

Medical Malpractice Crisis

Trends *Alert*

Critical information for state decision-makers



www.csg.org



The Council
of State Governments

Preparing states for tomorrow, today . . .

Trends *Alert*

Critical information for state decision-makers



Medical Malpractice Crisis

April 2003
Revised May 2003

www.csg.org



The Council
of State Governments

Preparing states for tomorrow, today . . .

Table of Contents

Executive Summary	1
1. The situation in perspective – medical malpractice over the years	2
2. Past policy response – first generation reforms	4
3. Three pieces of the puzzle – health care, legal and insurance industries.....	9
4. Looking forward – what states can do	11
Conclusion.....	21

Executive Summary

The cost and availability of medical malpractice insurance are causing major problems in many states. Doctors have walked off the job in some states, including Mississippi, Florida, West Virginia and Nevada. Trauma centers have closed while doctors have protested high premiums. Some women can't find an obstetrician to deliver their babies because doctors can't find affordable malpractice insurance.

Unfortunately, problems with the medical malpractice industry are nothing new. The medical malpractice insurance industry goes through a cycle every 10 years or so. Premiums skyrocketed in the 1970s, and doctors protested these increases. In the 1980s, many insurance companies quit providing medical malpractice insurance, so doctors had difficulty finding coverage. Problems were averted in the 1990s because insurance companies made money off their stock market investments so they didn't raise premiums.¹ But the 2000s have seen another cycle of crisis unfold.

Medical malpractice is a three-pronged problem. First, there are the medical care providers whose mistakes lead to medical malpractice claims. Second, the legal system requires a great deal of time, effort and money to determine fault, so it's an inefficient means of settling malpractice claims. Third, the medical malpractice insurance industry raises and lowers premiums, not based on a physician's track record, but partly on the ups and downs of the national economy.

In order to address the medical malpractice problems, state officials need to realize that:

- The foundation of medical malpractice concerns doctors who harm patients through negligence or mistakes. If there are fewer medical errors, there should be fewer medical malpractice claims. State licensing board reforms, risk management and patient safety programs, and patient education and health literacy programs are ways to address the problem of medical incidents that lead to malpractice suits.
- The legal environment is costly, time-consuming and unpredictable. Enterprise liability, summary jury trials, medical courts, medical disciplinary tribunals and alternative dispute resolution methods are all ways to increase the efficiency of the legal system.
- The medical malpractice insurance industry operates in less-than-ideal market conditions. Insurers raise and lower premiums at least partly based on the booms and busts of the stock market. Problems with the insurance industry can be addressed through a variety of options, such as rate regulation, experience rating, no fault insurance and patient-purchased medical malpractice protection.

Medical malpractice is a complex problem that requires a comprehensive solution. Band-aid solutions, such as sole reliance on tort reform, have not worked in the past, and they won't work now. State officials must address problems with the medical, legal *and* insurance aspects of the problem if they hope to avert a future crisis.

This *TrendsAlert* puts the current situation into perspective by reviewing past problems with medical malpractice insurance and past policy responses. It also examines the three sectors that combine to create the problems – the health care system, the legal system and the insurance industry – and outlines a host of policy options from which state officials may choose to address the specific circumstances of their states.

1. The situation in perspective – medical malpractice over the years

Medical malpractice insurance has reached crisis status three times over the last 33 years. In the 1970s, medical malpractice premiums rose substantially. Premium rates lagged behind claim costs in the early 1970s, so insurers drastically increased premium rates later in the decade in order to pay claims.

In the 1980s, premium rates once again lagged behind claim costs, so insurers once again raised rates.² The difference between the two decades is that premium rate increases were spread over more years in the 1980s than in the 1970s, so the increases did not seem so drastic.³ However, medical malpractice insurance became so unprofitable in the 1980s that many companies pulled out of the market.

In the 2000s, cost and availability are both problems. Some doctors, especially those in high-risk specialties such as obstetrics, can't afford their premiums. And some doctors can't find coverage at all as major companies have pulled out of the market in some states.

This section examines each decade's situation and explains some of the most commonly cited reasons for malpractice insurance problems in the 1970s, 1980s and 2000s.

1970s

There were several factors leading to the rising premiums of the 1970s.⁴ There was more substantial risk to patients due to the use of newer methods of treatment and the use of more sophisticated pharmaceutical therapy, and Americans began to expect more from medicine. A decline in investment revenue by insurance companies resulting from a sagging economy forced insurers to raise capital by increasing premiums. There were increased incentives for lawyers to file medical malpractice claims, and the legal climate was more conducive to medical malpractice claims than in previous years.

In response to the crisis, doctors formed their own insurance companies. These physician mutuals were supposed to be more in tune with the needs of health care providers and thus provide more efficient insurance coverage.

1980s

Many of the same conditions that led to the 1970s crisis have been blamed for the crisis in the 1980s. In addition, part of the crisis in the 1980s was caused by state regulatory commissions that would not allow premium increases. Since medical malpractice insurance was such a small part of overall business for multiline insurers, many of them pulled out of the market.⁵ While this helps explain why availability became a problem, it does not explain why premium rates continued to rise.

Insurance companies' loss ratios increased in the early 1980s. In the mid-1980s, there were increased competition and more lawsuits, so many large multiline insurance companies got out of the business. The physician-owned insurance companies that were formed in the 1970s faced the same competitive conditions that other insurance companies did. Many of these physician mutuals were taken over by large companies or restructured, and rates were raised to pay for these changes.

The 1980s crisis can be partially attributed to the lag time in claims. The relatively new physician-owned mutual companies had just started to pay the claims filed in the late 1970s and early 1980s.⁶ In addition, since most mutual companies only sold policies in one state, the small size of the risk pool did not allow the insurers to adequately spread risk. Traditional insurers and these physician mutuals purchased reinsurance in order to spread risk. However, the reinsurance market took a downturn in the 1980s so smaller companies left the market or merged because of underwriting losses and low capital reserves.⁷

2000s

Another crisis was averted in the 1990s partly because insurance companies made sizeable profits from their stock market investments.⁸ They made so much money and built up such large reserves that they didn't raise premiums. Insurers reduced their capital reserves and lowered their underwriting standards in order to boost profits and gain market share. That is, in the 1990s, multiline insurers gained market share from physician mutuals by lowering premiums. Physician mutuals couldn't decrease premiums much further because they did not have access to outside expansion capital.⁹ These mutuals converted to investor-owned companies in order to compete. At the same time, however, insurers were faced with increased payouts that decreased capital reserves.

