate' Analysis and Other Apologist Diversions," *Georgia Law Review* 31 (Fall 1996).

[47] Figures are death rates per 100,000 population, adjusted for population age differences over time. Data from the U.S. Department of Health and Human Services, National Center for Health Statistics, as reported in U.S. Census Bureau, *Statistical Abstract of the United States: 2002* (Washington, DC: Government Printing Office, 2002).

[48] U.S. Department of Health and Human Services, National Center for Health Statistics, *National Vital Statistics Report* (various issues).

[49] See generally, Bryan A. Liang, "The Adverse Event of Unaddressed Medical Error: Identifying and Filling the Holes in the Health-Care and Legal System," *Journal of Law, Medicine & Ethics* 29 (2001): 346-368.

Second, in many ways, medical liability deters health care providers from recognizing and reporting errors and working to prevent future mistakes. The legal setting in which malpractice claims occur is hostile to efforts to reduce error and improve safety. Current rules of evidence and discovery generally undermine reporting systems needed to systematically identify how and why errors occur.[50] A 2000 report by the Institute of Medicine found that the most important threat to patient safety was not simple human mistakes, negligence or incompetence, but rather human mistakes that result from poor system design, faulty maintenance and inadequate management.[51] Thus, addressing system failures are a crucial aspect to improving patient safety, and legal reform continues to be an inescapable element of such efforts.

The medical malpractice system also exacts a subtler toll on health care by eroding physician morale and damaging the doctor-patient relationship. In a 2002 survey, 87 percent of doctors felt that the overall morale of physicians had fallen in the last five years.[52] Low morale is important because it can reduce job satisfaction among physicians. Indeed, 58 percent of doctors report that their enthusiasm for practicing medicine has declined in the last five years.[53] As a result, doctors are more inclined to retire early or to shift their professions away from patient care. In addition, there is a tendency for malpractice fears to make doctor-patient relationships more adversarial. More than one doctor has reported that excessive litigation has fostered a sense of viewing each patient as a potential malpractice lawsuit rather than a patient in need of help.[54] Together, these trends make it difficult for doctors and patients to establish the kind of personal rapport necessary for better health care.

IV. IMPACT OF THE MEDICAL LIABILITY SYSTEM ON HEALTH CARE COSTS

The problems in the medical liability system impose substantial costs on the U.S. health care system. Most apparent are the direct costs of premiums paid by health care providers. As noted previously, such premiums totaled $21 billion in 2001, and have doubled over the preceding ten years.

The indirect costs of the medical liability system are much larger than malpractice premiums. Principally, these costs manifest as the practice of defensive medicine by doctors and other health care professionals. Defensive medicine is defined as medical care that is primarily or solely motivated by fear of malpractice claims and not by the patient's medical condition alone. The effect can manifest as the prescription of increased diagnosis and treatment procedures beyond what is needed from a purely clinical perspective, and as the avoidance of

[50] See Liang, "Adverse Event"; and Brian A. Liang, "Error in Medicine: Legal Impediments to U.S. Reform," *Journal of Health Politics, Policy & Law* 24, no. 1 (February 1999): 27-58.
[51] Linda T. Kohn, Janet M. Corrigan and Molla S. Donaldson, eds., *To Err Is Human: Building a Safer Health System* (Washington, DC: National Academy Press, 2000), 55.
[52] Kaiser Family Foundation, *National Survey of Physicians* (May 2002), online at http://www.kff.org.
[53] *Ibid*.
[54] For some recent examples, see Joedy McCreary, "Residents Fear for Health Care as West Virginia Surgeons Continue Protest of Insurance Costs," *The Associated Press*, 1/8/2003; Rod Thomson, "In the Medical Malpractice Slugfest, the Patient Inevitably Gets Bruised," *Sarasota Herald-Tribune*, 2/17/2003; and Roberto Kusminsky, Raymond Goldsteen and James P. Boland, "Medical Malpractice Rational Test of No-Fault Patient Care Is Needed," *Charleston Gazette* (West Virginia), 12/14/2002.

procedures which might be appropriate from a clinical standpoint but whose risk-level discourages their use.

A large body of research has accumulated showing that medical malpractice liability causes doctors to practice defensive medicine.[55] In an authoritative study on defensive medicine, Stanford University researchers Daniel Kessler and Mark McClellan found that expanded malpractice liability significantly increased medical expenditures. Specifically, they found "that malpractice reforms that directly reduce provider liability pressure lead to reductions of 5 to 9 percent in medical expenditures without substantial effects on mortality or medical complications."[56] Based on national health expenditure data, Kessler and McClellan's estimates imply that medical liability reforms could have reduced defensive medicine expenditures by between $69 billion and $124 billion in 2001, or between 3.2 and 5.8 times the amount of malpractice premiums.[57] Importantly, the practice of defensive medicine does not produce measurable health benefits.[58]

Surveys of doctors provide additional evidence of defensive medicine.[59] According to a survey of 1,800 doctors published in the journal *Medical Economics*, more than three out of four (76 percent) doctors report that they practice defensive medicine.[60] In terms of the cost impact of defensive medicine, a large majority (68 percent) of respondents felt that defensive medicine increased the costs of their services by at least 6 percent. Another survey found that 79 percent of doctors order more tests than they would based solely on medical need, and 74 percent refer patients to specialists more often.[61]

