



POLICY BACKGROUNDER No. 163

*For people with limited time
and a need to know.*

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Medical Malpractice Reform

Introduction

A tort is a wrongful act, injury or damage for which the person harmed can seek monetary compensation in civil court. Medical malpractice occurs when patients are harmed by the error or negligence of health care providers. Physicians and hospitals carry liability insurance to pay malpractice claims. If the parties do not agree on the amount of compensation for an injury, a lawsuit is the traditional American way of settling the dispute.

In theory, the right to sue should ensure that injured patients receive compensation, and the adversarial justice system should ensure that only patients who are harmed by negligence receive compensation. However, the evidence suggests that the reality is far different. According to the Harvard Medical Practice Study, the vast majority of all instances of malpractice never lead to a lawsuit; of the suits that are filed, a significant number do not involve malpractice; and juries do not always make the right decisions: Less than 2 percent of patients (or the families of patients) who are negligently injured ever file a malpractice claim; and even fewer are compensated.¹

Nonetheless, malpractice litigation is pervasive. In fact, most doctors are sued at least once during their career, and one-fourth of physicians are sued annually.² Most malpractice cases are settled out of court, but 10 percent to 20 percent go to trial.³

These outcomes are a result of the incentives of physicians and hospitals, and of patients and attorneys, under the tort liability system. In theory, the potential financial cost of a tort judgment gives physicians and hospitals an incentive to avoid errors; but in fact community-rated insurance (where physicians in a specialty are generally charged the same premiums regardless of their individual claims record) financially insulates negligent doctors from catastrophic judgments by shifting their claims cost to other physicians. At the same time, the threat of litigation encourages physicians to practice medicine defensively — ordering unnecessary tests and procedures that add to health

“Most doctors are sued at least once during their career, and one-fourth of physicians are sued annually.”

care costs, even though they do little to reduce errors or improve patient outcomes. The threat of litigation also discourages physicians and hospitals from disclosing information about potential errors, making it difficult to improve the quality of health care.

To reduce these costs and improve the quality of health care, Congress has made several attempts to pass malpractice reforms without much success. Many states have proceeded with their own reforms. Some of these have been successful, while others have had little effect. There is general agreement, however, that an efficient system of compensating injured patients would 1) compensate every patient (potentially) who is harmed by a medical error; 2) compensate patients fully; 3) minimize the cost of determining compensation; and 4) encourage health care providers and patients to act in ways that reduce the frequency of errors.

Medical Errors and Health Care Quality

Some observers claim there is an “epidemic of malpractice,” based on estimates of medical errors and the number of errors classified as negligence.⁴ Others claim that it is litigation, not malpractice, that is far too common.⁵ Which view is right? In order to determine whether there is too much or too little malpractice litigation, it is necessary to determine how efficient the tort liability system is in compensating patients who are injured by medical errors, and how efficient the system is in denying malpractice compensation for poor treatment outcomes that are not due to provider negligence.

Adverse Events. There are risks inherent in any type of medical treatment and in any hospital stay. The number of patients harmed in the course of treatment is a widespread concern. For example, an estimated two million patients suffer hospital-acquired infections each year.⁶ However, since there is no uniform system for reporting incidents in which a patient is harmed, estimates of the number of patient injuries due to medical error depend on the definitions used by researchers.

The influential Harvard Medical Practice Study defined a medical error as “an injury that was caused by medical management (rather than the underlying disease) and that prolonged the hospitalization, produced a disability at the time of discharge or both.”⁷ The Harvard researchers found some of these injuries were due to *negligence*, which they defined as medical care that “failed to meet the standards expected of a typical medical practitioner.” In other words, a patient was harmed by careless treatment. The researchers estimated that 2.9 percent of hospital patients in Colorado and Utah, and 3.7 percent of hospital patients in the state of New York experienced adverse events in 1984.

An Institute of Medicine (IOM) report, *To Err Is Human*, applied these Harvard estimates to patients nationwide. The IOM concluded:⁸

“Less than 2 percent of victims of malpractice ever file a lawsuit; yet, among the suits that are filed, about one-third do not involve malpractice.”

- Nationwide, 4 million to 5 million hospitalized patients are harmed by medical errors each year.
- Some 44,000 to 98,000 Americans die each year in hospitals as a result of medical errors.

Some experts think flaws in the Harvard study led the IOM to overestimate the number of injuries and deaths from medical errors.⁹ Others think the IOM report understates the likely number of deaths and injuries.¹⁰

Medical Errors and Negligence. Experts disagree on which medical errors should be classified as negligence. Using its definition of negligence (substandard care), the Harvard Medical Practice Study concluded that more than one-fourth of adverse events were due to negligence.¹¹

Some dispute this estimate. The Harvard study involved the review of about 30,000 randomly selected hospital records by two physicians. The physicians often disagreed on whether or not to attribute an adverse event to negligence, but classified arguable incidents as negligence.¹² And medical errors were put in the same category as negligent acts by physicians, even when doctors were not directly involved. For example, a “slip and fall” in a hospital corridor, over which a physician may have little control, was lumped in the same category as a surgical error, over which a physician has direct control.¹³

Researchers Robert Wachter and Kaveh Shojania say medical errors can be divided into two categories:¹⁴

- 1) Active errors by doctors, nurses or other workers, such as giving the wrong amount of medication during an emergency procedure.
- 2) Latent errors, such as poor equipment maintenance or design, or poorly organized health care delivery, such as failing to adequately follow up on a patient’s diabetes or high blood pressure.

While active errors are usually detected quickly, systemic, latent errors are more difficult to detect because they are beyond the control of individual caregivers.

Hospitals have been able to reduce the frequency of some active errors. For example, take deaths resulting from anesthesia during surgery. In the early 1980s, after widespread reports of anesthesia-related deaths and skyrocketing malpractice premiums, safety procedures were improved and deaths dropped sharply.¹⁵ Similarly, news reports and litigation surrounding “wrong-site surgery” led the Joint Commission on Accreditation of Health Care Organizations to promulgate guidelines requiring surgeons to mark surgical sites beforehand.¹⁶

However, hospitals have been slow to make more comprehensive changes to hospital-wide systems that contribute to medical errors. For example, handwritten prescriptions are a major source of medical errors; nearly 200,000 adverse drug events occur each year in hospitals due to manual order

“Hospitals have been slow to adopt error-reducing electronic medical records (EMRs).”

systems.¹⁷ Electronic medical records (EMRs) could greatly reduce medical errors, but less than one in five physicians and only one in four hospitals use them.¹⁸

Effects of Tort Liability

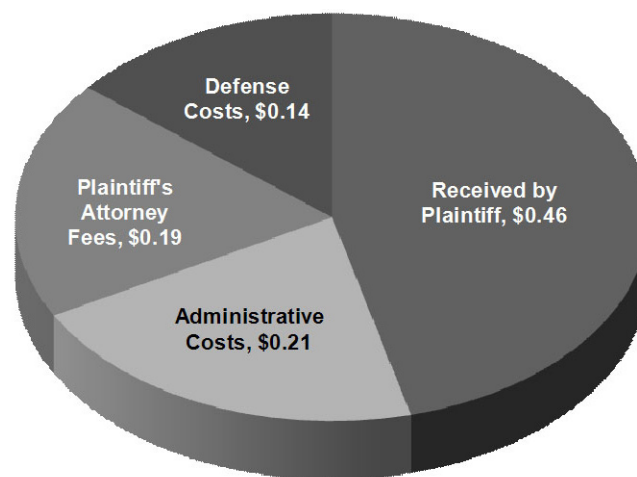
Malpractice litigation ostensibly aims to compensate those who are injured, to hold doctors and other health care providers accountable for errors, and to improve health care by changing physicians' behavior to avoid future lawsuits. There is evidence the malpractice system does a poor job of meeting these goals, although it raises health care costs and reduces the quality of care.

The Compensation System for Victims Is Inefficient. The Harvard Medical Practice Study also found that of the cases in which negligence occurred, less than 2 percent of individuals are ever compensated.¹⁹ Furthermore, one of the Harvard Practice researchers, David Studdert, led a newer study of closed claims among five liability insurers that found:²⁰

- Of 1,452 malpractice claims filed, one-third did not involve medical errors.²¹
- However, of the 889 claims filed that involved injury due to medical errors, about 27 percent were not compensated.²²
- Furthermore, plaintiffs receive less than half of every dollar (46 cents) recovered through settlements or jury verdicts; the rest covers claimants' attorneys' fees, court administrative costs and defense costs. [See Figure I.]

FIGURE I

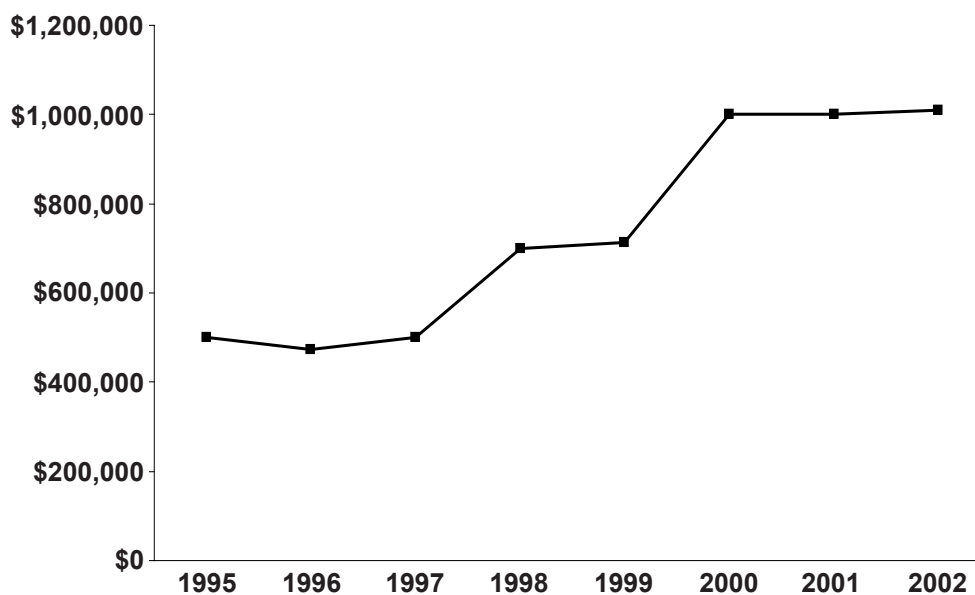
Breakdown of Plaintiff's Compensation (per dollar)



“Malpractice victims receive less than half of every dollar of compensation.”

Source: David M. Studdert et al., “Claims, Errors and Compensation Payments in Medical Malpractice Litigation,” *New England Journal of Medicine*, Vol. 354, No. 19, May 2006.

FIGURE II
Median Jury Award



“The median jury award doubled over six years.”

Source: Jury Verdict Research.

Many patients (and their families) who believe they have been harmed may be deterred from pursuing claims by the cost, time and stress of litigation compared to the damages they are likely to recover. Those with limited financial resources must find attorneys who take cases for contingency fees (meaning the attorney is paid from the award or settlement money). Attorneys who usually work for a percentage of the award have an incentive to take only lucrative cases and avoid those with small potential fees.

The Cost of Malpractice Insurance Is Rising. Malpractice litigation has not only become more pervasive, but more costly to doctors. Over a six-year period, the median jury award doubled from one-half million dollars to \$1 million in 2000.²³ [See Figure II.]

As a result of the increasing litigation and rising jury payouts, physicians’ malpractice insurance premiums have risen precipitously:

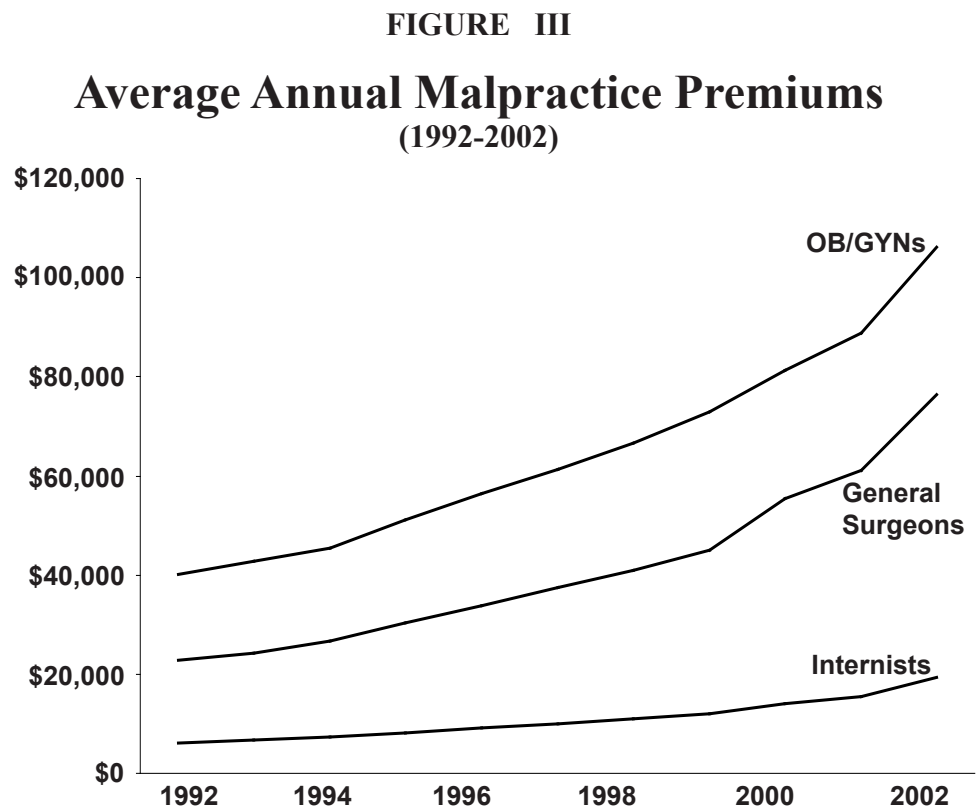
- The median malpractice insurance premium rose 13 percent from 2003 to 2005, faster than the increase in total health care spending per capita.²⁴
- Premium increases for certain specialties were much higher — for example, premiums increased 165 percent for obstetricians/gynecologists, 220 percent for internists and 235 percent for general surgeons. [See Figure III.]