With the downturn in the economy following the September 11 attacks and well-publicized corporate scandals, stock market investments plummeted. When insurers were no longer able to make large profits on these dividends, many decided to raise premiums, drastically so in some instances.

Overview of Crisis Factors

Much of the responsibility for the situation in the 1970s, 1980s and 2000s has been attributed to an increase in medical malpractice claims and generous jury awards against doctors. While some claim that there was a surge in the frequency and severity of medical malpractice claims in the 1960s,¹⁰ others claim that the frequency of medical malpractice claims have grown steadily throughout the history of this country. Other evidence suggests that the amounts of settlements and jury awards over the last thirty years have simply risen at the same rate as medical costs.¹¹ Because of a lack of data, though, it is difficult to determine the trend in claim frequency and severity. Therefore, other factors must be considered at least partly responsible for the periodic medical malpractice crises.

2. Past policy response – first generation reforms

The predicaments of the 1970s and 1980s prompted states to pass what are known as first generation reforms. Some of these reforms focused on the insurance industry. Despite the complicated nature of the problem, however, the majority of them focused on the legal system.

Insurance Reforms

The two most common first generation insurance reforms were joint underwriting associations (JUAs) and patient compensation funds. Most states created JUAs as an emergency measure to provide insurance for health care providers who were unable to secure it in the private market. With a JUA, all companies writing liability insurance in a given state were required to contribute funds to a reserve pool from which higher-risk physicians could receive insurance coverage.¹²

Similarly, Patient Compensation Funds (PCFs) were pools of money formed by payments from doctors to provide additional funds to pay the amounts required by court decisions and spread the risk of million-dollar court decisions across a number of doctors.

Most JUAs were established for a set amount of time in the 1970s and proved not to be the answer to the crisis, while many PCFs were quickly depleted, leaving the same problem as before.¹³

Tort Reforms

The majority of first generation reforms were tort reforms. Many of the same reforms initiated in the 1970s were once again instituted in the 1980s. Refer to Table 2.1 on the next page for a list of common tort reforms and the states that adopted them. Tort reforms fall into three different categories, each focusing on a different aspect of the legal system. Some deal with claim frequency, some with claim severity and some with the ease of plaintiff victory in court.

Claim Frequency

The first type of reforms attempted to curb the number of malpractice claims. In the 1970s, many states eliminated the discovery rule, which had suspended the statute of limitations for injuries that could not have been discovered by reasonable effort.¹⁴ Other states attempted to discourage frivolous lawsuits by enacting laws that capped attorneys' contingency fees at a certain percentage of the award or adopting a graduated contingency fee system based upon the amount of the award. Some states implemented pretrial screening panels to weed out frivolous claims and began referring malpractice claims to arbitration.

Claim Severity

A second category of tort reforms aimed to limit the severity of awards. States enacted caps on the amounts that juries could award in medical malpractice cases. They also changed rules for joint and several liability so that one defendant would not be liable for awards against other defendants. Many states also addressed the collateral source rule, which had allowed plaintiffs to recover money although they had already received compensation from insurance.¹⁵ Some states eliminated the collateral source rule altogether, while others simply began to require that plaintiffs reveal to the jury the amounts that they had already received.¹⁶ In addition, several states mandated or made allowance for periodic payments in lieu of lump-sum payments to ease the initial burden of large jury awards on insurance providers.¹⁷

Ease of Plaintiff Victory

A third category of reforms focused on making it harder for plaintiffs to win in court. A number of different states tried variations on informed consent laws, allowing juries to decide how much information a patient needed, outlining information that must be included on written consent forms or simply defining the level of information required to constitute appropriate disclosure.¹⁸ Many states altered requirements for medical standards of care. Some revised burden of proof standards, enacting laws that required plaintiffs to prove that defendants had demonstrated a lack of skill or failed to provide customary levels of care.¹⁹

Several states enacted laws specifying that it is the plaintiff's obligation to prove the absence of customary care or skill.²⁰ Prior to these reforms, the legal principle of *res ipsa loquitur* was applied to medical malpractice cases, which meant the plaintiff was not required to prove that the defendant was negligent.²¹

Figure 2.1 Tort Reform Measures		
Measures	States Passing Measure	States Passing Measure but Finding it Unconstitutional
Claim Frequency		
Attorney Contingency Fees Subject to Review A less restrictive alternative to placing limits in all attorney contingency fees is to make large payouts subject to review by a court or screening panel.	Ariz., Hawaii, Iowa, Md., Neb., N.H., Nev. and Wash.	
Limiting Attorney Contingency Fees Because attorneys in tort cases usually work on a contingency fee basis, which pays them a percentage of the total damage award, some argue that this system results in excessive payouts for lawyers. Thus, some states limit the total amount a lawyer may receive.	Calif., Conn., Del., Fla., Ill., Ind., Mass., Maine, Mich., N.J., N.Y., Okla., Ore., Tenn., Utah, Wis. and Wyo.	
Claim Severity		
Damage Caps Damage caps limit the amount of money providers are required to pay in medical liability cases. Three specific types of caps exist.		
1) Economic Damages: These reforms limit the amount of money a person may recoup to replace actual monetary losses that resulted from medical negligence. The specific costs in this category include medical bills and loss of future earnings. This category also includes those states that limit the total amount of a damage award.	Ga., Kan., Colo., Ind., La., N.D.*, Neb., N.H., N.M. and Va.	Ala., Ill., S.D., Texas and Wash.
2) Non-economic Damages: These reforms limit the amount of money a victim may be awarded for unquantifiable losses. These specific losses include pain and suffering or loss of consortium.	Alaska, Calif., Colo., Hawaii, Idaho, Kan, Mass., Md., Maine, Mich., Mo., Miss., Mont., N.D., Nev., S.D., Utah, W.Va. and Wis.	Ala., Fla., Ill., N.H., Ohio, Ore., Texas and Wash.
3) Punitive Damages: These reforms limit the amount that the offender may be ordered to pay as punishment for specific action.	Alaska, Colo., Del., Fla., Ga., Ill., Ind., Kan., La., Maine, N.C., Neb., N.J., Nev., Okla., Ore., Pa., R.I., Texas and Va.	Ala. N.H. and Ohio

Figure 2.1 Tort Reform Measures (cont.)