A final cost of the medical liability system is the expense of administering the judicial system to handle malpractice claims. These expenses include both the cost of administering a

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[55] Robert J. Rubin and Daniel N. Mendelson, "How Much Does Defensive Medicine Cost?" *Journal of American Health Policy* (July/August 1994): 7-15; A. Russell Localio et al., "Relationship between Malpractice Claims and Cesarean Delivery," *Journal of the American Medical Association* 269, no. 3 (January 20, 1993): 366-273; U.S. Congress, Office of Technology Assessment, *Defensive Medicine and Medical Malpractice*, OTA-H-602 (Washington, DC: Government Printing Office, 1994); Steven Shavell, "Economic Analysis of Accident Law," National Bureau of Economic Analysis Working Paper 9483 (March 2003); Daniel P. Kessler and Mark B. McClellan, "Medical Liability, Managed Care, and Defensive Medicine," National Bureau of Economic Research, Working Paper 7537 (February 2000); Lisa Dubay, Robert Kaestner, and Timothy Waidmann, "The Impact of Malpractice Fears on Cesarean Section Rates," *Journal of Health Economics* 18 (1999): 491-522; and Robert Quinn, "Medical Malpractice Insurance: The Reputation Effect and Defensive Medicine," *Journal of Risk and Insurance* 65, no. 3 (1998): 467-484. For an alternative view, see Laura-Mae Baldwin et al., "Defensive Medicine and Obstetrics," *Journal of the American Medical Association* 274, no. 20 (November 22/29, 1995): 1606-1610.

[56] Daniel P. Kessler and Mark McClellan, "Do Doctors Practice Defensive Medicine," National Bureau of Economic Analysis Working Paper 5466 (February 1996), 2.

[57] Calculation is based on the health services and supplies component of national health expenditures from U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, "National Health Expenditures," (2003), online at http://cms.hhs.gov/statistics/nhe/historical.

[58] Kessler and McClellan, "Medical Productivity," 25; Kessler and McClellan, "Defensive Medicine," 33; and Dubay, Kaestner, and Waidmann.

[59] For a review of some older surveys, see U.S. Congress, Office of Technology Assessment, Figure 3-3.

[60] "Once Burned, Twice Defensive," *Medical Economics* 76, no. 14 (July 26, 1999). See also, Berkeley Rice, "Medical Errors: Is Honesty Ever Optional," *Medical Economics* 79, no. 19 (October 11, 2002) (reporting the results of an ethics survey which found that 67 percent of physicians admit to practicing defensive medicine).

[61] Humphrey Taylor, "Most Doctors Report Fear of Malpractice Liability Has Harmed Their Ability to Provide Quality Care," The Harris Poll #22, 5/8/2002.

trial and the cost of providing a framework for filing and settling cases. Overall, medical malpractice cases account for about 12 percent of all tort cases decided by a trial, making such lawsuits the third most common type of tort settled in state courts.[62] However, only a small percentage of claims actually result in a jury trial, as the vast majority are settled out of court prior to trial. A precise estimate of administrative costs has not been done due to data limitations

V. IMPACT OF THE MEDICAL LIABILITY SYSTEM ON ACCESS TO HEALTH CARE

The medical liability system reduces access to health care in the U.S. The first way medical malpractice affects access is by reducing the affordability of health insurance. By increasing expenditures, the system forces premiums higher, which in turn reduces the number of Americans with health insurance. The second impact is to reduce the supply of health care, such as inducing doctors to retire from medicine or to avoid high-litigation specialties or geographic areas.

Demand for Health Insurance: Impact on Affordability

Given the increase in health insurance premiums and costs described above, there will be an impact on the extent of health insurance coverage in the U.S. Generally speaking, there are two pools of people who will be affected. First, some individuals will choose not to purchase insurance due to the increase in premiums. Second, some individuals who would otherwise be willing to pay the higher premiums caused by medical malpractice will lose coverage if their employer decides to no longer offer health insurance as a benefit. The bottom line is that higher costs reduce the affordability and hence the demand for health insurance. Survey data indicate that three-quarters (74 percent) of the uninsured identify high costs as a major reason for going uninsured.[63]

Research also shows that firms' decision to offer health insurance benefits is sensitive to the price of health insurance. Small businesses are even more likely to drop health benefits in response to increased liability costs than are large firms,[64] and employees of small businesses are more likely to be uninsured than are employees of large businesses.[65] A 1997 report by the U.S. General Accounting Office found:

> Particularly for small employers, costs are cited as a key factor in their decision to drop coverage for their workers or to consider offering it. For those employing lower-wage workers, health premiums represent a significant share of total compensation.[66]

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[62] The figure is based on a survey of the nation's 75 largest counties and does not include cases that were settled prior to trial. U.S. Department of Justice, 2.

[63] Kaiser Commission on Medicaid and the Uninsured, *Uninsured in America: A Chart Book* (May 2000), 35, online at http://www.kff.org/sections.cgi?section=kcmu.

[64] Jonathan Gruber and Michael Lettau, "How Elastic Is the Firm's Demand for Health Insurance," National Bureau of Economic Research Working Paper 8021 (November 2000).