Premiums for some specialties average well over \$100,000 a year, and in some regions are much higher.²⁵ Florida's largest insurer, for instance, charges a base rate of \$201,000 annually for obstetricians and gynecologists in Dade County (Miami), twice the amount it charges OB/GYNs in the rest of the state. Moreover, premiums in Dade County increased 75 percent for general surgeons from 1999 to 2002. By comparison, malpractice premiums for general surgeons in Minnesota increased only 2 percent over the same period.²⁶ The variation in premiums tends to reflect variations in insurance costs.

Insurance Markets Are Less Competitive. Some critics argue that malpractice insurers are responsible for rising premiums and health care costs. During the 1960s and 1970s, physicians successfully pressured states to regulate increases in insurance premiums.²⁷ As a result, many insurance companies left the market, creating a shortage of insurance providers. In some areas, *no* providers remained. In spite of efforts to keep premiums low, they increased during the 1980s and 1990s.²⁸

According to the U.S. Government Accountability Office, the number of malpractice insurance carriers has fallen since 1999 due to declining profitability.²⁹ Higher losses have forced many insurers to leave the medical malpractice market, resulting in fewer suppliers and less price competition. The St. Paul Companies, once the nation's largest medical malpractice insurer, stopped underwriting all medical malpractice insurance by 2002.³⁰

"Malpractice insurance costs are especially high for some specialties."



Source: Authors' calculations based on data from the *Medical Liability Monitor*.

In addition, malpractice insurance premiums are usually community rated, meaning all physicians in a particular specialty or geographic area pay the same rate. Community rating shifts the cost of errors (higher premiums) and the financial reward of avoiding errors from the individual to the group. This reduces the financial incentive of doctors to invest in quality-improving measures (such as electronic medical recordkeeping).

Surveys of physicians in several states have found that almost two-thirds of physicians would react to a rise in malpractice premiums by increasing their patient caseloads, presumably in order to raise their incomes to compensate for higher costs. About 47 percent of physicians said they would delay or cancel outlays for capital improvements in their offices.³¹ Higher caseloads and reduced investment in such things as computerized patient records and new diagnostic equipment can affect the quality of health care.

Patient Fees Are Higher. Who pays the cost of medical malpractice premiums? The evidence suggests that physicians are able to pass on the increasing cost of malpractice premiums to patients without sustaining a permanent reduction in their net incomes. Researchers Patricia Danzon, Mark Pauly and Raynard Kington found that between 1976 and 1983, during a period of rapidly rising premiums, patient fees increased about 10 percent per year, while physicians' net incomes changed very little.³² This still seems to be the case. Using data from 1994, 1998 and 2002, Pauly and his colleagues found that higher malpractice premiums do not significantly reduce physicians' incomes. Rather, physicians offset rising premiums by increasing their fees and the quantity of services.³³

Doctors Practice Defensive Medicine. The malpractice tort system raises health care costs by encouraging *unnecessary* tests and treatments. A 2002 survey by Aetna reports that 79 percent of physicians ordered more tests than they felt were necessary in order to protect themselves from malpractice suits.³⁴

The cost of defensive medicine is difficult to determine, but the most commonly accepted estimate is substantial. In 2002, economists Daniel Kessler and Mark McClellan examined survey data on the effects of defensive medicine on physician productivity, as well as its impact on health outcomes for heart patients.³⁵ They used Medicare claims data from 1984 to 1994 for two types of patients: those who were hospitalized with acute myocardial infarction (AMI), and those with ischemic heart disease (IHD).³⁶ Kessler and McClellan found:

- A 1 percentage point increase in the probability of a physician defending against a claim results in a 2.4 percent increase in treatment expenditures for AMI patients, and a 1.6 percent increase for IHD patients per year following each patient's hospital admission.

“Physicians practice defensive medicine — ordering unnecessary tests and procedures to protect themselves from claims of negligence.”

- A 1 percentage point increase in a physician's probability of paying a claim in any given year results in a 4.3 percent increase in treatment expenditures for AMI patients, and a 2.9 percent increase for IHD patients.
- Overall, Kessler and Mark McClellan found that about 5 percent to 9 percent of total health care expenditures on myocardial and ischemic heart disease patients are due to defensive medicine costs.³⁷

Treatment for heart disease is widespread, with hundreds of thousands of procedures performed annually in the United States. Thus, other researchers have felt comfortable extrapolating these results to the health care system as a whole.³⁸

- Applying the Kessler and McClellan estimates to total U.S. health care spending, total defensive medicine costs were about \$100 billion to \$178 billion in 2005, the most recent year for which data are available.³⁹
- In addition, the consulting firm Towers Perrin estimates the cost of defending against malpractice claims, paying compensation and added administrative costs were about \$29.4 billion in 2005 and are increasing by about 11 percent annually.⁴⁰
- Combining these two estimates, in 2006 the medical tort system added at least 6 percent, or \$191 billion, to the cost of health care — roughly \$1,700 to \$2,000 a year for every household in America.

The practice of defensive medicine carries risks. Take cesarean sections, for example. In the United States, about 29 percent of all births are performed via C-sections.⁴¹ Although C-sections are recommended for a variety of medical reasons, such as high-risk pregnancies, medical experts believe many more are performed than necessary. Based on the number of high- and low-risk pregnancies in the population, medical experts say that the C-section rate should be no greater than 15 percent of all births.⁴² Furthermore, the use of C-sections varies widely across the country and is especially prevalent in some localities known to be particularly litigious (for example, see the discussion below regarding El Paso, Texas). Experts suggest the widespread use of C-sections is due to obstetricians practicing defensive medicine — performing surgery so that they cannot be accused of withholding potentially beneficial treatment in the event a child is born with a medical condition. For example, a 2003 analysis of New Jersey births showed that cesarean births reduced the risk of uterine rupture for some women. But defensive C-sections also carry risks; the same study found that C-sections slightly increase the incidence of brain hemorrhage in infants delivered by less-experienced physicians.⁴³ C-sections also require longer hospital stays, which increase the risk of infection.

“The estimated cost of the tort malpractice system is roughly \$200 billion — an amount approaching \$2,000 a year for every household in America.”

“Shortages are appearing in specialties at high risk of malpractice lawsuits.”

A Growing Shortage of Medical Specialists. The American Medical Association reports that 21 states are in “crisis” due to the malpractice liability climate. The frequency and severity of lawsuits and judgments imposes costs on physicians who are innocent of wrongdoing. Physicians have an incentive to avoid high-risk surgeries and specializations, particularly obstetrics. As a result, according to the AMA, “patients are losing access to care because the nation’s out-of-control legal system is forcing physicians in some areas of the country to retire early, relocate or give up performing high-risk medical procedures.”⁴⁴ Furthermore, because malpractice insurance premiums are community-rated, premiums are not risk-rated according to the characteristics of the individual physician, such as age, experience and claims frequency. Furthermore, physicians are charged the same premiums regardless of their patient loads, so older physicians, in particular, have an incentive to retire rather than practice part-time and pay the same premiums as full-time physicians. Thus, the only way physicians can lower their insurance class rating and premiums is to avoid risky surgeries and medical specialties.⁴⁵

The malpractice system, which encourages physicians either to avoid certain specialties or to retire, is affecting the supply of physicians, particularly specialists. Researcher Robert Quinn found that in various states:⁴⁶

- The number of family physicians practicing obstetrics declined by over 11 percent from 1987 to 1992, and the number of family physicians performing surgical procedures declined 4 percent.
- In addition, Quinn found that the number of physicians practicing obstetrics in a state declines by 0.9 percent for every \$1,000 rise in the state’s insurance premiums.

Similarly, a 2003 nationwide survey found that 43 percent of neurosurgeons no longer perform surgeries considered “high-risk,” such as brain aneurysms and complex spinal surgery, for fear of litigation.⁴⁷ These outcomes obviously have the potential to greatly reduce health care quality and access to care.

State Malpractice Insurance Reforms

Some states have attempted to limit rising liability premiums through various insurance reforms, including strict regulation of insurance companies, state-administered funds, no-fault insurance and opt-out provisions, among other measures. But which (if any) of these measures have been truly effective?

Insurance Market Regulations. Advocates of insurance reform point to California’s Proposition 103 as a successful government intervention in the insurance market. Passed by California voters in 1988, Prop 103 imposed the strictest regulations in the country on the insurance market. It required

“State malpractice reforms have included increased insurance regulation.”

property and casualty insurance companies to roll back rates to 20 percent less than they were as of November 8, 1987. It also required the state’s elected insurance commissioner to approve all annual rate increases, and mandated public notice for all proposed rate increases.⁴⁸ Finally, Prop 103 authorized bank holding companies to sell insurance, ostensibly broadening the insurance market.⁴⁹

However, the results of California’s tightly regulated insurance market on malpractice premiums is debatable, particularly since it is difficult to determine which reforms account for the state’s success in moderating insurance premiums: the new insurance regulations or previously adopted limits on noneconomic damages . [California’s caps on noneconomic damages are discussed below under “State Tort Reforms.”]

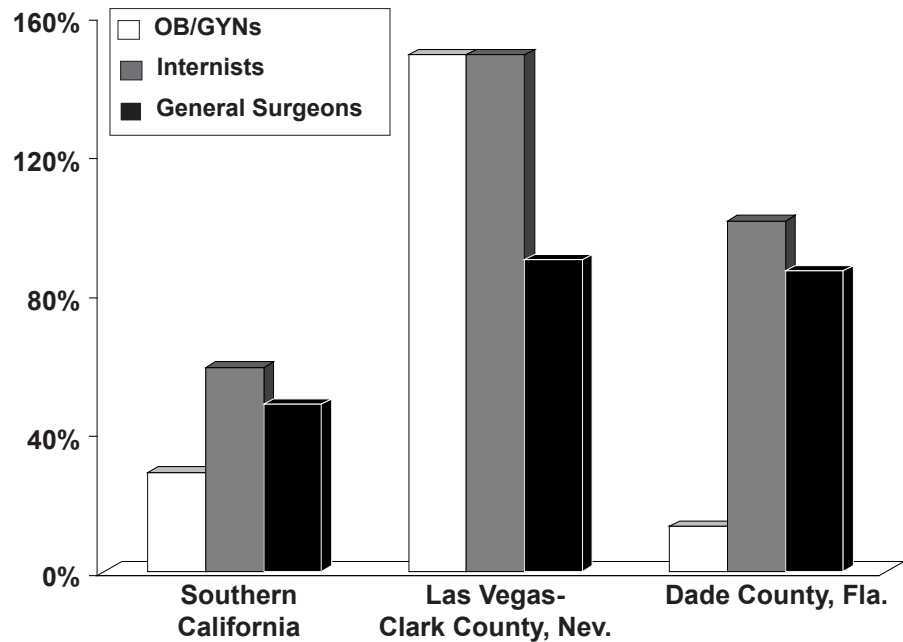
The U.S. Government Accountability Office (GAO) examined malpractice insurance premiums for three categories of medical specialty in specific California, Florida and Nevada counties known to be more litigious than surrounding areas. Like California, Nevada requires approvals for rate hikes, but Florida has what is known as a “use and file” procedure, which allows rate hikes as long as they are first filed with the insurance commissioner and do not deviate from the original filing.⁵⁰

The GAO found that premium increases in southern California over an eight-year period were much smaller than those in Dade County, Fla., and Las Vegas-Clark County, Nev., for the three specialties studied: general surgery, internal medicine and obstetrics/gynecology [see Figure IV]. Indeed, by 2000, California’s insurance premiums for internists had risen only 60 percent, compared to 100 percent for Dade County and 150 percent for Clark County. Recognizing that all three areas are highly litigious, some observers, such as the Foundation for Taxpayer and Consumer Rights, attribute California’s lower premiums to strict regulation of the state’s insurance market via Prop. 103.

However, the California Medical Association is skeptical about the effect of Prop.103 on premium growth. The law does not apply to about half of the state’s medical malpractice insurance market, which consists of hospitals that self-insure and physician-owned nonprofit insurance companies.⁵¹ Moreover, Prop. 103 was subject to a series of court battles and did not take full effect until the mid-1990s. By then, insurance companies had rolled back effective rates by more than the 20 percent required by Prop. 103.⁵²

Patient Compensation Funds. Nine states have patient compensation funds (PCFs), which are insurance pools that provide compensation to injured patients above the minimum liability insurance policies the states require physicians and facilities to purchase. For instance, Indiana requires physicians to be insured for up to \$250,000 per claim paid (or a total of \$750,000 annually).⁵³ Any malpractice judgment or settlement above these limits comes from the state’s PCF. PCFs do not cover punitive (noneconomic) damages, how-

FIGURE IV
Premium Growth in Litigious Counties
(1992-2000)



Source: Authors' calculations based on data from the *Medical Liability Monitor*.