Measures	States Passing Measure	States Passing Measure but Finding It Unconstitutional
Claim Severity (Cont.)		
<p>Periodic Payment of Damages This reform allows a defendant to divide the payment of an award over time instead of one lump sum payment. Although this action can lessen the immediate impact of a lawsuit for providers, opponents contend that it is unfair to victims because it removes the possibility for the investment of a large sum payment.</p>	Ala., Alaska, Ark., Ariz., Calif., Colo., Del., Fla., Iowa, Idaho, Ill., Ind., La., Md., Maine, Mich., Minn., Mo., Mont., N.D., N.H., N.M., N.Y., Ohio, S.D., Utah, Va., Wash. and Wis.	
<p>Abolition of Joint and Several Liability Without joint and several liability, each liable party is only responsible for their proportionate share of damages.</p>	Alaska, Ariz., Colo., Conn., Fla., Ga., Hawaii, Iowa, Idaho, Kan., Ky., La., Miss., N.D., Neb., Nev., N.H., N.J., N.M., N.Y., Ore., Pa., Texas, Utah, Vt., Wash. and Wyo.	Ill. and Mont.
<p>Abolition of the Collateral Source Rule The collateral source rule allows plaintiffs to recover amounts that they have already received from insurance reimbursements. While some states eliminated the collateral source rule, others simply began to require that plaintiffs to present the amounts already received to the jury.</p>	Alaska, Ariz., Calif., Colo., Conn., Del., Fla., Iowa, Idaho, Ill., Ind., Mass., Maine, Mich., Minn., Mont., N.D., Neb., Nev., N.J., N.Y., Okla., Ore., Pa., R.I., S.D., Tenn., Utah, Wash. and Wis.	Ala., Ga., Kan., Ky. And Ohio**
Ease of Plaintiff Victory		
<p>Expert Testimony and Qualifications Nearly every state requires expert testimony to establish sufficient evidence on a medical liability case. The specific qualifications vary widely across the states.</p>	All states except Ga., Neb. and N.D.	
<p>Affidavit/Certificate of Merit Some states require an affidavit or certificate of merit from a medical expert be filed in medical liability claim cases.</p>	Colo., Del. Fla., Ga., Md., Mich., Minn., Mo., N.J., N.Y., N.D. and Texas	Ill., Ohio and Pa.

Notes

* No cap in the traditional sense, but economic damages in excess of \$250,000 are subject to court review for reasonableness.

** Collateral source rule was struck down by the 11th District Court of Appeals in *Schenk v. The Cleveland Electric Illuminating Co.* (1994) (Information for this table was compiled from several sources but relies heavily on Miami Marchev, "The Medical Malpractice Insurance Crisis: Opportunity for State Action," *National Academy for State Health Policy*, (July 2002): 1-21.)

Effects of First Generation Reforms

Overall, there is little evidence that first generation reforms have been effective. Many of the states that passed tort reform in the 1970s had another crisis in the 1980s or are currently experiencing problems. Furthermore, the effects of tort reforms have been limited in part because of court challenges. In fact, tort reforms have been deemed unconstitutional in more than 20 states.²²

Many people point to the fact that there was a crisis in the 1980s as evidence that the first generation reforms of the 1970s did not work. Other anecdotal evidence suggests that tort reforms alone have consistently failed to keep malpractice insurance premiums down. California's Medical Injury Compensation Reform Act of 1975 is often held as model tort reform legislation. The act caps noneconomic damages at \$250,000, sets a statute of limitations on claims within one year of discovery of injury and negligent cause or within three years of the injury, allows periodic payments of awards and caps attorneys' contingency fees. Missouri has a similar law, but medical malpractice premium rates are increasing rapidly there.²³ In addition, some states, such as Michigan, Massachusetts and Maryland have higher-than-average medical malpractice premiums despite the existence of damage cap laws.²⁴ Furthermore, there is no evidence that states that have passed tort reform have been a magnet for doctors fleeing from other states²⁵ or that specialties, such as surgery and obstetrics, that have the highest medical malpractice premiums are having trouble recruiting new doctors.²⁶

This is not to say that all tort reform is futile. A 1982 study showed that there is some evidence that damage caps and collateral source offsets reduce claim severity and/or premiums and that statutes of limitation restrictions decrease claim frequency.²⁷ Another study found that Medicare costs decreased in states with tort reforms,²⁸ suggesting that doctors no longer had to run unnecessary tests in order to protect themselves from potential lawsuits. One study showed that tort reform may not stabilize medical malpractice insurance premiums but can increase insurance profitability and reduce risk and thus help stabilize the industry.²⁹ However, the same study also found that these financial benefits were accrued mostly by inefficient and less profitable insurance companies. In other words, tort reforms rewarded the bad underwriting practices of less profitable insurers.

Why were these reforms largely unsuccessful? Many of the problems of the medical malpractice insurance industry are related to the health care field and the market structure of the insurance industry. Tort reform did not address these aspects, so it didn't make lasting changes in the system.

3. Three pieces of the puzzle – health care, legal and insurance industries

Medical malpractice is a three-pronged problem. First, there are the medical care providers whose mistakes lead to medical malpractice claims. Second, the legal system requires a great deal of time, effort and money to determine fault, so it is an inefficient means of settling malpractice claims. Third, the medical malpractice insurance industry raises and lowers premiums, not based on a physician's track record, but partly on the ups and downs of the national economy.

Health Care System

One overlooked aspect of the medical malpractice insurance situation is the existence of medical malpractice. Medical error is an element of the health care system that leads to the necessity of malpractice insurance and recourse in the courts.

The fear of being sued may cause doctors to be more careful, but it may also deter health care providers from reporting medical errors. Ideally, doctors should learn from their mistakes and the mistakes of others. However, since their mistakes can result in lawsuits, doctors are hesitant to report their mistakes or those made by their colleagues.

Legal System

The legal system is an inefficient method of providing compensation.³⁰ It is unpredictable, costly, time-consuming and does not seem to prevent injuries. In addition, more than 60 percent of the cost of medical malpractice cases is related to determining fault.³¹

Few people with valid medical malpractice claims file against their doctors. While it is difficult to quantify, estimates range from 3 percent to 30 percent.³² Medical malpractice cases are costly. There are a lot of time and cost involved in the collecting evidence and taking depositions, and lawyers for both sides must hire expert witnesses.

Few injured plaintiffs actually win their cases. Therefore, most of the costs related to injured people come from compensatory insurance, such as sick leave, and public programs, such as Medicare.³³ So when a doctor injures a patient, it is likely not the doctor nor the insurance company that pays most of the costs.