[65] Kaiser Commission on Medicaid and the Uninsured, 25; and U.S. General Accounting Office, *Health Insurance: Characteristics and Trends in the Uninsured Population*, GAO-01-507T (March 2001), 8.

[66] U.S. General Accounting Office, *Private Health Insurance: Continued Erosion of Coverage Linked to Cost Pressures*, GAO/HEHS-97-122 (July 1997), 24.

Low wage workers are most vulnerable to such changes. First, such workers frequently work for small businesses, who already are less likely to offer coverage and are the most likely group of firms to drop health benefits in response to higher costs. Second, low wage workers often cannot afford to purchase private health insurance by themselves. Thus, when excessive malpractice litigation pushes up the cost of health insurance, low wage workers often bear the brunt of the impact.

Supply of Health Insurance: Impact on Health Care Providers

High malpractice costs have a detrimental impact on the supply of medical services by health care providers. There is extensive anecdotal evidence that doctors and hospitals have reduced the availability of health care in response to rising malpractice premiums.

- Arizona: The city of Bisbee, along the Mexican border, lost the maternity ward at its local hospital when malpractice rate increases led to four of the city's six obstetricians to stop delivering babies.[67]

- Florida: The number of insurers offering medical malpractice coverage dropped in half (from 40 to 20) over the past decade, pushing premiums up and reducing the availability of coverage.[68] Malpractice insurance premiums in 2002 averaged $201,376 for Ob/Gyns, while the average was $174,268 for general surgeons.[69] The Orlando Regional Medical Center is currently at risk of closing its trauma center due to the lack of neurosurgeons willing to work the emergency room.[70]

- Georgia: A recent study of Georgia physicians projected that 2,800 doctors in the state (or about one in five) would stop providing higher-risk procedures in order to reduce their liability exposure. One in three Ob/Gyns said they would limit their services (including delivering babies), and 11 percent would stop working in emergency rooms. Four percent of the state's doctors reported that high malpractice premiums have led them to retire early or leave the state. Overall, the study reported that malpractice premiums increased between 11 percent and 30 percent in the state.[71]

- Nevada: It has been reported that dozens of doctors have stopped practicing in the state due to the medical liability crisis.[72] The decision by St. Paul Companies to cease writing malpractice insurance left 60 percent of Las Vegas doctors seeking a new insurer, and 10 percent of the city's doctors are expected to quit or relocate as a result.[73] The crisis in Nevada was made particularly clear when the state's only Level 1 trauma center closed

[67] Tom Gorman, "Physicians Fold under Malpractice Fee Burden," *Los Angeles Times*, 3/4/2002.
[68] John Hillman, "Crisis Coast to Coast: Health-Care Providers and Regulators Urge Medical Liability Reform," *Best's Review*, September 2002.
[69] Smarr.
[70] Margaret Ann Mille, "Manatee Doctors, Nurses Rally for Cap on Malpractice Suits," *Sarasota Herald-Tribune*, 3/1/2003.
[71] Daniel Yee, "Study: Insurance Rates Affect Ga. Care," *The Washington Post*, 1/26/2003.
[72] Joelle Babula, "Doctors Call on Lawmakers to Revamp Liability Laws," *Las Vegas Review-Journal*, 3/5/2003.
[73] Tom Gorman, "Physicians Fold under Malpractice Fee Burden," *Los Angeles Times*, 3/4/2002.

for 10 days in July 2002, during which time the hospital's CEO warned the public to "Drive home carefully."[74]

- New Jersey: Medical liability premiums have been increasing 20 percent to 25 percent annually, and the Medical Society of New Jersey estimates that 3,000 physicians in the state are at risk of losing coverage due to reduced coverage by insurers.[75] Over a period of less than a year, three insurers – the MIIX Group, Phico and the St. Paul Companies – covering 55 percent of the state's doctors stopped writing coverage for malpractice, leaving doctors rushing to find new sources of insurance.[76]

- Pennsylvania: The state's largest malpractice insurer, the Phico Group, has been placed in liquidation, and the MIIX Group and Princeton Insurance have ceased writing new policies.[77] Rising malpractice costs have induced doctors to leave the state, retire early or stop performing certain procedures. Difficulty obtaining malpractice coverage caused Abington Memorial Hospital outside Philadelphia to close its trauma center for almost two weeks.[78] Among doctors hit the hardest, according to Pennsylvania Hospital, are radiologists specializing in mammography. The loss of radiologists in the state has resulted in waiting periods for routine mammographies of up to eight months.[79]

- Texas: Doctors along the Rio Grande river have experienced significant increases in malpractice premiums, with neurosurgeons paying up to $120,000 a year and Ob/Gyns paying up to $100,000 a year for coverage. Numerous surgeons, internists, and the only pediatric surgeon in El Paso have left the city. According to one physician, "The physicians along the Mexican border have a lower percentage of patients who are privately insured, and to have a line item like medical liability insurance go up 100 percent to 300 percent in a year's time is a lot for some practices to swallow."[80]