"California capped tort awards for noneconomic damages and regulated malpractice premiums."

ever. The funds are financed through annual insurance premium surcharges or assessments paid by physicians and hospitals.

Patient compensation funds ostensibly give both insurers and physicians incentives to remain in the market, by limiting the damages for which they are liable. How effective are they? In a 2004 analysis of the nine existing state PCFs, Frank Sloan and several researchers found inconclusive data regarding PCFs' effectiveness in reducing the cost of medical malpractice insurance.⁵⁴ However, one of the study surveys found that both physicians and insurers thought that states with PCFs were more attractive to private insurers because PCFs limit potential losses.⁵⁵

No-Fault Insurance. Two states, Florida and Virginia, have limited no-fault medical malpractice insurance. In no-fault systems, claimants are not required to prove negligence by physicians or health care facilities. Both states' programs cover only birth-related neurological injuries, but Virginia's eligibility requirements for compensation are slightly stricter. Florida claimants can choose between no-fault or tort, whereas Virginia claimants must first go through the no-fault system before pursuing litigation. In both states, patients who experience a bad outcome can receive a pre-established amount of compensation through the no-fault program. These two programs are state-funded through provider fees. In spite of their similarities, the programs have

produced different results.⁵⁶ According to a Duke University study by Frank Sloan and colleagues:⁵⁷

- Virginia residents were 22 times more likely to first file a no-fault claim, rather than go through the tort system.
- Floridians were more likely than Virginians to sue, rather than to drop the case, if they were denied compensation through the no-fault system.
- The combined average economic loss payout for a no-fault claim was \$318,000, compared to an average payout of \$214,000 for cases litigated through the tort system.
- In both states, lawyers' fees under no-fault were a much smaller proportion of payouts — about \$2,981, or 1.5 percent of no-fault payouts, versus \$256,375, or 48.1 percent of awards through the tort system — because depositions and expert witnesses are not required in no-fault cases.

Why did similar systems produce different results? Unlike Virginia, in Florida plaintiffs who are dissatisfied with the outcome under no-fault can file a tort lawsuit.⁵⁸ However, in both states no-fault appears to reduce the number of tort claims that would otherwise have been filed. Also, despite the expectation that no-fault insurance would reduce the need for lawyers, most no-fault claimants retain lawyers, probably to help them through the administrative hearing process.

Case Study: Choosing Between No-Fault and Tort. The Duke University study also found that patients were more likely to file lawsuits when the care was substandard and a number of errors were made. Two obstetricians evaluated the medical records of the Florida and Virginia claimants. The results:⁵⁹

- Of the 171 cases in which no claims were filed, the evaluators consider the care received to be of “poor overall quality” in only about 8 percent.
- Of the 65 cases filed first under no-fault, evaluators determined that about 24 patients (37 percent) received poor quality care.
- Of the 26 cases filed through the tort system, evaluators determined that 15 patients (58 percent) received poor quality care.
- The evaluators found that, on the average, there were nearly three times as many medical errors per case filed under the tort system as under the no-fault system.⁶⁰

These results suggest that patients filed lawsuits when their case was strong and used the no-fault alternative when the probability of winning a lawsuit was lower or the potential tort pay-off was smaller.

“Limited no-fault compensation for medical injuries reduced litigation in Florida and Virginia.”

Case Study: Physician Practice Patterns under No-Fault. Sloan and his colleagues also examined the effect of Florida's and Virginia's no-fault programs on the practice patterns of experienced obstetricians with established practices. They found:⁶¹

- Forty-two percent of the obstetricians had been named as defendants in a malpractice suit between 1990 and 1995.
- More than 90 percent were enrolled in no-fault insurance, and 13 percent reported that one of their patients had been compensated by no-fault insurance.⁶²
- Of the individuals who quit practicing obstetrics entirely, 39 percent cited as a reason the implicit costs (time, damaged reputation) from the “threat of being sued.”
- Only 8 percent cited the rising cost of malpractice insurance.

Some physicians reduced their caseload of high-risk patients, such as diabetics, who are more likely to experience complications; 29 percent of the physicians who reduced their caseloads cited the increased threat of medical malpractice litigation as the reason.

Generally, the Florida and Virginia no-fault systems are effective in compensating individuals without the hassle and cost of litigation, but the programs are too limited in scope, particularly in Florida, to replace tort. No-fault systems may also reduce the cost of resolving less egregious cases.

Efficiency in a No-Fault System. In the 1970s, the Swedish government determined that the tort system was a costly and unreliable way to compensate victims of medical injury. The owners and funders of the nation's health care system (the Federation of County Councils) negotiated a “no-fault” agreement that would provide compensation for specific types of patient injuries, without a determination of responsibility for the injury.⁶³ The Swedish model determines compensation based on the occurrence of an “avoidable” injury, which is determined by the answers to these questions: Did medical management cause the adverse event? Was treatment appropriate or acceptable according to a medical standard? Was the injury avoidable? If a patient outcome was adverse, but could not have been avoided even under acceptable treatment standards, the patient is not compensated. The avoidability standard does not impose as high a threshold as negligence, but it is a higher threshold than simply compensating patients for all adverse outcomes.⁶⁴

Compared to tort, the Swedish no-fault system is efficient. Claims are managed by adjustors in a central office in Stockholm, who determine the patient's eligibility for compensation. The claim is then forwarded to a board of physicians who manage the compensation fund and determine payments. Once a claim is made, the average resolution time is only six months. Furthermore, administrative costs amount to only 18 percent of the cost of pay-

“Sweden's no-fault system compensates patients for avoidable medical injuries.”

outs, compared to almost 50 percent in the U.S. tort system. Compensation is awarded through periodic payments or annuities.⁶⁵

Would such a system reduce costs compared to the current U.S. tort system? Researchers from the Harvard School of Public Health applied the Swedish criteria for a compensable injury to 15,000 medical records from Utah and Colorado. They found:⁶⁶

- In Utah, a Swedish no-fault system would cost about the same as the state's tort system (\$55 million to \$60 million), but would compensate roughly six times as many patients — 1,465 compared to 210 to 240 under tort.
- In Colorado, no-fault would cost more than the tort system, \$110 million versus \$82 million, but would compensate more patients (973 compared to 270 to 300).

In other words, the Swedish model is more efficient, based on the cost per compensated individual. However, compensation costs are rising in countries with no-fault systems, such as Sweden and New Zealand, and those countries are limiting the conditions under which injuries can be compensated.

Is No-Fault Auto Insurance a Model for Medical Compensation Reform? In a no-fault auto insurance system, each driver's insurance company compensates him for accidents involving other drivers, regardless of who is at fault. Motorists have the option of suing for damages for severe injuries, but only under the strictest threshold. Twelve states currently have no-fault auto insurance, but three of them still allow motorists to sue under some circumstances.⁶⁷

Expanding the concept of no-fault insurance to medicine could be problematic, according to Patricia Danzon.⁶⁸ First, events that are compensable under no-fault auto insurance are usually clear-cut, whereas deciding which medical events are eligible for compensation may be difficult due to pre-existing conditions that increase treatment risks, such as pregnant women who are diabetic. Simply compensating patients for bad outcomes without determining negligence could increase costs to the system. Additionally, says Danzon, even if compensable injuries were clearly defined and quickly compensated, there will always be cases that fall slightly outside the defined boundary and hence are likely to create some litigation.⁶⁹ In fact, the cases that come to trial are those where it is unclear whether medical treatment caused the injuries, since insurers have an incentive to settle cases of obvious malpractice out of court.

Finally, there is mixed evidence regarding the effect of no-fault automobile insurance on accident rates. A comprehensive RAND Corp. study that compared no-fault states to tort states found overall 1976 to 1998 accident rates and fatalities were similar, after controlling for other contributing factors.

"A no-fault system could increase costs by compensating patients for every bad outcome instead of injuries due to negligence."

Furthermore, there was no evidence that no-fault policies increased negligent behavior by drivers; in fact, accidents caused by negligence were about 2 percent lower in no-fault states. Finally, there was no significant difference between auto insurance premiums in no-fault states and premiums in tort states.⁷⁰

Based on the experience of no-fault auto insurance, it appears that no-fault medical malpractice insurance by itself would neither reduce error rates nor increase physician negligence.

Enterprise Liability. Some advocate combining no-fault insurance with enterprise liability, which holds health care organizations — such as hospitals, health plans and physician groups — liable for their physicians and staff. While hospitals are typically held liable for the actions of their staff, the courts have usually ruled that physicians with admitting privileges are not hospital employees. Enterprise liability would theoretically increase organizational incentives to reduce medical errors. It was a part of the Clinton administration’s proposed universal health plan in 1993, but met vigorous opposition from all sides. But as managed care has become widespread, enterprise liability has become a more accepted concept.

Enterprise liability would provide many benefits. First, it would reduce “defensive medicine” practices and costs since physicians would be legally immune from lawsuits, and it would encourage the adoption of practice guidelines by physicians and health care enterprises.⁷¹ Additionally, enterprise liability would improve the efficiency of the court system. In about 25 percent of malpractice court cases, there is more than one defendant, and enterprise liability would reduce transaction costs between parties in either settling or defending against a claim. Similarly, Michelle Mello recommends aggregating individual physicians into larger enterprises, such as a hospital, hospital network or a health plan. The enterprise would carry malpractice insurance for all of its employees and practitioners.⁷² Physicians working for or affiliated with a hospital would be not be individually liable, except in the case of intentional misconduct. But they would pay a surcharge to the hospital in exchange for the hospital’s accepting liability.⁷³ Currently, the Federation of Jewish Philanthropies in New York and Harvard Medical Institutions in Boston cover their physicians’ malpractice costs by self-insuring.⁷⁴ Holding hospitals and health care institutions liable for the actions of physicians and staff would encourage the identification and correction of errors resulting from system failures.

“Some hospitals self-insure their physicians against malpractice.”

Experience Rating. Experience rating of medical liability insurance is the opposite of community rating: Physicians are charged premiums based on their age, experience and number of adverse events. According to David Studdert and Troy Brennan, experience rating would work well with no-fault insurance because it would pressure health care providers to take error preven-

tion measures. They point to similar rating systems in workers' compensation, where the possibility of higher insurance premiums puts financial pressure on firms to exercise safety in the workplace.⁷⁵ While there is little data available on the effect of experience rating in the medical field, data from auto insurance and worker's compensation indicates that drivers and employers are more likely to take precautions when their premiums are tied to claims history.⁷⁶

In order to study the effects experience rating would have on medical liability insurance premiums, economists Gary M. Fournier and Melayne Morgan McInnes examined claims data and premium rates for Florida physicians between 1989 and 1992. They found:⁷⁷

- Seventy percent of anesthesiologists would pay lower premiums if they were experience-rated.⁷⁸
- Between 60 percent and 70 percent of OB/GYNs would pay lower premiums under experience rating, cutting premiums for some by half.⁷⁹

Most physicians would benefit because experience rating reduces the cross-subsidies inherent in community rating — where physicians with fewer claims are overcharged and physicians with more claims are undercharged.⁸⁰

Opt-Out Provisions. Only seven states require physicians to purchase liability insurance. In other states, doctors are opting out of liability insurance coverage and self-insuring — known as “going bare.” Going bare provides advantages: It is often cheaper than malpractice premiums, and in Florida the law protects physicians' homes, retirement plans, life insurance and salaries from legal judgments. Self-insured physicians also may have a greater incentive to avoid negligent behavior, since they are personally responsible for damages. In Florida, for example, doctors who are financially unable to pay damages due to financial inability can have their licenses revoked by the state medical board.⁸¹

Although few physicians are “going bare,” the American Medical Association predicts a growing number of doctors will do so and has even dropped its recommendation against the practice.⁸² Hospitals, which carry their own liability insurance, often require physicians to have liability insurance as a condition for granting staff privileges.

State Tort Reforms

Every state has considered tort system reforms, either alone or in conjunction with insurance market reforms, and most have changed their systems in recent years. Kessler and McClellan concluded that tort-reform states could expect to reduce medical costs by 3 percent to 6 percent a year without affecting health outcomes, especially in elderly patients.⁸³

“Some physicians self-insure for malpractice and bear the financial risk.”

Damage Caps. The most popular tort reform measure is to limit, or cap, monetary awards for noneconomic damages, commonly known as “pain and suffering.” There is no objective basis for the amounts juries award for pain and suffering, and other types of noneconomic awards, such as punitive damages. Therefore, caps on noneconomic damages are a popular state tort reform, and some experts argue that noneconomic damages should be completely eliminated. [See the sidebar on “Noneconomic Damages.”]

Several studies have examined the effect of damage caps on physicians’ and insurers’ behaviors.

Effect of Damage Caps on Claim Payouts and Types of Injuries. California’s Medical Injury Compensation Reform Act (MICRA) of 1975 limited noneconomic damages to \$250,000. However, due to court challenges, the MICRA caps were not consistently applied for a number of years. Researchers examined the effect of MICRA caps in more than 150 cases between 1985 and 2002 where juries awarded noneconomic damages in excess of the state’s damage cap. The injuries varied in type and severity, and some resulted in the death of the patient.⁸⁴

The average uncapped award per verdict was \$1.1 million, while the caps reduced the average to \$295,648 (measured in 2002 dollars).⁸⁵ Since the type and degree of injury strongly, if not consistently, influenced the amount of noneconomic damages awarded by juries before the imposition of caps, limiting noneconomic damages had disparate effects on awards for different injuries. For instance:

- Noneconomic payouts for neurological and newborn injuries fell the least (less than 8 percent) after caps were imposed on noneconomic damages, since noneconomic awards for these types of injuries had not been especially high before the caps.
- Noneconomic payouts for injuries that caused pain or disfigurement — but no loss of physical function — were reduced the most by damage caps, more than 70 percent.