Compensation is variable and unpredictable. Evidence suggests that minor injuries are over-compensated while serious injuries are under-compensated.³⁴ Jury awards can vary widely even for similarly severe

cases.³⁵ This adds to the uncertainty of cases and is unfair to plaintiffs with similar circumstances who receive different awards.

Insurance Industry

Insurers have capitalized on favorable market conditions over the years, especially during the 1990s. When interest rates were high or the stock market was booming, insurance companies underpriced premiums in order to gain market share and money to reinvest in the stock market. They tried to undercut each other by using income from profitable investments. When interest rates declined or the stock market soured, insurers raised premiums in order to increase or maintain their profitability. At times, they undercut each other to the extent that they could not pay for claims. Therefore, over the last three decades, medical malpractice premiums have directly followed economic cycles, not jury awards and settlement payments.³⁶

Insurance is a business based on “beating the odds.” In many lines of insurance, actuaries analyze data on past accidents in order to estimate premiums. In medical malpractice insurance, however, policies are not sold to a policyholder based on the risks associated with that particular policyholder. This is because of a lack of data on medical errors and incidents. Doctors are reluctant to report medical errors, and only 20 states require reporting of incidents and medical errors in hospitals.³⁷ Because data are not available, medical malpractice insurers use class ratings. Different specialties are considered riskier than others. Since insurance is based on statistics, the efficiency of group rating is debatable.

The medical malpractice insurance market is more volatile than general liability, automobile and homeowner insurance.³⁸ This is partly because medical malpractice claims are hard to predict since they are relatively rare in some states and data are not easily available. There is also variability in jury awards and settlements across states that exacerbates the actuarial problems.

These problems are also compounded because policies are sold state-by-state and different medical specialties are assigned different risk ratings. As a result, there are small policyholder pools and consequent high premium rates because risk cannot be spread over a larger pool. Furthermore, multiline insurers do not want any one aspect of insurance to dominate their business, so they sometimes limit medical malpractice’s percentage of total business. This, combined with rate increases, leads to the writing of fewer medical malpractice policies. Therefore, doctors have a hard time finding coverage.

4. Looking forward – what states can do

The U.S. Department of Health and Human Services (HHS) Task Force in Medical Liability and Malpractice in 1987³⁹ came up with 10 healthcare recommendations to address medical malpractice. The task force also proposed five alternatives to tort litigation and four recommendations for insurance reform. However, the options promoted by the federal government have become more limited over the years. For instance, a 2002 report by HHS focuses almost exclusively on caps on non-economic damages, noting that it would save the federal government \$25.3 to 44.3 billion per year because doctors would not be afraid and use defensive medicine.⁴⁰ The report lays most of the blame for medical malpractice insurance premiums on the legal system, with little attention focused on the health care system or the insurance industry.

State policy-makers should realize that medical malpractice is a three-pronged problem. Therefore, a comprehensive approach which addresses problems in the health care system, the legal system and the insurance industry is needed. State officials should assess their state's situation and choose the combination of policies addressing all three aspects that best deals with their unique situation. Table 4.1 provides an overview of policy options related to each of the three factors of the medical malpractice situation – the medical system, the legal system and the insurance industry.

Figure 4.1 Policy Options

	Reform Measure	Advantages	Disadvantages
Medical System Reform	<i>State Licensing Boards</i>	Infrastructure already in place Relatively simple to implement	Problems with self-policing Doctors' opposition to reporting of errors
	<i>Risk Management and Patient Safety Programs</i>	Reduced errors that lead to malpractice complaints	Doctors' reluctance to report errors
	<i>Patient Education and Health Literacy Programs</i>	Tempered expectations of medical system Fewer misunderstandings between doctors and patients	Impossible to provide education on all medical conditions and procedures

Figure 4.1 Policy Options (cont.)

	Reform	Advantages	Disadvantages
Alternative Legal Reforms	<i>Enterprise Liability</i>	Fewer lawsuits Incentives for hospitals to upgrade patient care Rates based on more stable risk pool	Fault determination by court system Possibly larger claims Juries unsympathetic to hospitals Doctors' reluctance to report mistakes
	<i>Summary Trials</i>	Evaluation of strength of cases Out-of-court settlements encouraged Establishment of range of awards	Costly if agreement is not reached
	<i>Medical Courts</i>	Judges' understanding of complexities of medical cases Judges less swayed by technicalities Expedition of cases by knowledgeable judges	Increased opportunity for both plaintiff and defense lawyers to influence judges Discouragement of filing legitimate complaints
	<i>Medical Disciplinary Tribunal</i>	Less costly and time-intensive than court proceedings	Questions about logistics of system Uncertainty of how such a system would be perceived by patients Constitutional question concerning trial by jury
	<i>Alternative Dispute Resolution</i>	More expeditious rulings Less costly than court proceedings More private than court Facilitator/mediator expertise in medical matters Information exchange between patients and doctors	Increased claim frequency Lower awards detrimental to grossly injured patients Constitutional question concerning trial by jury

Figure 4.1 Policy Options (cont.)

	Reform Measure	Advantages	Disadvantages
Insurance Industry Reform	<i>Rate Regulation</i>	Relatively simple to implement Stabilizes industry	Market distortions by government intervention Common definition of “drastic” change in rates
	<i>Experience Rating</i>	Reduced subsidization of high-risk physicians by low-risk physicians Incentives to high-risk physicians to reduce risk Reduced claim frequency	Risk of erroneously classifying high-risk doctors as low-risk and vice versa Incentive for doctors not to report errors and not to settle cases even if it is beneficial to the insurance company Doctors’ refusal to see high-risk patients Doctors can still be sued Ratings dependent upon medical errors data
	<i>No-Fault Plans</i>	Less costly than court Faster administration than jury awards Cost savings from compensating only economic losses	Smaller awards to grossly injured patients Increased claims frequency Doctors’ refusal to see high-risk patients
	<i>Patient-Purchased Protection</i>	Flexibility associated with a wider array of compensation options Patients not limited by doctors’ insurance coverage	Difficult to price Difficult to negotiate doctor’s fees if patient visits several doctors

Medical System Reform

One overlooked aspect of medical malpractice insurance situation is the existence of medical malpractice. Doctors' mistakes lead to malpractice claims. Malpractice claims can lead to lawsuits. Lawsuits can lead to insurance payouts.

Strengthening state licensing boards, promoting risk management programs and advancing patient education and health literacy programs are all ways to address the occurrence of medical incidents that lead to medical malpractice suits.