- West Virginia: High malpractice rates have contributed to about 5 percent of the state's doctors either retiring early or leaving the state. The Charleston Area Medical Center had to pay $2,000 daily in malpractice premium subsidies in order to retain the doctors necessary to keep its trauma center open. After the last emergency room neurosurgeon left Wheeling, the local hospital had to transport trauma patients by helicopter to other emergency rooms. The departure of St. Paul Companies from the malpractice insurance market has forced two-thirds of the state's doctors to seek coverage from other sources.[81]

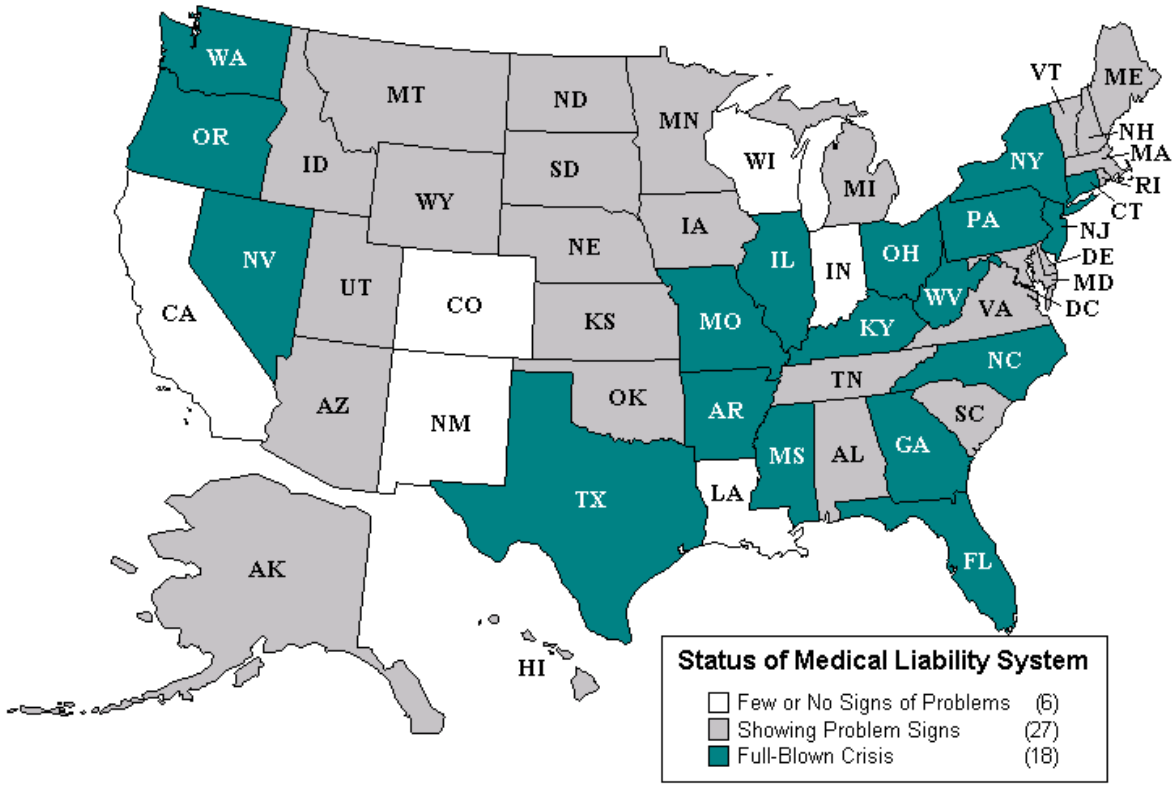
- Washington: Increased losses forced Washington Casualty Co., the state's largest provider of malpractice coverage to rural hospitals, into receivership. The firm provided

[74] Tony Batt, "UMC Official Says Crisis Is Far from Over," *Las Vegas Review-Journal*, 10/12/2002.
[75] Lynna Goch, "Medical-Malpractice Tort Reform Trouble Spots," *Best's Review*, December 2002.
[76] Joseph B. Treaster, "New Jersey Insurer Is Leaving Many Doctors Scrambling," *New York Times*, 5/10/2002.
[77] Lynna Goch, "Medical-Malpractice Tort Reform Trouble Spots," *Best's Review*, December 2002.
[78] Jeff Miller, "Rendell: Jury Award Caps Fall Short," *Morning Call* (Allentown, PA), 2/11/2003.
[79] Marian Uhlman, "Shortage of Radiologists, Technologists Creating Long Waits," *Philadelphia Inquirer*, 2/11/2003.
[80] John Hillman, "Crisis Coast to Coast: Health-Care Providers and Regulators Urge Medical Liability Reform," *Best's Review*, September 2002.
[81] Frances X. Clines, "Insurance-Squeezed Doctors Folding Tents in West Virginia," *New York Times*, 6/13/2002.

coverage to 46 hospitals and 20 community health clinics in the state, and covered 75 percent of the state's rural hospitals.[82] PedMac, which provides health care services to the poor, reported that its annual malpractice insurance costs increased by 150 percent,[83] and the average cost for malpractice coverage for hospitals increased 60 percent statewide.[84] A survey by the state medical association found that obstetricians have been hit hard, with 19 percent reporting that they have already stopped practicing obstetrics and 8 percent saying they plan to stop in the near future.[85]

Anecdotal evidence is confirmed by empirical evidence. A recent study found that the number of doctors at the state level is sensitive to the malpractice insurance costs: higher premiums reduce the number of practicing physicians.[86] A 1991 study of four Western states reported that medical liability problems resulted in decreased access to obstetric services, an effect found to be particularly harmful to poor women and rural residents.[87]

Figure 3. Problems in Medical Liability in the U.S.