These results indicate that juries are swayed by real or perceived pain and suffering and respond by awarding large payouts for noneconomic damages.

Effect of Damage Caps on Physician Behavior. One of the litigation costs previously mentioned is the effect on physician behavior, such as the practice of defensive medicine and avoidance of certain specialties. In a study previously noted, Robert Quinn showed that damage caps have a generally positive but limited effect on physician behavior:⁸⁶

- In highly litigious states, damage caps reduced lab test revenues, indicating that physicians were less apt to practice defensive medicine.

“State caps on court awards for noneconomic damages (pain and suffering) have moderated increases in jury awards.”

Noneconomic Damages

In jury trials involving injury or death, the money awarded to plaintiffs sometimes includes noneconomic damages as well as economic damages. Economic damages are awarded for actual and projected expenses and losses, such as medical bills and lost wages. Noneconomic damages are awarded for such things as pain and suffering, disfigurement, mental anguish or loss of consortium. Noneconomic damages can also include punitive damages — monetary penalties that aim to deter defendants from future wrongdoing. The term noneconomic generally refers to a subjective amount that is separate from actual economic compensation, such as lost wages and medical bills.

Punitive damages have historically been limited by a formula — say, two or three times the amount of compensatory damages awarded.¹ Furthermore, some states require punitive damages to be paid into a victims' compensation fund rather than be paid directly to the plaintiff. This ensures that punitive damages meet the social goal of deterring defendants rather than encouraging litigation by providing additional compensation to plaintiffs and their lawyers.

By contrast, damages for pain and suffering are hard to quantify because pain is subjective and varies from person to person. For instance, it is impossible to really compensate parents for the emotional or psychological loss from the death of a child. But the presumption is that juries and judges who show compassion toward an injured party must somehow compensate them for their emotional experience, be it a painful corrective surgery, a permanent disability, or the loss of a child or other loved one. After all, it seems like the right thing to do.

Paul Rubin, an expert in law and economics, argues against the practice of awarding noneconomic damages to individuals, based on the revealed preferences of consumers.² He points out that individuals do not place much value on compensation for pain and suffering because there is no market for that type of insurance coverage. There are markets currently for medical insurance (including psychiatric therapy and counseling), disability insurance and life insurance, which cover medical injuries, lost wages and loss of lifetime income to the family, respectively. But if consumers wanted to be compensated for emotional distress, they would willingly purchase some type of insurance and a market would exist for it.³ Generally, tort law for malpractice events does not provide any additional benefit to, and is far more expensive than, traditional insurance.⁴

Furthermore, another expert, federal appellate Judge Paul Niemeyer, says there is no rational criteria for noneconomic damages, and that courts have long recognized that such awards violate common law principles. Judges have allowed them because juries frequently award them. Almost as frequently, the trial judge or an appellate court will reduce multimillion-dollar or multibillion-dollar awards for noneconomic damages. Judge Niemeyer argues that because there is no rational basis for pain and suffering damages, the legislature, not judges and juries, should determine a formula or set amount beforehand.⁵

One reason judges may like noneconomic damage awards is because it gives them the discretion to give the victim what, in the judge's view, is the "just" amount of compensation.

¹ Paul V. Niemeyer, "Awards for Pain and Suffering: The Irrational Centerpiece of Our Tort System," *Virginia Law Review*, Vol. 90, No. 5, September 2004, pages 1,401–21.

² Paul H. Rubin, *Tort Reform by Contract* (Washington, D.C.: American Enterprise Institute, 1996).

³ Paul H. Rubin, "Courts and the Tort-Contract Boundary in Product Liability," in Frank Buckley, ed., *The Fall and Rise of Freedom of Contract* (Durham, N.C.: Duke University Press, 1999).

⁴ According to Rubin, about 50 cents of every dollar of awards is consumed by transaction costs, principally attorneys' fees and court costs.

⁵ Niemeyer, "Awards for Pain and Suffering: The Irrational Centerpiece of Our Tort System."

- However, damage caps did not lead to a statistically significant higher percentage of physicians practicing obstetrics or neurosurgery.

Effect of Damage Caps on Insurance Premiums. Researchers have not found a direct connection between damage caps and reduced premiums. However, an examination of claims data from the National Practitioner Data Bank by Milliman Consultants and Actuaries concluded:⁸⁷

- Between 1992 and 2002, paid losses resulting from malpractice claims increased substantially, with a 25 percent jump over a two-year period at the end of the 1990s.
- Premiums per physician were consistently higher in uncapped states than in capped states; in 2002, the average physician premium in a capped state was \$12,000 compared to \$16,000 in an uncapped state.
- By 2002, malpractice awards and settlements per physician were 46 percent lower in capped states than in uncapped states.

Damage caps allow insurers to better predict their future expenditures on claims, especially if the law mandates periodic payments for large awards. A 2005 study by Harvard law professor W. Kip Viscusi and Patricia Born shows that losses for insurers in states with damage caps were 17 percent lower than in uncapped states.⁸⁸ A 2006 study from George Mason University found that insurance premiums are positively associated with the dollar amount of awards per doctor, even after controlling for other factors, such as market concentration and the number of claims per doctor.⁸⁹ In fact, for every \$1 increase in awards, insurance premiums increase by \$2.89. Both of these studies imply that reductions in awards for noneconomic damages lead to lower malpractice insurance premiums. In fact, recent data from Texas has found that damage caps may have effectively lowered premiums and attracted more physicians to the state. [See sidebar “Damage Caps in Texas”]

“Malpractice insurance premiums are lower in states with caps on noneconomic damages.”

The Collateral Source Rule. Historically, in setting damage awards, courts have prohibited juries from considering other sources of compensation an injured party could receive, such as life insurance, health insurance or disability insurance. This is called the “collateral source rule.” A repeal of the collateral source rule would prevent “double-dipping” by allowing juries to consider such payments when determining monetary awards. Several states have either repealed the collateral source rule or have limited the cases in which juries must ignore other payments. Some states have *mandatory* offset rules that require most forms of compensation to be considered when determining awards. Other states have *discretionary* rules that allow judges to consider other forms of compensation.

Kenneth Thorpe of Emory University found ambiguous effects from the full collateral source rule, the mandatory offset rule and the discretionary

Damage Caps in Texas

In 2003, Texas voters approved a constitutional amendment limiting noneconomic damage awards in malpractice suits to \$250,000 per defendant (or \$1.6 million for wrongful death). Despite the continuing debate surrounding the effectiveness of damage caps, Texas has seen some remarkable results on physician supply since the caps took effect:¹

- The Texas Medical Board reports that since 2003, 10,878 new physicians have received licenses, up from 8,391 in the prior four years.
- In fact, the influx of physicians has created a backlog of about 2,500 additional license applications waiting to be processed.

The largest gains in physician supply have occurred in obstetrics, orthopedic surgery and neurosurgery. These are specialties that are prone to malpractice litigation.

Moreover, Texas' malpractice insurance market has grown highly competitive, with 33 companies now writing policies.² Physicians' malpractice premiums have dropped an average of 21 percent.³ One doctor who recently chose Texas over Mississippi for his urology practice expects to pay only \$2,000 for malpractice premiums in 2007, compared to the \$60,000 he would have paid had he practiced in Mississippi.⁴

“More medical specialists and more malpractice insurers have entered the Texas market since damage caps were imposed.”

¹ Ralph Blumenthal, “More Doctors in Texas After Malpractice Caps,” *New York Times*, October 5, 2007.

² Eric Torbenson and Jason Roberson, “Are Texas’ Malpractice Damage Limits Healthy?” *Dallas Morning News*, June 17, 2007.

³ Blumenthal, “More Doctors in Texas After Malpractice Caps.”

⁴ Jason Roberson, “How Tort Reform Has Affected Four People: The New Doctor,” *Dallas Morning News*, June 17, 2007.

rule on damage awards. He found that compared to states with the traditional collateral source rule, the loss ratio (portion of each premium dollar spent on claims) was 13.3 percent lower in states with discretionary collateral source rules (offsets considered at a judge's discretion).⁹⁰ Furthermore, in states with both limited discretionary collateral source rules and damage caps, loss ratios were an additional 25 percent lower. The reduced loss ratios translated into higher profitability for insurers, but they did not appear to lower medical malpractice premiums for physicians.⁹¹

“More than half the states allow defendants to pay awards over time.”

Periodic Payments. More than half of all states allow defendants to pay a damage award over time rather than a lump-sum award up front. Periodic payments (or structured settlements) benefit both plaintiffs and defendants:

- A lump-sum award can be subject to potentially unwise investment decisions by the plaintiff, causing them to spend down their award money before their needs are met.
- However, periodic payments can be invested in an annuity that pays out a guaranteed amount over time to the plaintiff; furthermore, unlike lump sum awards, in which interest on the lump sum is subject to federal taxes, periodic payments (including interest) are tax-free.⁹²
- Defendants (insurers, hospitals) can spread the costs over time, allowing them to invest reserves from which they will make payments.

State laws on periodic payments vary. Some states allow periodic payments for damages only over a specific amount. In California, for example, the plaintiff or the defendant may request the court to order periodic payments for damages that exceed \$50,000. But awards for lost earnings must be paid in a lump sum to survivors.⁹³

Periodic payments can reduce costs. Some states allow the payments to cease once the victim dies, and unlike lump-sum awards periodic payments do not require a present value calculation. One criticism of lump-sum awards is that states often calculate the present value of an injured worker's future earnings at a lower discount rate than the market interest rate, essentially allowing claimants to profit from lump-sum awards. As a result, workers prefer them over periodic payments, although claimants can spend lump-sum awards before their medical needs end.⁹⁴ Indeed, periodic payments can meet the needs of claimants who require long-term care without emptying state patient compensation funds or forcing insurers to raise malpractice premiums in order to pay awards.

Limiting Attorneys' Fees. Some states limit attorney fees in order to reduce the incentive to demand higher awards. For instance, Florida limits fees to one-third of damages up to \$1 million, with lower percentages on awards over \$1 million.⁹⁵ California imposed stricter limits of 15 percent on

“Mediation and arbitration by third parties are ways to avoid the tort system.”

awards exceeding \$600,000.⁹⁶ Theoretically, limiting attorney fees allows plaintiffs to keep more of their awards and helps filter out frivolous lawsuits.⁹⁷

Alternative Dispute Resolution (ADR). Alternative dispute resolution involves arbitration or mediation between the injurer and the injured.⁹⁸ Arbitration agreements are typically binding, while mediation tends to be less formal. Proponents say alternative dispute resolution is a less costly and more efficient alternative to tort. In 1997, Thomas Metzloff of Duke University and Ralph Peeples and Catherine Harris of Wake Forest University examined the effectiveness of a court-ordered mediation pilot program for medical malpractice cases in North Carolina. They found:⁹⁹

- The average cost of a simple case with a single defendant, including premediation preparation at an hourly rate, was \$5,000, compared to \$35,000 for the defense cost of a trial.
- It took less than six months, on the average, to resolve cases in which mediation was ordered, compared to an average of five years to litigate a malpractice claim.¹⁰⁰

Arbitration is more commonly used to settle disputes between health care providers and patients regarding insurance coverage of treatments rather than malpractice. But that experience shows how arbitration might fare in malpractice situations. For example, California allows but does not require arbitration of medical malpractice disputes. A 1997 survey of 369 physicians and 99 hospitals in California revealed that:¹⁰¹

- Only 9 percent of physicians and 9 percent of hospitals use arbitration agreements.
- Physicians who use arbitration agreements are typically associated with HMO plans or are covered by an insurer that strongly encourages the use of arbitration.

Of the physicians who used arbitration agreements:

- Fifty-seven percent did so because their insurer recommended it, while 31 percent reported it is the policy of their practice group.
- More than one-third believed it was cheaper than court trials to resolve disputes.

However, of the physicians and hospitals that did not use arbitration agreements:

- Forty percent of physicians and 19 percent of hospitals reported they were not familiar with them.
- Another 31 percent of physicians and 36 percent of hospitals felt that such agreements “set the wrong tone for the patient,” indicating that patients may view such agreements as adversarial and not in their best interest.

Arbitration agreements in health care disputes, even in an environment as supportive as California, are simply not commonplace.¹⁰² One of the challenges in using arbitration agreements is that courts do not always enforce them, so the legal system must effectively recognize them as an exclusive remedy or as trial evidence.

Other Legal Reforms. A recent study on tort reforms across all 50 states found that a few legal reforms had significant effects on the number and cost of claims:¹⁰³

- Stronger expert-witness requirements reduced both claim payment levels and the number of claims.
- States that prohibit (or restrict) plaintiffs from informing jurors of the specific amount of damages they are seeking saw a smaller percentage of claims that resulted in payment (although the level of awards were similar), compared to states where juries know the amount of damages sought by plaintiffs.¹⁰⁴
- Stronger frivolous-suit penalties were associated with reductions in the paid number of claims and paid claims per physicians, but had no effect on payment levels.