*State Licensing Boards*⁴¹

State licensing boards were created to protect the public from unskilled and unsafe health care providers. However, analysts have long recognized that licensing boards vary tremendously in how well they protect the public. State licensing boards often take a long time to investigate complaints, rarely revoke or suspend providers' licenses and have traditionally had limited means to inform the public about providers that have received disciplinary action.⁴² In addition, licensing boards, by law, set *minimum* standards for what is considered the safe practice of medicine. Therefore, disciplinary action regarding quality of care issues is difficult to prove and rarely results in the revocation of a provider's license.

To address the underlying medical incidents that lead to medical malpractice suits, some experts propose that laws governing state licensing boards should have clear definitions of incidents that merit disciplinary action, establish a range of disciplinary actions for boards, require mandatory reporting of substandard care or harm to patients by health care providers and provide legal protection for medical professionals who make such reports.

Since boards are funded through licensure fees, state legislatures could appropriate a significant portion of the funds raised through these fees back to the boards. This helps ensure that board investigations and disciplinary action are swift, effective and thorough. In addition, enhanced standards for licensure could help weed out questionable providers and serve as a more proactive approach to the medical malpractice problem.⁴³

Enhancing state licensing boards to better monitor and discipline health care providers is a relatively simple reform measure in theory. The infrastructure – licensing boards – is already in place. The boards simply need to better serve the purposes for which they were created. Since boards are comprised of doctors, however, there are inherent problems with self-policing. Doctors, for instance, are reluctant to administer disciplinary action to other doctors and potentially to injure the livelihood of a colleague.

Licensing boards also focus on individual providers rather than systems of care. Often, medical malpractice occurs due to a system error involving multiple practitioners. Therefore, enhancing state licensing boards must be undertaken in conjunction with other reforms.

Risk Management and Patient Safety

For years, certain health care providers have taken steps to reduce their potential liability through risk management programs. Risk management programs seek to prevent, identify, assess and resolve medical mistakes. These kinds of programs can involve gathering data to help hospitals and other institutions set a baseline for quality improvement.

Continuing education programs for medical care professionals may also be a component of risk management. A recent risk management pilot program initiated by the Veterans Administration (VA) found that admitting mistakes to patients and working towards fair compensation for errors actually saved the VA money.⁴⁴

More recently, the Institute of Medicine (IOM) report *To Err is Human* has focused new attention on the reduction of medical errors and improvements in patient safety.⁴⁵ The report emphasizes that errors are rarely the responsibility of one negligent or incompetent practitioner but are far more often systems errors. The report also identifies the medical liability system and the culture of blame that it fosters as a major obstacle to improving the safety of the health care system and protecting patients. In the wake of the IOM report, 26 states have introduced legislation aimed at improving patient safety.⁴⁶ The most controversial aspect of these programs is error reporting requirements because providers, because of liability concerns, are reluctant to report errors.

Patient Education and Health Literacy

Medical care is incredibly complex. In the course of diagnosis and treatment, health practitioners are responsible for translating complicated technical information to patients in a way they can understand. Because of health care's complexity, information and understanding may get lost in the translation to patients, leading to unrealistic expectations, misunderstandings and an erosion of trust. A simple misunderstanding can lead to a sense of grievance and eventually to redress through the legal system.

Numerous studies underscore the gap between health professional expertise and patient understanding. It is estimated that as much as 50 percent of the population may have difficulty understanding and acting appropriately on health care information.⁴⁷

Customarily the medical community has attempted to address patient understanding and liability concerns through informed consent documents. Yet, one study found that as few as 9 percent of the clinical decisions examined met the criteria for informed consent by patients.⁴⁸ Despite

widespread use of informed consent documents, the gap between practitioner knowledge and patient understanding persists.

One way to address this problem is to narrow the information gap between patients and practitioners through patient education and health literacy efforts. Health literacy refers to an individual's ability to understand health care information. Health literacy efforts attempt to make health care information simpler and easier for patients to understand. Patient education programs seek to raise patient awareness about specific diseases and conditions or about the health care system in general.

Policy-makers can address health literacy and patient education in a variety of ways. Public service announcements, health education classes, brochures and pamphlets can provide basic information about a disease and inform patients about appropriate standards of care. States can also require that health care providers, health insurers and others provide information at a literacy level appropriate to most patients. For more information about these kinds of efforts, see CSG's *State Officials Guide to Health Literacy*.⁴⁹

Patient education and health literacy efforts could lead to fewer misunderstandings between doctors and patients. When patients better understand what to expect from the health care system, they may be less inclined to file a medical malpractice suit. However, these are broad areas. It is impossible to educate patients about every medical condition and procedure that exists. Therefore, efforts must be targeted.

Legal Alternatives

Most analysts agree that the legal system is an inefficient method of providing compensation.⁵⁰ It is unpredictable, costly, time-consuming and does little to prevent injuries. In addition, more than 60 percent of the cost of medical malpractice cases is related to determining fault.⁵¹

A number of reform proposals seek to address the economic inefficiencies of the court system. Enterprise liability, summary trials and medical courts are aimed at improving efficiency in the legal system while medical disciplinary tribunals and alternative dispute resolution seek to avoid the legal system.

Enterprise Liability

Under enterprise liability, hospitals, not doctors, can be sued. In the current system, a patient can sue both a doctor and the employing hospital for the same incident. Because so many doctors work for hospitals or medical organizations rather than alone or in small private practices, enterprise liability places responsibility for reducing medical errors on these larger institutions.

In essence, hospitals are responsible for the doctors who practice in their facilities. There are several benefits to this type of system.⁵² Rates are based on a more stable risk pool. It is more efficient in that both doctors and hospitals do not have to defend themselves for the same incident, and hospital administration and physicians can coordinate their defenses for a single court case. This type of system provides incentives for hospitals to upgrade risk management systems and patient safety programs. It is more efficient because both doctors and hospitals do not have to defend themselves for the same incident.

There are also disadvantages.⁵³ Since hospitals carry higher levels of insurance coverage, plaintiffs may make larger claims. Juries may be more apt to rule against faceless hospitals than individual doctors. Rather than increasing patient safety efforts, it is possible that hospitals will try to cover up the actions of individual doctors that could lead to lawsuits. The plaintiff still has to establish fault, and this is expensive and time-consuming.

Summary Trials

Plaintiffs and defendants may agree to a mini-trial. This summary trial could help both the plaintiffs and defendants evaluate the strength of their cases. It could encourage out-of-court settlements or establish an award range if the case went to court. If the parties cannot agree on terms, however, this is an added cost to the litigation process.