Source: American Medical Association.

[82] Carol M. Ostrom, "Malpractice Insurer Ordered into Receivership by State," *The Seattle Times*, 3/8/2003.
[83] "Bleeding No More," *Puget Sound Business Journal*, 11/22/2002.
[84] Julian Anderson, "Tort & Retort: Doctors Say They're Dogged by Rising Costs of Premiums and Jury Awards, While Attorneys Say It's Not Their Fault," *The Columbian* (Vancouver, WA), 2/9/2003.
[85] Washington State Medical-Education and Research Foundation, *The Impact of Medical Malpractice Insurance and Tort Law on Washington's Health Care Delivery System* (September 2002).
[86] Mark P. Gius, "An Examination of the Determinants of Physician Supply at the State Level," *Journal of Business and Economic Studies* 6, no. 1 (Spring 2000): 73-79.

The American Medical Association (AMA) has identified 18 states in which the medical liability system has created a crisis in health care.[88] Figure 3 displays those states that the AMA considers to be in full-blown crisis. The AMA lists another 26 states and the District of Columbia as showing signs of a serious medical liability problem, but that have not yet progressed to the crisis stage.

VI. FEDERAL REFORM OF THE MEDICAL LIABILITY SYSTEM

Federal reform of the medical liability system consists of several interrelated provisions, described below. While one single change is unlikely to produce dramatic results, the combined effect of all the provisions could bring about meaningful benefits. The impact of the reforms would likely begin to manifest soon after passage into law. However, the complete impact would take time to fully manifest, depending on the actual date of enactment, judicial review and response by the insurance industry

The primary benefits of federal medical malpractice reform include budgetary savings for governments, fewer individuals without health insurance, and reduced national health care expenditures. Additionally, consumers would benefit from improved access to health care, as excessive malpractice premiums would no longer drive health care providers to raise prices, retire early, move out of state or avoid higher-risk specialties. A system less hostile to reporting and reviewing medical errors could also produce a system that would increase the effectiveness of error prevention and patient safety efforts.

Among those groups most benefiting from such changes are women, low-income households, and rural residents. Female patients are often put at a disadvantage in the current system because obstetricians pay some of the highest malpractice insurance rates of any specialty. The result has been fewer obstetricians that are able to afford continuing their obstetricics practice or to accept new obstetricics patients.[89] Low-income households suffer from the high cost of health insurance and are already more likely to lack private health insurance. Lower health insurance premiums would make coverage more affordable for the many working class families who earn too much to qualify for Medicaid.[90] Finally, rural residents generally live in areas with lower rates of physicians per capita. Thus, such residents already have limited options when it comes to health care. The faults of the current medical liability system only further reduce their health care access options.[91] All three groups stand to significantly benefit from reforms in the medical liability system.

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[87] Roger A. Rosenblatt et al., "Tort Reform and the Obstetrics Crisis: The Case of the WAMI States: Washington, Alaska, Montana, and Idaho," *Western Journal of Medicine* 154, no. 6 (June 1991): 693-699.

[88] The most important factor in determining the status of each state is the number of patients losing access to medical care. Other factors include early retirements among physicians, physicians leaving the state or limiting their provision of services, the state's legal and judicial climate, the cost and availability of malpractice insurance, and trends in jury awards and settlements. American Medical Association, "18 States Now in Full-Blown Medical Liability Crisis," Press Release (3/3/2003).

[89] See Rosenblatt et al.; and *supra* notes 67, 69, 71, 79, and 85, and accompanying text.

[90] See U.S. General Accounting Office, *Private Health Insurance*, 24; Gruber and Lettau; Kaiser Commission on Medicaid and the Uninsured, 11-14; and *supra* notes 39, 80 and 83, and accompanying text.

[91] See Rosenblatt et al.; and *supra* note 82 and accompanying text.

Medical liability reform has been attempted on numerous occasions at the state level. Reforms adopted at the state level include a range of policies, including caps on non-economic losses, changes in the statute of limitations, joint and several liability reform, punitive damage limits, and periodic payment of damages, among others. These efforts have yielded mixed results, depending on the strength and type of reforms, as well as whether state courts have overturned or limited some provisions.[92] However, some of the key reforms proposed at the federal level, including the cap on pain and suffering damages, have proven successful at producing savings when implemented.[93]

Perhaps the most successful example of reform at the state level is California. In the early 1970s, California suffered from rapidly escalating malpractice premiums that affected the quality and availability of care in the state. In response, California adopted the Medical Injury Compensation Reform Act (MICRA) in 1975.[94] MICRA contained several provisions, including a $250,000 cap on non-economic damages, binding arbitration on disputes, collateral sources offsets, limits on contingency fees, advance notice of malpractice claims, statute of limitations, and periodic payment of damages.[95] Although California still has problems with its malpractice system (including a high claiming rate), it has not experienced the same rate of growth in malpractice premiums. Over the period 1976-2000, medical malpractice premiums in California increased by 167 percent, while premiums for the rest of the nation rose by 505 percent.[96] This difference in premium growth suggests that similar reform at the federal level could have a potent effect as well.