Health Courts. Phillip K. Howard, chairman of the legal reform group Common Good, advocates medical courts. In these special courts, medically trained judges would expedite proceedings, thus reducing legal costs and allowing patients to keep more award money.¹⁰⁵ Charles J. Lockwood of the Yale School of Medicine says medical courts would have other advantages:¹⁰⁶

- Judgments would be based on peer-reviewed medical evidence and medical society guidelines, while court experts, not plaintiff and defense attorneys, would gather data.
- Compensation would be based on measurable economic losses, not noneconomic damages or pain and suffering.
- The courts would “work with state medical societies and specialty boards...giving them greater authority than existing state agencies” to monitor physician performance and take action against bad doctors.

Several bills to fund state health court pilot programs have been introduced in Congress, and similar legislation has been proposed in several states.¹⁰⁷

How exactly would health courts work? Testifying before the House Subcommittee on Health, Paul Barringer of Common Good described a medical liability court system based on a broader standard of “avoidability,” such as that used in Sweden, rather than negligence.¹⁰⁸

“Health courts with specially trained judges could expedite proceedings.”

To promote consistency in rulings, judges would refer to practice standards such as the National Guideline Clearinghouse at the U.S. Agency for Healthcare Research and Quality. Additionally, health courts would have compensation schedules to ensure that those injured in like manner received more equal compensation and individuals with legitimate medical injuries would have access to compensation.¹⁰⁹

Preventing Errors and Improving Quality

While insurance and tort reforms may be helpful, they will better promote efficiency and quality if the health care system focuses on tracking and preventing medical errors. Many states are working toward this goal as well.

Patient Safety Databases. It is often difficult for patients to make wise decisions regarding which doctors or hospitals to use, because they do not have comparable information about the outcome they should expect. Many states have created patient safety databases that allow consumers to research outcomes for various hospitals and physicians. Currently, 20 states have patient safety databases, most of which only require reporting of errors that lead to serious injury or death; reporting less serious errors is voluntary. All but one of the 20 states have confidentiality rules barring use of the information in litigation.¹¹⁰

While little data is available on the effect of such databases on malpractice lawsuit rates, a recent study examined the effect of New York's Cardiac Surgery Reporting System (CSRS) on patient health outcomes. Harvard University researchers examined CSRS data from 1991 to 1999 on death rates in New York hospitals that performed cardiac catheterization procedures. They found:¹¹¹

- Moving from a low-quality to a higher-quality hospital significantly reduces a patient's mortality risk.
- At hospitals with low mortality rates, patient admissions increased the first year following a favorable CSRS report, but dropped in the following year.
- Patient admissions at hospitals identified as having a lower quality of surgery declined by about 10 percent during the year following a poor CSRS rating, and remained at that level for three years.
- However, low-quality hospitals were still performing the same number of emergency surgeries as before the report, presumably because patients exercise little discretion in hospital selection during emergencies.

Furthermore, the study suggests that since cardiac surgery is profitable, hospitals with high mortality rates have incentives to reduce their mortality in order to attract more patients. Patient safety databases present two chal-

"Data on patient outcomes are not readily available for most physicians or hospitals."

lenges, however. First, health care providers must be willing to report errors. Therefore, states must use the information for consumer education and quality improvements purposes — not for punishment.¹¹² Second, consumers must be willing to take responsibility for their health care by using readily available information. According to a national survey by the Kaiser Family Foundation:¹¹³

- The majority of consumers (65 percent) would “very likely” obtain information on the quality of physicians, hospitals or health plans from friends and family members.
- But only 37 percent of consumers would obtain information on physician quality from the Internet.
- Furthermore, while patients are concerned about malpractice, only 2 percent consider finding a physician with a “low incidence of medical errors” to be the most important criterion in selecting a physician, although 70 percent believe reports of medical errors or mistakes tells them “a lot” about the quality of a hospital.

Electronic Medical Records. Two bills were introduced in both the U.S. House of Representatives and the Senate in 2005 that would fund the implementation of electronic medical records (EMR) for health care providers.¹¹⁴ As Robert Wachter and Kaveh Shojania note, “Moving paper from one place to another is always a dicey matter.”¹¹⁵ While neither bill has been approved, many states and localities are implementing their own reforms. For example:

- The Medicaid program in Wichita, Kansas, established a pilot program that puts about 90,000 records of patients online for local health care providers; officials expect to eventually expand the program statewide.¹¹⁶
- In Massachusetts, 450 physicians and 150 nurses are participating in a pilot EMR program funded by insurers, hospitals and the state.¹¹⁷

In addition, the U.S. Department of Health and Human Services has a program that “certifies” EMR products based on a product’s functionality, security and compatibility with other products. So far, 19 companies’ products have been certified.¹¹⁸ Eliminating manual record-keeping is expected to reduce medical errors and improve efficiency. Why then, aren’t EMR systems already universal? Experts say it is because insurers don’t typically pay hospitals to install EMR systems or pay doctors to use them.¹¹⁹

Contractual Solutions to Malpractice¹²⁰

In the mid-1980s, University of Chicago law professor Richard Epstein argued for replacing the tort-law malpractice system with a system in which

“Hospitals have few incentives to implement electronic medical record systems.”

liability would be determined by contract.¹²¹ Epstein's proposal, however, lacked an institutional mechanism that would make such contracts palatable. As explained below, courts have been reluctant to accept contracts signed in the hospital admissions office, let alone in the emergency room, as a true meeting of the minds. In 1993, Emory University professor Paul Rubin extended Epstein's idea by describing a reasonable institutional environment for contracts.¹²² Rubin suggested that insurance companies contract with providers and then offer people insurance governed by different legal regimes. In return for waiving the right to sue for pain and suffering and settling for economic damages only, people would be able to purchase lower-priced insurance.¹²³

"Courts have not enforced contracts between patients and medical providers that would resolve medical injury claims."

While Rubin's contribution is important and moves in the right direction, it does not go far enough. In general, market-based (contract) solutions should be encouraged for all medical malpractice claims — both economic and noneconomic. The following discussion shows how most malpractice issues could be better resolved in the marketplace.

Free the Patients. Under the current system, most hospitals and doctors ask their patients to sign a form at the time of treatment releasing the provider from any legal liability in case of a bad outcome. In malpractice suits, the defendants point to the form and claim the plaintiff (victim) has contractually waived her right to sue as a condition of treatment. Courts have routinely dismissed such arguments, however, on the grounds that they do not really constitute informed consent. After all, how can a patient who is ill, frightened and intimidated by the health care system make rational decisions about complex legal liability issues? The position of the courts is understandable, but it has had an unfortunate side effect: Doctors and patients are unable to avoid the costs of the malpractice system through any contract whatsoever.

How can the system give patients and doctors other options, while at the same time protecting patients from making unwise decisions when they are least able to negotiate contracts? One solution is to have the state legislature specify the elements of enforceable contracts in law. Physician boards could identify conditions and procedures that generally have a low risk of death and, therefore, could warrant compensation in the event of a bad outcome. Economists could establish minimum amounts of compensation based on the economic loss from an unexpected death or disability as well as procedures for determining future health costs, if any.

Patients would not be required to agree to such contracts as a condition of treatment although physicians would have the right to restrict their practices to patients who agree to such contracts. However, if the patient and physician voluntarily signed the agreement, it would be binding.

The following provisions should be considered for inclusion in such contracts:

Compensation without Fault. This provision obligates the provider to compensate the patient (or family of the patient) in the case of unexpected

“A contract alternative to tort suits would require physicians and hospitals to disclose information on errors and patient outcomes.”

death or disability. In the case of an unexpected death, the amount could be set in advance and be generally known to all patients. In the case of an unexpected disability, the contract might use provisions similar to those used to determine disability payments in state workers’ compensation systems. The amount of compensation could be varied by patient characteristics, including the patient’s age and income. In other words, the amount could be based on some of the same criteria the current malpractice system uses — but without judges, jurors, lawyers and courtroom costs.

Adjustments for Risk. Not all medical cases are the same. Even if the probability of an unexpected death is low, complications for one patient may create risks twice as high as for another. There must be a way of adjusting for differences in risks, or providers would try to avoid the harder cases. One possibility is to reduce the amount of compensation for the riskier patient (or high-risk procedure). Furthermore, the patient (or the patient’s health insurer) could purchase additional coverage to insure the event. (See the discussion below.)

Full Disclosure. As a condition of waiving the patient’s legal right to pursue liability claims under traditional tort law, providers should be required to make certain quality information public. For example:

- For routine surgeries, hospitals and doctors should post (case-adjusted) mortality rates, readmission rates, hospital-acquired infection rates and so forth.
- Providers should also be required to disclose the use of safety measures, including electronic medical records, computer software designed to reduce errors and procedures designed to prevent hospital-acquired infections.
- Additionally, in the case of unexpected death or disability, providers should be required to fully disclose all facts to appropriate investigative bodies so that steps can be taken to prevent future recurrences.

The patient should also be required to provide full disclosure of such routine information as when the last meal was consumed or what other drugs are being taken, since these might lead to adverse medical outcomes.

Patient Compliance. Even for simple surgery, patients must comply with certain provider directives, including diet restrictions, full disclosure of medications being taken and so forth. For maternity cases, compliance in the form of prenatal care is more involved and extends over a longer period of time. Failure to comply in all these cases would result in a reduction in the amount of compensation and perhaps no compensation at all.

Additional Insurance Options. In most cases, insurance companies will insure contracts. However, once premiums for a doctor, patient and procedure are set, patients could increase the coverage by paying an additional

out-of-pocket premium. For example, if the legislature requires a minimum payout of \$500,000 for an unexpected death and the providers have to pay \$X of premium for the insurance, patients should be able to pay an additional \$X to obtain \$1 million of insurance coverage (or any other multiple).

These are only a few provisions that seem reasonable. The reason for having some constraints on the freedom to contract is to promote good social policy and avoid unconscionable outcomes. People will no doubt think of additional items. The list should not be long, however. If too many burdens are placed on the contract, there will be no contracts.

Advantages. A liability-by-contract system would have a number of advantages, including the following:

Advantage No. 1: Insurers rather than patients would become the primary monitors of health care quality. Under this proposal, a great deal of quality information would be available to patients that is currently unavailable. However, patients would not be the primary monitors of quality. That role would fall to insurers. If doctors could escape the costs and burdens of the liability system by compensating patients for unexpected outcomes, they would naturally want to insure against such payments. So instead of buying malpractice insurance, they would be purchasing what amounts to short-term life insurance on all patients, say, undergoing surgery. In the current system, there are no life and disability insurance products specifically tied to episodes of medical care. However, if the contract system becomes widely used, such products are likely to emerge. In pricing these policies, insurers would have a strong interest in monitoring how doctors practice medicine. The market, rather than bureaucratic bodies, would determine who is a good surgeon and who is a bad one, and those determinations would be reflected in insurance premiums.

Advantage No. 2: Medical providers would have strong financial incentives to improve quality. In addition to the fact that malpractice premiums do not accurately reflect the actual incidence of malpractice, physician premiums rarely indicate the quality of medicine they practice. In the reformed system, insurance premiums should be closely related to actual outcomes. Surgeons with high mortality rates will pay higher premiums to insure against unexpected outcomes, other things being equal. These higher premiums, in turn, will constitute a strong financial incentive to find safer ways to perform surgery.

Advantage No. 3: All the parties responsible for patient care would have strong incentives to cooperate in improving quality. Under the current system, a patient undergoing surgery typically does not deal with a single doctor responsible for the entire procedure. Instead, the patient (implicitly) contracts with several doctors, each as an independent contractor, for example: the surgeon, the anesthesiologist, the radiologist, the pathologist and the hospital itself. Because each of these entities is independent of the other, none bears the full cost of his or her bad behavior and none reaps the full benefits of

“Physicians’ insurers would become the primary monitors of quality.”

good behavior. Some have proposed making the hospital fully responsible for all malpractice claims. But that practice would not work when most or none of the other parties to the medical incident are hospital employees. Under the proposal envisioned here, all parties to a surgical event, for instance, would have strong incentives to contract with each other and cooperate with each other on error-reducing, quality improving changes (including electronic medical records and hospital infection reduction procedures). The incentives proposed here would avoid the current tort system, offer the patient a contract insured by a single insurer and minimize the cost of that insurance.

Advantage No. 4: Patients will receive cash compensation for unexpected outcomes without the stress or expense of a lawsuit. The loss of a loved one is a traumatic event. The prospect of filing a malpractice lawsuit is also inherently stressful and traumatic. Patients and their families could better face their grief if they received a check without being forced to negotiate with doctors and lawyers, or to endure unpleasant confrontations with an opposing party in litigation. The compensation system envisioned here would put doctors and patients on the same side, with only one obligation — completing the paperwork needed to collect from an insurance company.

Advantage No. 5: Patients and their families could self-insure for additional compensation. How much should a surviving spouse receive for the death of a loved one? The decision will, to a certain extent, be arbitrary — especially if made by a legislative body. However, if the amount is publicized in advance and broadly known, families can make adjustments to meet their expected needs. If the amount is too low, for example, families could buy additional life or disability insurance on their own — including (as described above) insurance under the provider's insurance contract.