Medical Courts

Medical courts are presided over by judges who handle only medical cases. The judges, therefore, develop expertise in the complexities of medical cases and then expedite the process. Proponents have argued that the regular court system is inadequate because judges and juries are not knowledgeable of the medical field and are thus influenced by unimportant or technical factors.⁵⁴

However, if judges focus on just medical cases, opponents of specialized courts could argue that there is increased opportunity for corruption since there is a larger chance that a hospital or lawyer will have cases in front of a small number of judges. In addition, depending on the rulings, some may view the courts as pro-hospital or pro-doctor, thereby discouraging the filing of legitimate lawsuits.

Medical Disciplinary Tribunal

Many analysts view the current system as flawed because emotional arguments and lack of technical knowledge lead to inconsistent awards by judges and juries in similar types of cases. In 1988, the American Medical Association proposed the concept of a medical disciplinary tribunal. This is a system of pre-hearing, formal hearing and appellate review to determine fault and settle cases. Nonmeritorious cases would be screened out at the pre-hearing state. Others would be heard by an examiner at the formal hearing stage. The examiner's decision could be appealed to the state medical board.

This alternative to the traditional court system was proposed as a way to address deficiencies in knowledge common among judges and juries and rationalize the method for determining fault and awarding compensation. This approach was also seen as a way to avoid the time and expense associated with litigation.

Yet, medical disciplinary tribunals are a new and untried concept. With the booming stock market of the 1990s and the lack of an access or cost crisis in medical malpractice insurance, this option was not pursued by any state. Therefore, there are many logistical and perception problems that would have to be overcome to assure the success of such a system. And with all alternatives to the legal system, there is a question of whether these methods can legally deny patients the right to a jury trial.

Alternative Dispute Resolution

A less formal option to medical disciplinary tribunals involves alternative dispute resolution (ADR). ADR methods, such as mediation or arbitration, are designed to speed resolution of complaints and to hold down liability costs through keeping disputes out of the court system. Mediation uses a neutral third-party mediator to facilitate discussions between the two sides, but the mediator does not make decisions. In arbitration, a third party makes a decision that is usually binding on both parties.

The advantages of alternative dispute resolution are several. Decisions are made faster than using the court system, and it is less costly than traditional litigation. Alternative dispute resolution is private and thus potentially less damaging to a doctor's reputation than public court cases. Arbitrators may be more knowledgeable about medical incidents than a jury, thus expediting the process. Furthermore, informal dispute methods provide a venue for doctors to explain actions to patients and allow patients to vent their frustrations.⁵⁵

However, ADR methods may lead to more complaints because the process is easier than the court system. This is fair and efficient if the process encourages legitimate complaints but is problematic if it increases frivolous complaints. ADR often results in lower award payments than jury awards that may not benefit grossly injured patients. Informal dispute methods also raise the constitutional question of denying the patient's right to a trial by jury.

Insurance Reform

Options for insurance reform include relatively simple actions such as rate regulation to nontraditional insurance schemes such as experience rating, no fault and patient-purchased medical malpractice protection.

Rate Regulation

State insurance regulatory commissions could set up a deviation rating scheme that makes insurers receive approval to drastically change premium rates. The rationale for this is to alleviate price-cutting and destabilization of the market.

However, it may be difficult to decide what constitutes a drastic change in rates. In addition, the crisis of the 1980s was partly attributable to the fact that state regulatory commissions would not allow premium increases. Therefore, rate regulation can be risky.

Experience Rating

Currently, medical malpractice insurance is based on specialty, location, risky procedures and part-time practice. A very small percentage of doctors is responsible for a very large percentage of claims, so low-risk doctors are subsidizing this small number of high-risk doctors by paying higher medical malpractice premiums than is warranted based on their claims history.

One option is to make medical malpractice insurance experience rated, that is, based on claims history like other types of insurance. Since doctors could be equally skilled and careful but differ in their risk per year because of the number of patients seen, setting premiums on the basis of volume would be a much fairer system and provide more appropriate incentives than one that sets rates according to the number of past paid claims.⁵⁶ Insurers can add surcharges or administer rebates if their forecasts are wrong. Experience rating has several benefits. It reduces subsidization of high-risk physicians by low-risk physicians and provides incentives to high-risk physicians to be more careful.⁵⁷ Experience rating has been tried before in the medical malpractice arena but in a limited fashion,⁵⁸ so it is difficult to evaluate the impact of such a rating scheme. However, based on experience with other experience-rated schemes such as workers compensation insurance, unemployment insurance and auto insurance, there is evidence that experience rating decreases claims frequency and injury rates.⁵⁹ So experience rating in medical malpractice insurance could decrease the incidence of medical malpractice and number of claims filed.

There are also downsides to experience rating.⁶⁰ Doctors who treat high-risk patients would not benefit from experience rating because complications are more likely with high-risk treatments. Another possible problem is the possibility that high-risk doctors could be mistakenly classified as low-risk and vice versa. There is also an incentive for doctors not to report errors. In addition, deductibles paid by doctors for experience rated insurance decreases an insurance company's incentive to settle a case within the limit of the deductibles. There is also an uninsured risk if a doctor must pay a defendant more than his or her policy limit.

Data are primary concerns with experience rating. In order to rate a physician, an insurance company must have access to a great deal of data on every doctor in the system. Since reporting of medical incidents is not mandatory in every state, this issue would have to be addressed.

No Fault

A more radical policy option is to eliminate fault-based insurance, which deals with doctors' negligence, in favor of strict liability which places responsibility for reimbursement for losses from preventable harm on hospitals, regardless of fault.

A no fault system could be implemented in different ways. One option for no-fault insurance was proposed in 1975 by the AMA. The AMA proposed a system similar to workers' compensation.⁶¹ It would be based on experience rating of hospitals, and compensation would be given for economic losses only. In this scheme, claims would be analyzed by a board rather than the courts, benefits paid according to a set schedule and compensation from other sources deducted from the settlement.⁶² The purpose of this type of system is to expedite awards to victims and even out payments to victims.⁶³

There are several benefits to a no-fault system. There are cost savings to insurers in that financial awards are smaller because they focus solely on economic loss, not pain and suffering and other noneconomic losses, which are difficult to quantify. A no fault plan also saves litigation costs. In addition, if hospitals were experience rated, they would have incentive to look for injuries and prevent injuries, so no fault insurance would provide an incentive for better medical care.