Components of the Federal Reform

Federal legislation has been introduced in the 108th Congress that would significantly reform the medical liability system in the U.S.[97] The proposed legislation consists of several major provisions, summarized below. Existing state reform provisions would be largely left intact.[98]

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[92] For a state-by-state review of laws, court rulings and reforms, see Cohen; American Tort Reform Association, "Medical Liability Reform" [March 2003], online at http://www.atra.org/show/7338; McCullough, Campbell & Lane, "Summary of Medical Malpractice Law" [March 2003], online at http://www.mcandl.com/states.html; and American Medical Association, "Activity in the States" [March 2003], online at http://www.ama-assn.org/ama/pub/category/7470.html.

[93] See Patricia M. Danzon, *New Evidence on the Frequency and Severity of Medical Malpractice Claims* (Santa Monica, CA: RAND, 1986); Kessler and McClellan, "Defensive Medicine"; and Daniel P. Kessler and Mark B. McClellan, "The Effects of Malpractice Pressure and Liability Reform on Physicians' Perceptions of Medical Care," National Bureau of Economic Analysis Working Paper 6346 (January 1998).

[94] Although MICRA was enacted in 1975, it was not until 1984 and 1985 that the courts upheld the key provisions of the reform.

[95] For a discussion of MICRA, see John Hillman, "The Right Reforms: Experts Call California's Medical Injury Compensation Reform Act a Medical-Liability Role Model," *Best's Review*, December 2002.

[96] Smarr.

[97] Representative James Greenwood (R-PA) introduced H.R. 5, "Help Efficient, Accessible, Low-Cost, Timely Healthcare (HEALTH) Act of 2003," on March 6, 2003. The U.S. House of Representatives passed the bill on March 12, 2003 by a vote of 229 to 196.

[98] Existing state reforms would be unaffected if they are stronger than the federal reform. In addition, any state limitation on non-economic or punitive damages, even if weaker than the federal reform, would remain unchanged.

- Unlimited Economic Damages: The legislation specifically states that there would be no limit on the amount of economic damages that injured parties can collect. This provision would not change current law.

- Cap on Non-Economic Losses: Awards for non-economic, also called pain and suffering, damages would be limited to $250,000. Currently, limits (if any) on non-economic damages vary by state.

- Statute of Limitations: The legislation would require malpractice lawsuits to be brought within three years of the date the injury manifested, or one year after the claimant discovers (or should have discovered) the injury, whichever occurs first. Children are entitled to exemptions from this limit. Statutes of limitations vary by state, and claims can be initiated years after the injury in many jurisdictions.

- Fair Share Rule (Joint and Several Liability): Each defendant would be liable for damages only in proportion to their share of responsibility. A defendant found to be 30 percent at fault for an injury, for example, would only be required to pay 30 percent of damages. Under current law, liable defendants can be required to pay for 100 percent of damages regardless of their actual share of fault.

- Collateral Sources Offset: Claimants would be permitted to recover claimed damages only once. Currently, claimants have the ability to recover the same damages from multiple sources.[99]

- Lawyers' Contingency Fees: Contingency fee arrangements would be limited to specific rates based on the size of the award, ranging from 40 percent on the first $50,000 to 15 percent of amounts over $600,000. Current practice is for plaintiffs' attorneys to take 33 percent to 40 percent of the total award or settlement as payment.

- Periodic Payment of Damages: Allows payments for future losses (such as expected rehabilitation costs) to be paid out over time rather than an immediate lump-sum payment. Under current law, defendants can be required to make immediate full payment.

- Punitive Damages: Punitive damages would be limited to double the amount of economic damages, or $250,000, whichever is greater. In addition, the bill would set a higher legal requirement before punitive damages can be awarded. Currently, limits (if any) on punitive damages vary by state.

Impact on the Federal Deficit

Medical liability reform would generate significant fiscal savings for the federal government. The budgetary impact results from the general reduction in the cost of health care and would affect both revenues and spending. On the revenue side, the government would

[99] In some cases, the right to subrogation can limit the net collection by the claimant.

collect additional income and payroll taxes. As the cost of tax-exempt employer-provided health benefits falls, employers will pass savings on to their employees in the form of taxable wages and benefits. The initial savings are relatively small, and increase over time as the full impact of the reforms takes hold. According to the Congressional Budget Office (CBO), these effects would result in about $3.0 billion in additional revenues over a ten-year period, including a $925 million boost for Social Security (Table 4).[100]

Government spending would also decrease due to medical liability reform. The primary savings would accrue to the Medicare and Medicaid programs, which would experience lower health care costs. In addition, the federal government would realize savings from lower costs of health benefits for federal employees. Reduced outlays from medical liability reform would total $15.1 billion in savings. Together, the increased revenue and reduced spending would produce more than $18 billion in direct savings over ten years for the federal government. State and local governments would also receive savings of about $8.5 billion over ten years.[101]