Advantage No. 6: The social cost of a liability-by-contract system is likely to be much lower than the cost of the current system. As noted above, as many as 98,000 people die each year because of errors and mistakes in our health care system — primarily in hospitals.¹²⁴ That estimate is probably high. But suppose, for the sake of argument, we accept it; and suppose that the surviving family members of these patients each received a check for \$500,000.¹²⁵ The total annual cost would be less than \$50 billion. To put that number in perspective, note that the total cost of the current malpractice system is estimated to be as much as \$200 billion annually, or four times as much.¹²⁶ If the average compensation were \$250,000, the total cost would equal one-eighth the cost of the current system. Moreover, the current system involves a huge use of real resources — lawyers, judges, courtrooms and so forth. By contrast, the check-writing solution involves very few real resources — other than monitoring and administration costs; it primarily involves moving money from some people to others, leaving real resources to be used in more productive ways. Further, if hospitals were required to pay \$500,000 per unexpected death, on the average, the health care system would not continue to sustain 98,000 deaths from medical errors each year. Hospitals would quickly find ways of reducing their error rates.

“Patients and their families would be compensated for unexpected outcomes.”

Advantage No. 7: Health care costs for patients would likely be reduced. Ultimately, patients and potential patients will absorb most of the cost of any compensation system. Just as the cost of malpractice premiums is embedded in the price of patient care, the cost of a liability-by-contract system will also be passed on to patients (and their insurers) in the form of higher prices. However, if the proposed system is socially more efficient, patients will see an overall reduction in health care costs (as well as an increase in quality and better personal protection against untoward events).

Advantage No. 8: Liability by contract is a socially better way of handling sympathetic cases. Some of the most heart-wrenching cases in malpractice law involve newborns facing the prospect of a lifetime of care. Even if the doctors and hospital personnel committed no error, the parents are confronted with an enormous burden — in terms of both time and money. The tendency on the part of jurors, therefore, is to have great sympathy for the plaintiffs. One reason obstetricians' malpractice premiums are so high is that the system is inching ever closer to a system of liability without fault. But if this is the case, why not move there directly and dispense with the lawyers, judges and juries? The reformed system would handle the sympathetic cases in an efficient, responsible way.

Free the Doctors. A system of liability by contract will not work in all cases. Many patients have a high probability of death or disability. Doctors are unlikely to want to pay the cost of those adverse outcomes, and it would be unreasonable to expect them to do so. Further, when patients seek care at emergency rooms, no one has time to evaluate the likelihood of death or permanent injury prior to the delivery of care. Even in these cases, however, an alternative to the current system is desirable. Accordingly, medical providers who offer their patients the opportunity to escape the current malpractice system by contract should have the chance to escape the system themselves in cases where contracts are impossible or impractical. In particular, these providers would be able to insist as a condition of treatment that all malpractice claims must be submitted to binding, unappealable arbitration by an independent party. (The exception would be cases of gross negligence, discussed below.)

What criteria should arbitrators use in deciding cases? Unlike the liability-by-contract system, here the paramount issue is one of fault. Doctors (and their insurers) pay nothing unless they are found to be at fault, and the amount they pay would be based on the degree to which they are at fault. As in the case of liability by contract, doctors would be freed from the burden of the traditional malpractice system, provided they do certain things. For example, they must make their quality data available to all patients; they must cooperate with all safety bodies; and they must (in arbitration cases) make all relevant data available to the patient without costly discovery.

Free the Experts. All too often, expert witnesses in tort cases are “hired guns.” The same witnesses appear time and again for one side or the

“In cases where contracts are inappropriate, binding arbitration would be an alternative.”

other. They are selected as witnesses precisely because their testimony can be counted upon to be overly generous to one of the two sides. Further, these witnesses are often handsomely paid, which gives them an incentive to continue the practice and become “professional witnesses.” These witnesses would have no role in a properly run system of arbitration. The arbitrators would be free to call on real experts who would be agents of the arbitrator rather than agents of one of the two parties.

A model for the arbitrators is the so-called “vaccine court,” a branch of the U.S. Court of Federal Claims in Washington. The vaccine court was created in 1986 as Congress’ response to a liability crisis. In rare cases, vaccines were being blamed for catastrophic injuries and even death. Manufacturers were threatening to quit the business, which in turn threat shielded the industry from civil litigation by instituting a system of no-fault compensation. Under the law, aggrieved families file petitions, which are heard by special masters in the vaccine court. Successful claims are paid from a trust fund fed by a 75-cent surcharge per vaccine dose. The U.S. Department of Health and Human Services oversees the fund, with the Justice Department acting as its lawyer.¹²⁷

“A model for arbitration is the federal ‘vaccine court’ for injury claims.”

Free the Courts. The reformed system described above should be available in all cases except gross negligence. Medical practitioners should be able to insure against the consequences of their mistakes. There seems to be no socially defensible reason, however, to allow them to contract out of the consequences of gross negligence.

There is evidence that a few of the tort system reforms considered so far have reduced the rate of growth in medical malpractice costs, while others have had little effect. But none has had a noticeable effect on health care quality. As noted, the goals are to: 1) compensate every patient (potentially) who is harmed by a medical error; 2) compensate patients fully; 3) minimize the cost of determining compensation; and 4) encourage health care providers and patients to act in ways that reduce the frequency of errors. Further, an ideal solution would generally allow patients and health care providers to achieve these goals while avoiding the tort liability system altogether. A contractual solution may be the answer.

This backgrounder was prepared by Pamela Villarreal, policy analyst, John C. Goodman, president, and Joe Barnett, director of publications, of the National Center for Policy Analysis.

NOTE: Nothing written here should be construed as necessarily reflecting the views of the National Center for Policy Analysis or as an attempt to aid or hinder the passage of any bill before Congress.

Notes

- ¹ A. Russell Localio et al., "Relation between Malpractice Claims and Adverse Events Due to Negligence: Results of the Harvard Medical Practice Study III," *New England Journal of Medicine*, Vol. 325, No. 4, July 25, 1991, pages 245-51.
- ² Angela M. Dodge and Steven F. Fitzer, *When Good Doctors Get Sued*, (Olalla, Wash.: Dodge Publications, 2001), cited in "How Often Doctors Get Sued for Medical Malpractice: Medical Malpractice." Available at http://www.wrongdiagnosis.com/medical-malpractice/how_often_doctors_get_sued_for_medical_malpractice.htm.
- ³ Charles Toutant, "Malpractice Juries Tend to Side More With Doctors, Researcher Finds," *New Jersey Law Journal*, April 26, 2007. Of cases that go to trial, plaintiffs win only about 30 percent of the time.
- ⁴ See Harvey F. Wachsman and Steven Alschuler, *Lethal Medicine: The Epidemic of Medical Malpractice in America* (New York, N.Y.: Henry Holt & Co., 1993).
- ⁵ See the American Medical Association, "Tennessee Joins States in Medical Liability Crisis," Press Release, February 14, 2006. Available at <http://www.ama-assn.org/ama/pub/category/15992.html>. Access verified July 20, 2006.
- ⁶ Betsy McCaughey, "Unnecessary Deaths: The Human and Financial Costs of Hospital Infections," Committee to Reduce Infection Deaths and the National Center for Policy Analysis, December 2005, available at http://www.npcpa.org/pub/special/pdf/RIDBooklet_120605.pdf. Also see "The Use of Economic Modeling to Determine the Hospital Costs Associated with Nosocomial Infections," *Clinical Infectious Diseases*, Vol. 36, 2003, pages 1,424-32.
- ⁷ Troyen Brennan et al., "Incidence of Adverse Events and Negligence in Hospitalized Patients: Results of the Harvard Medical Practice Study I," *New England Journal of Medicine*, Vol. 324, No. 6, pages 370-76. The study is based on the review of 30,121 randomly selected hospital records from 51 hospitals in the state of New York for the year 1984. The results were then extrapolated to estimate the occurrence of adverse events among the entire hospital population of New York during 1984.
- ⁸ Linda T. Kohn, Janet M. Corrigan and Molla S. Donaldson, *To Err Is Human: Building a Safer Health System*, Institute of Medicine (Washington, D.C.: National Academy Press, 1999). The extrapolations in the IOM report were based on Brennan et al., "Incidence of Adverse Events and Negligence in Hospitalized Patients: Results of the Harvard Medical Practice Study I;" Lucian L. Leape et al., "The Nature of Adverse Events in Hospitalized Patients: Results of the Harvard Medical Practice Study II," *New England Journal of Medicine*, Vol. 324, No. 6, 1991, pages 377-84; and Eric J. Thomas et al., "Incidence and Types of Adverse Events and Negligent Care in Utah and Colorado," *Medical Care*, Vol. 38, No. 3, pages 261-71.
- ⁹ Clement J. McDonald, Michael Weiner and Siu L. Hui, "Deaths Due to Medical Errors Are Exaggerated in Institute of Medicine Report," *Journal of the American Medical Association*, Vol. 284, No.1, July 5, 2000, pages 93-95.
- ¹⁰ Lucian L. Leape, "Institute of Medicine Error Figures Are Not Exaggerated," *Journal of the American Medical Association*, Vol. 284, No.1, July 5, 2000, pages 95-97.
- ¹¹ Localio et al., "Relation between Malpractice Claims and Adverse Events Due to Negligence: Results of the Harvard Medical Practice Study III."
- ¹² Richard Anderson, "An 'Epidemic of Medical Malpractice?' A Commentary on the Harvard Medical Malpractice Study," Manhattan Institute, Civil Justice Memo No. 27, July 1996. See also Linda Gorman, "Too Many Errors?" in John Goodman et al., *Handbook on State Health Care Reform*, National Center for Policy Analysis; available at http://www.npcpa.org/email/State_HC_Reform_6-8-07.pdf, page 17.
- ¹³ Ibid.
- ¹⁴ Robert M. Wachter and Kaveh G. Shojania, *Internal Bleeding* (New York: Rugged Land, 2005).
- ¹⁵ Joseph T. Hallinan, "Once Seen as Risky, One Group of Doctors Changes Its Ways," *Wall Street Journal*, June 21, 2005. In fact, several studies from other countries indicate that the rate of anesthesia deaths has declined from about two per 10,000 anesthetics administered to one per 200,000.
- ¹⁶ Robert Davis, "Wrong Site Surgeries on the Rise," *USA Today*, April 17, 2006.
- ¹⁷ Richard Hillestad et al., "Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings, and Costs," *Health Affairs*, Vol. 24, No. 5, September/October 2005, pages 1,103-17; and see "Industry Facts-at-a-Glance," National Association of Chain Drug Stores. Available at <http://www.nacds.org/wmspage.cfm?parm1=507#retail>. Accessed February 8, 2007. In 2005, about 3.38 billion retail prescriptions were written. See Catharine W. Burt and Jane E. Sisk, "Which Physicians and Practices Are Using Electronic Medical Records?" *Health Affairs*, Vol. 24, No. 5, September/October 2005, pages 1,334-43.

- ¹⁸ Burt and Sisk, “Which Physicians and Practices Are Using Electronic Medical Records?”
- ¹⁹ Localio et al., “Relation between Malpractice Claims and Adverse Events Due to Negligence: Results of the Harvard Medical Practice Study III.”
- ²⁰ David M. Studdert et al., “Claims, Errors and Compensation Payments in Medical Malpractice Litigation,” *New England Journal of Medicine*, Vol. 354, No. 19, May 2006, pages 2,024-33.
- ²¹ Ibid.
- ²² Ibid.
- ²³ Robert A. Yoho and Kenneth R. Zuetel, “State of Emergency.” *International Journal of Cosmetic Surgery and Aesthetic Dermatology*, Vol. 4, No. 2, 2002, pages 75-80. Jury awards vary widely by state. One study examining seven states found the median payout ranged from \$5,000 to \$350,000 depending on the state and the type of injury. See Stu Smith, “Majority of Medical Malpractice Claims in Seven States Closed Without Compensation Payments,” United States Department of Justice, March 25, 2007.
- ²⁴ Insurance Information Institute, “Medical Malpractice,” May 2007. Available at <http://www.iii.org/media/hottopics/insurance/medicalmal>. Access verified July 12, 2007. See also, “Health Care Spending in the United States and OECD Countries,” Kaiser Family Foundation, January 2007.
- ²⁵ Malpractice insurance premiums are based on a physician’s specialty, riskiness of procedures, amount of coverage and whether the physician works full time or part time. Patricia Danzon, Mark V. Pauly and Raynard S. Kington, “The Effects of Malpractice Litigation on Physicians’ Fees and Incomes,” *American Economic Review*, Vol. 80, No. 2, 1990, pages 122-27.
- ²⁶ Interviews conducted by the U.S. Government Accountability Office in the insurance, legal and medical industries suggest that contributing factors include the increased litigiousness of society, greater expectations for medical care, reduced quality of care, and “lottery mentality” (suing as a way to get a large sum of money). U.S. Government Accountability Office, “Medical Malpractice Insurance: Multiple Factors Have Contributed to Increased Premium Rates,” GAO-03-702, June 2003. Available at <http://www.gao.gov/new.items/d03702.pdf>. Access verified July 17, 2006. A lack of comprehensive state-level data prevents closer examination of the cause of these losses, such as analyzing the severity of medical malpractice claims for individual insurers.
- ²⁷ Reed Neil Olsen, “The Reform of Medical Malpractice Law: Historical Perspectives,” *American Journal of Economics and Sociology*, Vol. 55, No. 3, July 1996, pages 257-75.
- ²⁸ Ibid.
- ²⁹ William M. Sage, “The Forgotten Third: Liability Insurance and the Medical Malpractice Crisis,” *Health Affairs*, Vol. 23, No. 4, July/August 2004, pages 10-21.
- ³⁰ Ibid.
- ³¹ Michelle Mello et al., “Caring for Patients in a Malpractice Crisis: Physician Satisfaction and Quality of Care,” *Health Affairs*, Vol. 23, 2004, pages 42-53.
- ³² Patricia Danzon, Mark V. Pauly and Raymond Kington, “The Effects of Malpractice Litigation on Physicians’ Fees and Incomes,” *American Economic Review*, Vol. 80, No. 2, May 1990, pages 122-27. Researchers found that following two years of sharp premium increases, premiums declined from 1976 to 1978, yet physicians’ fees remained at higher levels with no indication of lower net incomes.
- ³³ Mark Pauly et al., “Who Pays the Incidence of High Malpractice Premiums,” *Forum for Health Economics and Policy*, Vol. 9, Issue 1, 2006.
- ³⁴ Insurance Information Institute, “Medical Malpractice Insurance,” Insurance Issues Series, Vol. 1, No. 1, June 2003.
- ³⁵ Daniel B. Kessler and Mark McClellan, “How Liability Law Affects Medical Productivity,” *Journal of Health Economics*, Vol. 21, No. 6, November 2002, pages 491-522. Kessler and McClellan obtained survey data from the Physician Insurance Association of America (PIAA) for 95,000 physicians in 19 states with significant malpractice premiums. The data listed 85,000 patient claims, details of the alleged injuries and compensation payouts from 1984 to 1994.
- ³⁶ Hospital expenditures were measured by adding up all Medicare reimbursements, out-of-pocket deductibles and copays. Additionally, treatments were divided into three types: diagnostic testing, therapeutic (drug treatments) and other services (nursing, room and board). Results showed that while health outcomes were similar for the general elderly population, expenditures for heart patients in the 19-state sample were higher than the U.S. population on average, growing 52.5 percent for AMI patients (compared to 49.7 percent for the U.S. average) over 10 years, and 47.7 percent for IHD patients (compared to 44.8