On the other hand, while the amount of awards would be smaller, their number may increase because it would be easier to navigate a no-fault system than the court system. However, the current system can be considered economically flawed. A great deal of money is spent on fault determination, so an increase in claims frequency is acceptable in economic terms because these costs are currently borne by some segment of society, such as government programs and compensatory insurance. In addition, it is difficult to experience rate small hospitals, and medical providers would have an incentive to avoid high-risk patients. No fault penalizes grossly injured people who would get decreased benefits compared to jury awards.

To date, only Virginia and Florida have tried no-fault insurance, and both of these plans focus on very specific instances of birth-related neurological injuries. In a study of Florida's no-fault insurance, it was found that the number of tort claims decreased but the number of total claims (including no-fault claims) increased. There was no decrease in total payments, although a larger percentage of payments went to patients rather than lawyers under the no-fault plan.⁶⁴ More than 80 percent of obstetricians chose the optional no-fault coverage, indicating its benefits to doctors.

Patient-Purchased Medical Malpractice Protection

Another method of implementation focuses on insuring patients, not health care providers, against medical malpractice. Patients could insure themselves by purchasing a rider for their health insurance.⁶⁵

Patients could choose from a combination of compensation methods, ranging from damage caps to arbitration to litigation. The patient is not limited by the coverage limits of the doctor's insurance policy and may choose to purchase insurance with higher coverage limits than would the doctor. Doctors' fees would be based on the type of insurance purchased.

This option limits the role of government in the process, which is considered a benefit in some people's view. It also provides patients with a wider array of options than currently exist for any one medical incident.

There are several problems with this potential reform measure. It would be difficult to price this type of coverage, and it could be very expensive in some cases. When a patient receives treatment from a number of physicians, it may be difficult to negotiate fees based on the insurance package purchased by the patient.

Example of Comprehensive Reform

Last year, Pennsylvania passed comprehensive medical malpractice reform which addressed the medical, legal and insurance aspects of the problem. The Medical Care Availability and Reduction of Error Act of 2002 was the first to incorporate patient safety measures by establishing a Patient Safety Authority that is responsible for collecting data on medical errors, analyzing the data and recommending safety improvements.⁶⁶ The law also includes a number of tort reforms, such as periodic payment of awards of more than \$100,000. The law establishes a JUA for providers who can't find malpractice insurance in the private market, limits an insurer's liability to a policy's coverage limit and restricts an insurer's ability to cancel policies.

While some of these reforms have met with limited success in other states in the past, Pennsylvania is unique in that the reform package addresses all three aspects of the problem. State officials hope that the combination of reforms will alleviate the medical malpractice situation in the state.

Conclusion

Medical malpractice is a complex problem that requires a comprehensive solution. Band-aid solutions, such as a sole focus on tort reform, have not worked in the past, and they won't work now. In order for malpractice insurance to be readily available and affordable, policy-makers need to take a holistic approach to solve the problem. In short, state officials must address problems with the medical, legal *and* insurance aspects of the problem if they hope to avert another crisis.

Notes

- ¹ Emily V. Cornell, "Addressing the Medical Malpractice Insurance Crisis," *National Governors Association Issue Brief* (January 2003): 1-15.
- ² Patricia M. Danzon, "Liability for Medical Malpractice," *Journal of Economic Perspective* 5 (Summer 1991): 51-69.
- ³ Ibid.
- ⁴ Glen O. Robinson, "The Medical Malpractice Crisis of the 1970's: A Retrospective," *Law and Contemporary Problems* 49 (Spring 1986): 5-35.
- ⁵ Reed N. Olsen, "The Reform of Medical Malpractice Law: Historical Perspectives," *The American Journal of Economics and Sociology* 55 (July 1996): 268.
- ⁶ Lois Quam, et al., "Medicine and Law: Medical Malpractice in Perspective," *British Medical Journal* 294 (June 1987): 1529-1532.
- ⁷ Ibid.
- ⁸ Emily V. Cornell, "Addressing the Medical Malpractice Insurance Crisis," *National Governors Association Issue Brief* (January 2003): 1-15.
- ⁹ Leigh Page, "Bedpans Half-full: Growth of Physician-Owned Insurers a Bittersweet Turn for the Better," *Modern Physician* 6 (October 2002): 26.
- ¹⁰ Glen O. Robinson, "The Medical Malpractice Crisis of the 1970's: A Retrospective," *Law and Contemporary Problems* 49 (Spring 1986): 5-35.
- ¹¹ Americans for Insurance Reforms, "Medical Malpractice Insurance: Stable Losses / Unstable Rates," (October 2002): 1-7.
- ¹² Glen O. Robinson, "The Medical Malpractice Crisis of the 1970's: A Retrospective," *Law and Contemporary Problems* 49 (Spring 1986): 5-35.
- ¹³ James Posner, "Trends in Medical Malpractice Insurance, 1970-1985," *Law and Contemporary Problems*, (New York City: Marsh & McLennan, 1986): 40-41.
- ¹⁴ Kandy G. Webb, "Recent Medical Malpractice Legislation- A First Checkup," *Tulane Law Review* (March 1976), <<http://web.lexis-nexis.com/universe/printdoc>> (31 October 2002).
- ¹⁵ Glen O. Robinson, "The Medical Malpractice Crisis of the 1970's: A Retrospective," *Law and Contemporary Problems* 49 (Spring 1986): 5-35.
- ¹⁶ Martin H. Redish, "Legislative Response to the Medical Malpractice Insurance Crisis: Constitutional Implications," *Texas Law Review* 55 (May 1977): 765.
- ¹⁷ Glen O. Robinson, "The Medical Malpractice Crisis of the 1970's: A Retrospective," *Law and Contemporary Problems* 49 (Spring 1986): 5-35.
- ¹⁸ Commentary, "Medical Malpractice: The Second Wave of Reform," *Alabama Law Review* 37 (Winter 1986): 424.
- ¹⁹ Ibid.
- ²⁰ Ibid.
- ²¹ "Res Ipsa Loquitur," Injuryboard.com, Claris Law, Inc. <<http://www.injuryboard.com/tort11.cfm>> (16 December 2002).
- ²² Lynna Goch, "Medical Malpractice Tort Reform Trouble Spots," *Best Review* (December 2002): 52-53.
- ²³ "Managed Care Involvement In Health Insurance Process Seen Trigger For Failure to Detect Malpractice Suits," *Insurance Advocate* (January 2001): 10.
- ²⁴ Americans for Insurance Reform, "Consumer Group Says Evidence Mounting that Skyrocketing Insurance Rates not Tied to Jury Verdicts." Press Release (31 October 2002).
- ²⁵ Ibid.
- ²⁶ Mimi Marchev, "The Medical Malpractice Insurance Crisis: Opportunity for State Action," *National Academy for State Health Policy*, (July 2002): 1-21
- ²⁷ Lois Quam, et al., "Medicine and Law: Medical Malpractice in Perspective," *British Medical Journal* 294 (June 1987): 1529-1532.
- ²⁸ Patricia M. Danzon, "Liability for Medical Malpractice," *Journal of Economic Perspective* 5 (Summer 1991): 51-69.
- ²⁹ Daniel Kessler and Mark McClellan, "Do Doctors Practice Defensive Medicine?" *Quarterly Journal of Economics*, 11 (May 1996): 353-90.
- ³⁰ Patricia Born and W. Kip Viscusi, "The Distribution of the Insurance Market Effects of Tort Liability Reforms," *Brookings Papers on Economic Activity*, (1998): 55-100.
- ³¹ Patricia M. Danzon, "Liability for Medical Malpractice," *Journal of Economic Perspective* 5 (Summer 1991): 51-69.