Table 4. Direct Budgetary Savings from Medical Liability Reform (millions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2004-2013
Income & Medicare Payroll Taxes	10	70	170	210	220	230	250	270	290	330	2,050
Social Security Payroll Taxes	5	20	60	90	100	110	120	130	140	150	925
Subtotal: Revenues	15	90	230	300	320	340	370	400	430	480	2,975
Outlays for Medicare & Medicaid	170	480	910	1,250	1,570	1,820	1,990	2,130	2,220	2,350	14,900
Outlays for federal employees	2	10	20	20	20	30	30	30	30	30	230
Subtotal: Outlays	172	490	930	1,270	1,590	1,850	2,020	2,160	2,250	2,380	15,130
Total Savings	**187**	**580**	**1,160**	**1,570**	**1,910**	**2,190**	**2,390**	**2,560**	**2,680**	**2,860**	**18,105**

Note: Positive numbers indicate budgetary savings of either increased revenue or decreased outlays.
Source: Congressional Budget Office.

The budgetary savings presented in Table 4 only reflect the direct savings from lower medical liability premiums. As noted above, however, the medical malpractice system induces doctors to practice defensive medicine. As the federal liability reforms take hold, there will be a corresponding reduction in the practice of defensive medicine. As previously discussed, the cost of defensive medicine is estimated to be 3.2 to 5.8 times the magnitude of malpractice premiums.[102] Assuming that there is the same proportionate relationship between direct government savings and indirect government savings on defensive medicine, then there would be between $9.3 billion and $16.7 billion in additional budgetary savings in 2012 from reduced defensive medicine.[103] Combined annual budgetary savings from medical malpractice reform

[100] The budget estimates presented here are for H.R. 5. U.S. Congress, Congressional Budget Office, "Cost Estimate for H.R. 5: Help Efficient, Accessible, Low Cost, Timely Healthcare (HEALTH) Act of 2002," 3/10/2003.
[101] U.S. Congress, Congressional Budget Office, "Cost Estimate for H.R. 5," 8.
[102] See *supra* note 57 and accompanying text.
[103] The calculations behind these estimates (in billions) are: $9.26 = $2.86 * 3.24, and $16.67 = $2.86 * 5.83.

would total $12.1 billion to $19.5 billion a year. Over a ten year period (2004-20013), a total of between $67 billion and $106 billion in savings would accrue to the federal government in this manner.

Impact on the Number of Uninsured

By lowering the cost of malpractice insurance and reducing the practice of defensive medicine, medical liability reform will increase the number of Americans with health insurance. Not only does the demand for health insurance vary widely by individual and employer, but also the number of uninsured Americans is itself difficult to quantify.[104] In addition, the reduction in the number of Americans without health insurance will not occur overnight, as it will take time for the full effect of reforms to impact the insurance market. Any estimate of changes in the uninsured population suffers from a number of inherent problems. However, it is possible to arrive estimates based on estimated savings and the sensitivity of consumers to changes in insurance premiums.

The sensitivity of consumers to the price of health insurance is measured by what economists call "elasticity." In the context of this discussion, an elasticity measures the percent change in the purchase of health insurance for a 1 percent change in the price of health insurance. A substantial amount of research has accumulated attempting to quantify health insurance elasticity. Research reviewed for the present study (including surveys of the literature) suggests a range of price elasticities for health insurance.[105] The median of these estimates indicates that a 1 percent decrease in the price of health insurance results in a 0.40 percent increase in the number of insured individuals, or approximately 960,000 people.[106] This figure is notably more conservative than the 0.60 elasticity which CBO has used to estimate the effect of health care proposals.[107]

CBO estimates that the malpractice reforms described above would effect a 0.4 percent decrease in the price of health insurance. Assuming an elasticity of 0.40, the malpractice premium savings alone would, in time, increase the number of Americans with health insurance by approximately 385,000. An elasticity of 0.60 raises the direct impact to 578,000 persons. The estimated price change, however, only includes the savings from lower malpractice

[104] For example, one in five (18 percent) Medicaid recipients report themselves as uninsured. John Sheils, Lewin Group, Prepared Testimony to the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, 6/15/1999.

[105] Jean Marie Abraham, William B. Vogt, and Martin S. Gaynor, "Household Demand for Employer-Based Health Insurance," National Bureau of Economic Research Working Paper 9144 (September 2002); David M. Cutler and Richard J. Zeckhauser, "The Anatomy of Health Insurance," National Bureau of Economic Research Working Paper 7176 (June 1999); U.S. Congress, Congressional Budget Office, "Behavioral Assumptions for Estimating the Effects of Health Care Proposals" (November 1993); Willard G. Manning and M. Susan Marquis, *Health Insurance: The Trade-Off between Risk Pooling and Moral Hazard* (Santa Monica, CA: RAND, 1989); Paul J. Feldstein, *Health Care Economics* (Albany, NY: Delmar Publishers, 1993), 149; and M. Susan Marquis and Stephen H. Long, "Worker Demand for Health Insurance in the Non-Group Market," *Journal of Health Economics* 14, no. 1 (May 1995): 47-63.

[106] Based on an estimated insured population of 240.9 million in 2001. U.S. Census Bureau, *Health Insurance Coverage: 2001*, Current Population Report P60-220 (September 2002), 13.