percent for the U.S. average) over 10 years, with most of the growth occurring in therapeutic treatments.

³⁷ This is their estimate of health care costs that could have been avoided, in the sample of patients they analyzed, without reducing the quality of care or outcome of treatment. See Daniel Kessler and Mark McClellan, “How Liability Law Affects Medical Productivity,” *Journal of Health Economics*, Vol. 21, No. 6, November 2002, pages 491-522.

³⁸ Christopher J. Conover, “Health Care Regulation: A \$169 Billion Hidden Tax,” Cato Institute, Policy Analysis No. 527, October 4, 2004. Other estimates on the nationwide cost of defensive medicine differ according to the samples used in specific studies. For example, one study examined obstetrical costs after tort reform, assuming a reduction in unnecessary cesareans. But researchers found the savings to be less than one-half percent of total obstetrical costs in the United States. See Lisa Dubay et al., “The Impact of Malpractice Fears on Cesarean Section Rates,” *Journal of Health Economics*, Vol. 18, 1999, pages 491-522.

³⁹ Authors’ calculation based on data from “National Health Expenditures by Type of Service and Source of Funds: Calendar Years 2005 – 1960,” Centers for Medicare and Medicaid Services. Some of these costs, however, may be due to inefficiencies in the health care system, rather than defensive medicine, since doctors and patients using third party insurance could be indifferent to the cost of additional treatments if they are not paying for them directly.

⁴⁰ Tillinghast, “2006 Update on U.S. Tort Cost Trends,” Towers Perrin.

⁴¹ “Efforts to Reduce Unnecessary C-Sections,” American College of Nurse-Midwives.

⁴² Ibid.

⁴³ Tong Li et al., “Physician Cesarean Delivery Rates and Risk-Adjusted Perinatal Outcomes,” *Obstetrics and Gynecology*, Vol. 101, No. 6, June 2003, pages 1,204-12.

⁴⁴ American Medical Association, “Tennessee Joins States in Medical Liability Crisis,” Press Release, February 14, 2006. Available at <http://www.ama-assn.org/ama/pub/category/15992.html>. Access verified July 20, 2006.

⁴⁵ Robert Quinn, “Medical Malpractice Insurance: The Reputation Effect and Defensive Medicine,” *Journal of Risk and Insurance*, Vol. 65, No. 3, September 1998, pages 467-84. Quinn calls this avoidance behavior “revenue-reducing defensive medicine,” since it tends to reduce a physician’s revenue, but also lowers the probability of a malpractice claim.

⁴⁶ Quinn obtained data from the largest malpractice insurer at the time, St. Paul Company, on family physicians and the effect that malpractice rates and tort reforms had on their behavior. Other factors taken into account included an area’s divorce rate (indicating a potentially litigious area), physicians’ ages, and the area birth rate (indicating the potential for future income).

⁴⁷ Katie Orrico, “Statement of the Alliance of Specialty Medicine before the House Energy and Commerce Health Subcommittee on the Subject of ‘Assessing the Need to Enact Medical Liability Reform,’” Alliance for Specialty Medicine, February 27, 2003. Available at <http://www.neurosurgeon.org/advocacy/wc/archives/mlr/AllianceTestimonyHouseEnergyCommerce2-03.pdf>. Access verified August 29, 2007.

⁴⁸ Prior to Prop 103, only health and life premiums had to be approved by the California Department of Insurance. California Department of Insurance, “Prop 103 Fact Sheet,” May 23, 2003. Available at <http://www.insurance.ca.gov/0200-industry/0500-legal-info/0500-gen-legal-info/prop-103-fact-sheet.cfm>.

⁴⁹ Under the federal Gramm-Leach-Bliley Act (GLB) passed in 1999, bank holding companies, securities firms, insurance companies and others were permitted to engage in cross-selling of services; for instance, banks could sell insurance services. Insurance Information Institute, “Gramm-Leach-Bliley,” Available at <http://www.financialservicesfacts.org>.

⁵⁰ U. S. Government Accountability Office, “Medical Malpractice Insurance.”

⁵¹ These include risk retention groups (RRGs), which are liability insurance companies that are owned by their members — in this case, physicians. While an RRG is licensed in one state, it is permitted by federal law to cover physicians in other states as well. See the Risk Retention Reporter at <http://www.rrr.com>. Self-insured institutions, such as hospitals, have enough assets to pay out claims without a third-party insurer.

⁵² Californians Allied for Patient Protection, “Prop 103 vs. MICRA: The Flawed Analysis by the Foundation for Taxpayer and Consumer Rights,” California Medical Association, December 2003, page 1. Available at http://www.calphys.org/assets/applets/prop103_myths.pdf. Access verified July 18, 2006.

⁵³ McCullough, Campbell and Lane, LLP, “Summary of Medical Malpractice Law: Indiana,” Available at <http://www.mcandl.com/indiana.html>. Access verified August 2, 2007.

⁵⁴ Frank A. Sloan et al., “Public Medical Malpractice Insurance: An Analysis of State-Operated Patient Compensation Funds,” Project on Medical Liability in Pennsylvania, *DePaul Law Review*, Vol. 54, 2005, pages 247-276.

⁵⁵ Ibid.

⁵⁶ Frank A. Sloan et al., “The Road from Medical Injury to Claims Resolution: How No-Fault and Tort Differ,” *Law and Contemporary Problems*, Vol. 35, spring 1997, pages 35-37.

⁵⁷ Ibid. Researchers interviewed 123 women from both states between January and June 1996. All of the women had filed a no-fault claim, a tort claim or both. All of the cases filed through no-fault had been resolved by mid-June 1996.

⁵⁸ Ibid. Surveys analyzed in the study found that those who filed no-fault claims were primarily interested in receiving compensation to cover medical expenses and lost family income, while those who filed tort claims were motivated to seek retribution or to gain more knowledge about the specifics of the injury.

⁵⁹ Ibid.

⁶⁰ The mean number of errors was 0.52 per tort claim and 0.18 per no-fault claim.

⁶¹ Frank A. Sloan, Kathryn Whetten-Goldstein and Gerald B. Hickson, “The Influence of Obstetric No-Fault Compensation on Obstetricians’ Practice Patterns,” *American Journal of Obstetrics and Gynecology*, Vol. 179, No. 3, September 1998, pages 671-76. Sloan selected a random sample of 119 obstetricians, including 21 respondents who had quit practicing obstetrics (100 from Florida, 19 from Virginia). The original sample was 203, but 65 could not be located, 12 refused to participate and 7 did not meet eligibility requirements.

⁶² Both Florida’s and Virginia’s no-fault programs are voluntary and funded by fees paid by participating hospitals and physicians.

⁶³ David M. Studdert et al., “Can the United States Afford a ‘No-Fault’ System of Compensation for Medical Injury?” *Law and Contemporary Problems*, Vol. 60, No. 2, spring 1997, pages 1-34.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ “No-Fault Auto Insurance,” Insurance Information Institute, May 2007.

⁶⁸ Patricia M. Danzon, *Medical Malpractice: Theory, Evidence and Public Policy* (Cambridge, Mass.: Harvard University Press, 1985), page 214.

⁶⁹ Ibid, page 215.

⁷⁰ “No-Fault Auto Insurance Unrelated to Accident Rates” Research Brief 9034, Rand Institute for Civil Justice, 2001. Available online at http://www.rand.org/pubs/research_briefs/RB9034/index1.html. Access verified February 1, 2007.

⁷¹ William M. Sage, “Enterprise Liability and the Emerging Managed Health Care System,” *Law and Contemporary Problems*, Vol. 60, No. 2, spring 1997, pages 159-210.

⁷² Michelle M. Mello, “Malpractice Liability and Medical Error Prevention: Strange Bedfellows?” prepared for the Council on Health Economics and Policy Conference on Medical Malpractice in Crisis; Health Policy Options, March 2004.

⁷³ “Beyond MICRA: New Ideas for Liability Reform,” American College of Physicians; available at <http://www.acponline.org/hpp/pospaper/micra.htm>; access verified July 18, 2007.

⁷⁴ David M. Studdert and Troy Brennan, “No-Fault Compensation for Medical Injuries,” *Journal of the American Medical Association*, Vol. 286, No. 2, July 11, 2001, pages 217-23.

⁷⁵ Ibid.

⁷⁶ Frank A. Sloan, “Experience Rating: Does It Make Sense for Medical Malpractice Insurance?” *American Economic Review*, Vol. 80, No. 2, 1990.

⁷⁷ Gary M. Fournier and Melayne Morgan McInnis, “The Case for Experience Rating in Medical Malpractice Insurance: An Empirical Evaluation,” Florida State University, June 2001. Available at http://garnet.acns.fsu.edu/~gfournie/WP_pdfs/jri_june2001_final.pdf. Researchers estimated premiums under an experience rating scenario were derived by dividing the physicians into groups based on specialty, location and posterior risk type. The sample included 131 anesthesiologists and 193 OB/GYNs in Miami Dade and Broward counties, and 274 anesthesiologists and 123 OB/GYNs in the rest of the state.

⁷⁸ Actual premiums for anesthesiologists ranged from \$26,000 to \$70,000, compared to estimated premiums of \$21,000 to \$87,000 under experience rating.

⁷⁹ Actual premiums for OB/GYNs ranged from \$111,000 to \$327,000 in Miami Dade and Broward counties, compared to estimated premiums of \$78,000 to \$449,000 under experience rating. For OB/GYNs in the rest of the state, actual premiums ranged from \$45,000 to \$113,000, compared to estimated premiums of \$32,000 to \$232,000 under experience rating.

⁸⁰ Fournier and McInnis, "The Case for Experience Rating in Medical Malpractice Insurance."

⁸¹ Russ Allen, "Liability: Naked Exposure," *Risk and Insurance*, September 15, 2004. Available at http://www.riskandinsurance.com/040915_feature_1.asp. Access verified May 30, 2005.

⁸² Ibid.

⁸³ Daniel B. Kessler and Mark McClellan, "How Liability Law Affects Medical Productivity," *Journal of Health Economics*.

⁸⁴ David M. Studdert, Y. Tony Yang and Michelle M. Mello, "Are Damage Caps Regressive? A Study of Malpractice Jury Verdicts in California," *Health Affairs*, Vol. 23, No. 4, July/August 2004, pages 54-67. This study assumes juries were not aware of the caps when awarding damages. The study sample consisted of 152 jury verdicts where noneconomic damages were awarded in excess of \$250,000. The injuries involved in each case were then evaluated and rated by medical experts based on their severity.

⁸⁵ Ibid.

⁸⁶ Quinn, "Medical Malpractice Insurance."

⁸⁷ Richard S. Biondi and Arthur Gurevitch, "The Evidence: Noneconomic Damage Caps Help Reduce Malpractice Insurance Premiums," Milliman Consultants and Actuaries, *Contingency*, November/December 2003, pages 31-33.

⁸⁸ W. Kip Viscusi and Patricia H. Born, "Damages Caps, Insurability, and the Performance of Medical Malpractice Insurance," *Journal of Risk and Insurance*, Vol. 72, No. 1, March 2005, pages 23-43.

⁸⁹ Alexander Tabarrok and Amanda Agan, "Medical Malpractice - Awards, Insurance, and Negligence: Which Are Related?" Manhattan Institute, Center for Legal Policy, Civil Justice Report No.10, May 2006.