- ³¹ Carl Wedekind, "Medical Malpractice: A No Fault Approach," *Property-Casualty Insurance Edition 88* (May 1987): 2-10.
- ³² Randall R. Bovbjerg and Brian Raymond, "Patient Safety, Just Compensation and Medical Liability Reform," Prepared for the Roundtable: Creating a Malpractice Liability System to Support Improved Patient Safety, January 9 & 10, 2003 (Oakland, CA: Kaiser Foundation Health Plan, Inc.).
- ³³ Ibid.
- ³⁴ Ibid.
- ³⁵ Ibid.
- ³⁶ "Medical Malpractice Insurance: Stable Losses / Unstable Rates," *Americans for Insurance Reforms* (October 2002): 1-7.
- ³⁷ Emily V. Cornell, "Addressing the Medical Malpractice Insurance Crisis," *National Governors Association Issue Brief* (January 2003): 1-15.
- ³⁸ John A. Rizzo, "The Impact of Medical Malpractice Insurance Rate Regulation," *The Journal of Risk Insurance* 56 (September, 1989): 482-500.
- ³⁹ "Report of the Task Force on Medical Liability and Malpractice," Department of Health and Human Services (August 1987).
- ⁴⁰ "Confronting the New Health Care Crisis: Improving Health Care Quality and Lowering Costs By Fixing Our Medical Liability System," U.S. Department of Health and Human Services (July 2002).
- ⁴¹ These recommendations are derived from "Report of the Task Force on Medical Liability and Malpractice," Department of Health and Human Services (August 1987).
- ⁴² Emily V. Cornell, "Addressing the Medical Malpractice Insurance Crisis," *National Governors Association Issue Brief* (January 2003): 1-15.
- ⁴³ "Report of the Task Force on Medical Liability and Malpractice," U.S. Department of Health and Human Services (August 1987).
- ⁴⁴ Kraman, Steve and Ginny Hamm, "Risk Management: Extreme Honesty May Be the Best Policy," *Annals of Internal Medicine*, 12 (1999): 963-967.
- ⁴⁵ Kohn, Linda T., Corrigan, Janet M., and Donaldson, Molla S., ed., *To Err is Human: Building a Safer Health System*. (Washington, D.C.: National Academy Press, 2000).
- ⁴⁶ Mimi Marchev, "The Medical Malpractice Insurance Crisis: Opportunity for State Action," *National Academy for State Health Policy*, (July 2002): 1-21.
- ⁴⁷ Matthews, Trudi L. and Sewell, Jenny C., *State Official's Guide to Health Literacy*. (Lexington, KY: The Council of State Governments, 2002).
- ⁴⁸ Braddock, C., Edwards, K., Hassenberg, N., et al. "Informed Decision Making in Outpatient Practice." *Journal of the American Medical Association* 282 (December 1999): 2313-2320.
- ⁴⁹ See <<http://www.csg.org/CSG/Policy/health/Health+Literacy.htm>>
- ⁵⁰ Patricia M. Danzon, "Liability for Medical Malpractice," *Journal of Economic Perspective* 5 (Summer 1991): 51-69.
- ⁵¹ Carl Wedekind, "Medical Malpractice: A No Fault Approach," *Property-Casualty Insurance Edition 88* (May 1987): 2-10.
- ⁵² Randall R. Bovbjerg and Brian Raymond, "Patient Safety, Just Compensation and Medical Liability Reform," Prepared for the Roundtable: Creating a Malpractice Liability System to Support Improved Patient Safety, January 9 & 10, 2003 (Oakland, CA: Kaiser Foundation Health Plan, Inc.).
- ⁵³ Ibid.
- ⁵⁴ Ibid.
- ⁵⁵ Henry S. Faber and Michelle J. White, "A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice," *The Journal of Legal Studies* (June 1994): 777-806.
- ⁵⁶ Randall P. Ellis, Cynthia L. Gallup, and Thomas G. McGuire, "Should Medical Professional Liability Insurance Be Experience Rated?," *The Journal of Risk and Insurance* 57 (March 1990): 66-78.
- ⁵⁷ Gary M. Fournier and Melayne McInnes, "The Case for Experience Rating in Medical Malpractice Insurance: An Empirical Evaluation," *The Journal of Risk and Insurance* 68 (2001): 255-276.
- ⁵⁸ Frank A. Sloan, "Experience Rating: Does it Make Sense for Medical Malpractice Insurance?," *The American Economic Review* 80 (May 1990): 128-133.
- ⁵⁹ Ibid.
- ⁶⁰ Ibid.

⁶¹ "Toward a Crisis Resolution," *American Bar Association* (May 1975): 622-623.

⁶² Patricia M. Danzon, "Liability for Medical Malpractice," *Journal of Economic Perspective* 5 (Summer 1991): 51-69.

⁶³ Ibid.

⁶⁴ Frank Sloan, et al., "No-Fault System of Compensation for Obstetric Injury: Winners and Losers," *Obstetrics and Gynecology* 91 (March 1998): 437-443.

⁶⁵ Ralph Switzer Jr. and Teri Reynolds, "Medical Malpractice Compensation- A Proposal," *American Business Journal* 13 (1975): 65-82.

⁶⁶ Mimi Marchev, "The Medical Malpractice Insurance Crisis: Opportunity for State Action," *National Academy for State Health Policy*, (July 2002): 1-21.