[107] U.S. Congress, Congressional Budget Office, "Behavioral Assumptions."

premiums and does not account for any changes in levels of defensive medicine, which are 3.2 to 5.8 times the magnitude of malpractice premiums.

Since there is no direct estimate of how the federal reform would affect health insurance prices through reduced defensive medicine, a proxy is necessary. The present analysis assumes that defensive medicine costs correlate with changes in the average price of purchasing insurance. Thus, the price effect of a 25 percent to 30 percent reduction in malpractice premiums (as estimated by CBO) would be matched by a similar proportional decrease in defensive medicine. Using this broader approach to estimated savings, the savings from lower malpractice premiums plus lower defensive medicine spending would reduce health insurance premiums by 1.70 percent to 2.73 percent.[108] Based on the 0.40 elasticity discussed above, the total impact of medical malpractice reform would be a reduction in the number of persons without health insurance of 1.6 million to 2.6 million.[109] With an elasticity of 0.60, the effect of the legislation would be to reduce the uninsured population by 2.4 million to 3.9 million persons.

Impact on Total Health Care Expenditures

The medical malpractice reforms described here could produce substantial savings in total spending on health care in the U.S. Public and private national health care expenditures for health services and supplies are projected to rise from $1.4 trillion in 2001 to nearly $2 trillion in 2006.[110] Reform of the medical liability system would generate savings in a number of areas. Kessler and McClellan's research indicates that medical liability reforms, such as those discussed here, would reduce health care spending by 5 percent to 9 percent, without an appreciable impact on health outcomes. Assuming the reforms are fully implemented after three years (i.e., by 2006), the gross savings would range from $99 billion to $178 billion.[111] However, an exact estimate of the net overall change in health care expenditures is difficult to make due to offsetting factors.

Factors that will reduce overall expenditures include lower medical malpractice insurance premiums, direct reductions in the cost of providing care, and reduced spending on defensive medicine. Other changes will result in increased spending on health care. For example, as noted above, a decrease in the average price of health insurance will result in more individuals purchasing health insurance. Although the average cost per policy will decrease, there will be more people buying policies. Similarly, some individuals who currently have health insurance may choose to use any savings to purchase expanded health insurance coverage.

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[108] Reduced spending on defensive medicine translates to an additional price reduction of between 1.30 percent (= 0.4 * 3.24) to 2.33 percent (= 0.4 * 5.83).

[109] These calculations are based on the number of insured Americans in 2001 and assume full implementation of the reforms. The true effects of the reforms may not be fully realized until some point in the future depending on the number of uninsured persons, the actual date of enactment, judicial review and response by the insurance industry. However, since projections of the uninsured population are not available, the only alternative is to estimate the impact as if the reform were fully implemented in 2001. The future impact on the number of uninsured would be proportional to the population when the effects of the reforms are fully realized.

[110] U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, "National Health Care Expenditures Projections," (2003), online at http://cms.hhs.gov/statistics/nhe/projections-2002.

[111] For comparison purposes, if the reforms had been fully implemented as of 2001, the gross savings would have been $69 billion to $124 billion.

The net effect of these factors will be a reduction in national health care expenditures, although the exact magnitude is unknown. The CBO analysis of medical malpractice reform legislation indicates that approximately 60 percent of gross spending reductions will be offset by increased spending by newly-covered individuals or expanded coverage for currently-insured individuals.[112] A rough approximation of the net reduction in health care expenditures, based on projected 2006 expenditures and assuming fully implemented reforms, puts the total between $39 billion and $71 billion annually.

VII. CONCLUSION

The medical liability system in the U.S. suffers from several major shortcomings that adversely impact the negligently injured as well as the general population. The system fails to achieve either of its central goals: compensation and deterrence. First, the vast majority of negligent injuries do not lead to a claim. By definition, if injured parties do not file claims, then the tort system provides them with no compensation. Second, among those claims that are filed, the vast majority shows no signs of an injury or harmful event. If such claimants receive a payout, then the tort system is providing compensation to the wrong people. Third, when a legitimate claim is filed, the system typically takes years for the injured party to receive anything. Finally, even when legitimately injured parties are able to prove negligence, plaintiffs' lawyers routinely take 33 percent to 40 percent (or more) of that award as payment for legal fees. On balance, it seems clear that the medical liability tort system broadly fails as a means of compensating the negligently injured.

On the second goal – deterrence of negligent behavior – the tort system also fails to achieve its mission. Since most acts of medical malpractice do not result in a claim and most claims are not tied to actual negligence, the tort system is unable to convey to doctors the appropriate signals about the optimal level of care. Moreover, the litigious environment created by the tort system discourages the reporting of mistakes, which impedes efforts to identify and prevent medical errors. In fact, the threat of malpractice litigation induces doctors to practice defensive medicine, subjecting patients to unnecessary treatments and therapy.

This indictment of the tort system serves as the basis for medical liability reform. Reform efforts at the state level have had mixed results, with California being the best example of effective reform. If adopted, the federal reform discussed here could yield budgetary savings of more than $19 billion per year, reduce the number of Americans without health coverage by up to 3.9 million, and lead to an environment that is significantly more receptive to efforts to improve patient safety and reduce medical errors.

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[112] U.S. Congress, Congressional Budget Office, "Cost Estimate for H.R. 5," 6.

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