⁹⁰ Kenneth E. Thorpe, "The Medical Malpractice 'Crisis': Recent Trends and the Impact of State Tort Reforms," *Health Affairs*, Web Exclusive, January 21, 2004. Loss ratio is the proportion of an insurance premium that goes to litigation-related costs, such as awards, defense costs and settlements.

⁹¹ Paradoxically, Thorpe found mandatory offset rules did not significantly reduce loss ratios.

⁹² Christopher R. Gullen, "Structured Settlements: What Attorneys Need to Learn from Grillo v. Pettite." Available at <http://www.michbar.org/journal/article.cfm?articleID=604&volumeID=46>. Access verified September 19, 2007.

⁹³ McCullough, Campbell and Lane LLP, "Summary of Medical Malpractice Law-California."

⁹⁴ Joan T. Schmidt, "Lump-Sum Awards in Workers' Compensation," *Journal of Risk and Insurance*, Vol. 54, No. 2, June 1987, pages 332-40.

⁹⁵ McCullough, Campbell and Lane LLP, "Summary of Medical Malpractice Law-Florida."

⁹⁶ Ibid.

⁹⁷ The effect of limiting attorneys' fees on the frequency of lawsuits and size of damage awards has not been widely studied.

⁹⁸ Washington State Bar Association, "Alternatives to Court," pamphlet, March 6, 2006, available at <http://www.wsba.org/media/publications/pamphlets/alternatives.htm>. Access verified July 18, 2006. The primary difference between arbitration and mediation is that in arbitration, covered under the Federal Arbitration Act of 1925, the arbitrator hears the evidence and makes a decision for the parties, where in mediation, the parties involved negotiate a settlement they must all agree on, with the help of a neutral third party.

⁹⁹ Thomas B. Metzloff, Ralph A. Peeples and Catherine T. Harris, "Empirical Perspectives on Mediation and Malpractice," *Law and Contemporary Problems*, Vol. 60, No. 1, winter 1997, pages 107-52. The program, which began in 1991, involved eight judicial districts in 13 counties. Data was collected from all malpractice cases from December 1992 through December 31, 1995.

¹⁰⁰ Lisa M. Cole, "Statement by the Physician Insurers Association of America," Physician Insurers Association of America, January 29, 2003.

¹⁰¹ Elizabeth Rolph, Erik Moller and John E. Rolph, "Arbitration Agreements in Health Care," *Law and Contemporary Problems*, Vol. 60, No. 153, winter 1997, pages 153-181.

¹⁰² Ibid.

¹⁰³ Teresa M. Water et al., “Impact of State Tort Reforms on Physician Malpractice Payments,” *Health Affairs*, March/April 2007. This study uses data from the National Practitioner Data Bank (NPDB). Explanatory variables were tort reforms by state from 1991 to 2003. Each tort reform was given an index ranking indicating the stringency of the reform. Rankings were from 1 to 7, 1 to 5, or simply 0 or 1 (if there was little variation from state to state). The higher the rating, the more stringent the reform. If there was no reform, the ranking was 0. Explanatory variables that were used included limiting attorneys’ fees, pretrial screening requirements, noneconomic damage caps, economic damage caps, joint and several liability, expert witness requirements, *ad damnum* clauses, and offset of the collateral source rule.

¹⁰⁴ Ibid. Anecdotal evidence suggests that allowing plaintiffs to ask for a specific amount in damages (known as the *ad damnum* clause) gives juries a “benchmark” to use in determining awards. These awards may be much higher than if juries were not notified of the damages sought. Restricting or eliminating the clause may result in juries awarding much lower amounts of damages to plaintiffs. Another argument is that allowing *ad damnum* publicizes large awards sought by plaintiffs, thereby eliciting media attention and sympathy for plaintiffs that could influence juries’ award determinations. According to Waters et al., a plausible explanation for the *ad damnum* clause’s effect on the number of paid claims per physician and per year is that its elimination may give defendants more confidence to go to trial instead of settling out of court. This would explain why eliminating the clause would reduce the number of paid claims, but not the average amount per claim.

¹⁰⁵ Phillip K. Howard, “The Best Course of Treatment,” *New York Times*, July 21, 2003.

¹⁰⁶ Charles J. Lockwood, “Editorial: Expert Medical Courts: An Idea Whose Time Has Come,” *Contemporary OB/GYN*, September 1, 2004.

¹⁰⁷ Ibid.

¹⁰⁸ Testimony of Paul J. Barringer III, before the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Health, July 13, 2006.

¹⁰⁹ Ibid.

¹¹⁰ Joel B. Finkelstein, “Patient Safety Laboratories: States Pave the Way for a National Effort,” *AMNews*, January 3/10, 2005. Available at <http://www.ama-assn.org/amednews/2005/01/03/gvsa0103.htm>. Access verified July 18, 2006.

¹¹¹ David M. Cutler, Robert Huckman and Mary Beth Landrum, “The Role of Information in Medical Markets: An Analysis of Publicly Reported Outcomes in Cardiac Surgery,” National Bureau of Economic Research, Working Paper No. 10489, May 2004.

¹¹² Finkelstein, “Patient Safety Laboratories: States Pave the Way for a National Effort,” page 2.

¹¹³ Kaiser et al., “National Survey on Consumers’ Experiences with Patient Safety and Quality Information.”

¹¹⁴ These include H.R. 2234, the 21st Century Health Information Act introduced in May 2005, S. 262, and the Health Technology to Enhance Quality Act introduced in June 2005.

¹¹⁵ Robert M. Wachter and Kaveh G. Shojania, *Internal Bleeding*, page 175.

¹¹⁶ Andi Atwater, “Project Puts Patient Info Online,” *Wichita Eagle*, April 7, 2006.

¹¹⁷ “\$50 Million Electronic Medical Records Pilot Set to Start,” *Boston Business Journal*, January 16, 2006.

¹¹⁸ Julie Schmit, “Medical Record E-Devices Get Government Approval,” *USA Today*, July 18, 2006.

¹¹⁹ Devon M. Herrick and John C. Goodman, “The Market for Medical Care: Why You Don’t Know the Price; Why You Don’t Know about Quality; And What Can be Done About It,” National Center for Policy Analysis, Policy Report No. 296, March 12, 2007.

¹²⁰ Much of this section is adapted from a proposal by Goodman et al., *Handbook on State Health Care Reform* (Dallas, Texas: National Center for Policy Analysis, 2007), Chapter X.

¹²¹ Richard Epstein, “Medical Malpractice, Imperfect Information, and the Contractual Foundation for Medical Services,” *Law and Contemporary Problems*, Vol. 49, No. 2, spring 1986, pages 201-212.

¹²² Paul H. Rubin, *Tort Reform by Contract* (Washington, D.C.: American Enterprise Institute, 1993).

¹²³ Malpractice insurance premiums are commonly community rated, which reduces the financial incentive of doctors to invest in quality-improving measures such as electronic medical recordkeeping.

¹²⁴ Kohn, Corrigan and Donaldson, *To Err Is Human: Building a Safer Health System*.

¹²⁵ As noted above, not every patient would receive the same amount of money.

¹²⁶ This comparison ignores the cost of nonfatal malpractice injuries.

¹²⁷ The vaccine compensation law requires that petitions be filed within three years of the first sign of injury. Under the law, petitioners who have gone more than 240 days without a ruling in the vaccine court can opt out and file a civil suit. More than three dozen families who have waited at least this long have opted out, and more are sure to follow.

About the NCPA

The NCPA is a nonprofit, nonpartisan organization established in 1983. Its aim is to examine public policies in areas that have a significant impact on the lives of all Americans — retirement, health care, education, taxes, the economy, the environment — and to propose innovative, market-driven solutions. The NCPA seeks to unleash the power of ideas for positive change by identifying, encouraging and aggressively marketing the best scholarly research.

Health Care Policy. The NCPA is probably best known for developing the concept of Health Savings Accounts (HSAs), previously known as Medical Savings Accounts (MSAs). NCPA President John C. Goodman is widely acknowledged (*Wall Street Journal*, *WebMD* and the *National Journal*) as the “Father of HSAs.” NCPA research, public education and briefings for members of Congress and the White House staff helped lead Congress to approve a pilot MSA program for small businesses and the self-employed in 1996 and to vote in 1997 to allow Medicare beneficiaries to have MSAs. In 2003, as part of Medicare reform, Congress and the president made HSAs available to all nonseniors, potentially revolutionizing the entire health care industry. Health Savings Accounts now are potentially available to 250 million nonelderly Americans.

The NCPA outlined the concept of using federal tax credits to encourage private health insurance and helped formulate bipartisan proposals in both the Senate and the House. The NCPA and Blue-Cross Blue-Shield of Texas developed a plan to use money federal, state and local governments now spend on indigent health care to help the poor purchase health insurance. The SPN Medicaid Exchange, an initiative of the NCPA for the State Policy Network, is identifying and sharing the best ideas for health care reform with researchers and policymakers in every state.

Taxes & Economic Growth. The NCPA helped shape the progrowth approach to tax policy during the 1990s. A package of tax cuts designed by the NCPA and the U.S. Chamber of Commerce in 1991 became the core of the Contract with America in 1994. Three of the five proposals (capital gains tax cut, Roth IRA and eliminating the Social Security earnings penalty) became law. A fourth proposal — rolling back the tax on Social Security benefits — passed the House of Representatives in summer 2002. The NCPA’s proposal for an across-the-board tax cut became the centerpiece of President Bush’s tax cut proposals.

NCPA research demonstrates the benefits of shifting the tax burden on work and productive investment to consumption. An NCPA study by Boston University economist Laurence Kotlikoff analyzed three versions of a consumption tax: a flat tax, a value-added tax and a national sales tax. Based on this work, Dr. Goodman wrote a full-page editorial for *Forbes* (“A Kinder, Gentler Flat Tax”) advocating a version of the flat tax that is both progressive and fair.

A major NCPA study, *Wealth, Inheritance and the Estate Tax*, completely undermines the claim by proponents of the estate tax that it prevents the concentration of wealth in the hands of financial dynasties. Actually, the contribution of inheritances to the distribution of wealth in the United States is surprisingly small. Senate Majority Leader Bill Frist (R-TN) and Senator Jon Kyl (R-AZ) distributed a letter to their colleagues about the study. In his letter, Sen. Frist said, “I hope this report will offer you a fresh perspective on the merits of this issue. Now is the time for us to do something about the death tax.”

Retirement Reform. With a grant from the NCPA, economists at Texas A&M University developed a model to evaluate the future of Social Security and Medicare, working under the direction of Thomas R. Saving, who for years was one of two private-sector trustees of Social Security and Medicare.

The NCPA study *Ten Steps to Baby Boomer Retirement* shows that as 77 million baby boomers begin to retire, the nation’s institutions are totally unprepared. Promises made under Social Security, Medicare and Medicaid are completely unfunded. Private sector institutions are not doing better — millions of workers are discovering that their defined benefit pensions are unfunded and that employers are retrenching on post-retirement health care promises.

Pension reforms signed into law include ideas to improve 401(k)s developed and proposed by the NCPA and the Brookings Institution. Among the NCPA/Brookings 401(k) reforms are automatic enrollment of employees into the companies' 401(k) plans, automatic contribution rate increases so that as workers' wages grow so do their contributions, and stronger default investment options for workers who do not make an investment choice.

The NCPA's online Social Security calculator allows visitors to discover their expected taxes and benefits and how much they would have accumulated had their taxes been invested privately.

Environment & Energy. The NCPA's E-Team is one of the largest collections of energy and environmental policy experts and scientists who believe that sound science, economic prosperity and protecting the environment are compatible. The team seeks to correct misinformation and promote sensible solutions to energy and environment problems. A pathbreaking 2001 NCPA study showed that the costs of the Kyoto agreement to reduce carbon emissions in developed countries would far exceed any benefits.

Educating the next generation. The NCPA's Debate Central is the most comprehensive online site for free information for 400,000 U.S. high school debaters. In 2006, the site drew more than one million hits per month. Debate Central received the prestigious Templeton Freedom Prize for Student Outreach.

Promoting Ideas. NCPA studies, ideas and experts are quoted frequently in news stories nationwide. Columns written by NCPA scholars appear regularly in national publications such as the *Wall Street Journal*, the *Washington Times*, *USA Today* and many other major-market daily newspapers, as well as on radio talk shows, on television public affairs programs, and in public policy newsletters. According to media figures from Burrelle's, more than 900,000 people daily read or hear about NCPA ideas and activities somewhere in the United States.

What Others Say About the NCPA

"The NCPA generates more analysis per dollar than any think tank in the country. It does an amazingly good job of going out and finding the right things and talking about them in intelligent ways." –Newt Gingrich, former Speaker of the U.S. House of Representatives

"We know what works. It's what the NCPA talks about: limited government, economic freedom; things like health savings accounts. These things work, allowing people choices. We've seen how this created America." –John Stossel, co-anchor ABC-TV's 20/20

"I don't know of any organization in America that produces better ideas with less money than the NCPA." –Phil Gramm, former U.S. Senator

"Thank you . . . for advocating such radical causes as balanced budgets, limited government and tax reform, and to be able to try and bring power back to the people." –Tommy Thompson, former Secretary of Health and Human Services

The NCPA is a 501(c)(3) nonprofit public policy organization. We depend entirely on the financial support of individuals, corporations and foundations that believe in private sector solutions to public policy problems. You can contribute to our effort by mailing your donation to our Dallas headquarters or logging on to our Web site at www.ncpa.org and clicking "An Invitation to Support Us."