MEDICAL MALPRACTICE INSURANCE REPORT:

A STUDY OF MARKET CONDITIONS AND POTENTIAL SOLUTIONS TO THE RECENT CRISIS

PRESENTED TO THE NAIC'S PROPERTY AND CASUALTY (C) COMMITTEE

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EXECUTIVE SUMMARY

Background

For several years, the health care profession has struggled with a medical liability insurance crisis. The number of insurers offering this coverage has diminished while the cost of the coverage increased to the point where many health care providers feel that the increases are affecting the availability and affordability of adequate insurance coverage. The NAIC's Property and Casualty Insurance (C) Committee asked the authors and researchers to study available NAIC data and survey the medical liability environment for crisis solutions that may be addressed and implemented through regulatory or legislative actions. The state of the economy and the quality of medical services, while recognized as important factors, are outside the scope of this study.

Interestingly, the medical liability insurance crisis varies dramatically among the states. **Table 13** shows the ratio of losses and LAE to premiums. Twenty-eight jurisdictions of the 51 shown, had loss ratios above 100 percent (for each premium dollar received, more than one dollar is expected to be paid for claims. This is well over half the jurisdictions shown; yet, on a favorable note, there were seven jurisdictions with loss ratios below 70 percent, which would be considered relatively favorable.

Companies writing this line of business tend to be regional or single-state insurers. According to the U.S. General Accounting Office (GAO), regionally oriented "physician-owned and/or operated insurers now cover 60 percent of the market." Because of the regional nature of the market, this study suggests that the legal and economic structures currently in place for both the medical profession and the insurance industry require a look at the states individually to gain meaningful perspective of the depth and breadth of the problems that have beset the medical malpractice insurance market over the past several years.

There has been considerable speculation and a number of studies concerning the causes of the latest crisis in the medical liability insurance market. The studies reviewed in this report identify many factors that have contributed to the current market conditions. Some of these factors include: competitive pricing; increasing claims experience, including increasing health care costs, jury awards and defense and investigation costs; declining investment yields; loss reserve deficiencies; inadequate underwriting and loss control procedures; increasing reinsurance costs; and pressure to consolidate.

Research done for the accompanying report of the committee indicates that in 2002, stock asset values comprised 11.38 percent of total invested asset values for insurers writing at least 2 percent of the direct premium in any state market and at least 50 percent of their written premium in medical malpractice, while bonds and cash and short-term investments comprised 86.24 percent of total invested assets. The research further indicates that while net investment income has declined, it is primarily, though not exclusively, underwriting losses that have been the driving factor in rate increases experienced by physicians and other health care providers. As a result, the study focuses on incurred losses.

Comments on Available Data and its Limitations

An analysis of data can only be as good as the data itself. The authors agree with the GAO's finding that there is insufficient available data to study every aspect of medical malpractice insurance market problems. There are essentially two important limitations to the data available from NAIC sources that merit discussion. First, many insurers, such as self-insurance plans and state-mandated entities, do not file financial data with the NAIC. In some states, such as Texas, these entities account for a large portion of the medical malpractice insurance market. The second limitation is that the data provided to the NAIC is not sufficiently detailed to examine where, and to what extent, problems exist. Analysis of available data shows that, in broad terms, there is a market problem in medical malpractice. However, the extent to which market problems are likely occurring within certain medical specialties and/or certain locales with greater severity cannot be determined. That limitation points to a need to develop a new statistical plan to collect such data to monitor market conditions in the future.

Because of these limitations, there is no way to determine on an aggregate basis what portion of losses is driven by actual medical expense and economic damages, as opposed to non-economic or punitive damages. The data are also not useful to the medical profession and others to discover root causes of adverse events for risk management, claim prevention, or for patient safety purposes. Currently, the data for these purposes are available only through closed claim data provided by medical liability insurers responding to individual state data calls.

The committee strongly urges the NAIC to study development of a statistical plan to create and implement a meaningful and comprehensive database. The data should be collected on an on-going basis to allow regulators and researchers to analyze loss causes, track market conditions, and determine what public policy measures are appropriate to correct market failures as they arise.

A Review of Regulatory/Legislative Solutions

It is generally recognized that the U.S. economy had an adverse effect on the medical liability market, at least in the initial crisis stage. Interest rates, the reinsurance market, and the decline in investment earnings played a role in putting upward pressure on medical liability premiums. While the committee recognizes the economy has a bearing on the medical liability market, it also recognizes that regulators and legislators cannot mandate economic conditions. Therefore, it necessarily restricted the survey of policy options to those actions available to regulators and/or legislators at the state level.

One potential solution to the high cost of medical liability insurance would be to reduce a key underlying cause; adverse outcomes and medical results that sometime give rise to claims. However, though such a solution is highly desirable, it is not solely the province of insurance regulators or legislators. That part of the solution must be coordinated with the medical institutions that govern the profession.

During 2003, the legislatures of at least 30 states considered bills intended to stabilize or reduce the cost of medical malpractice insurance. These actions were taken with consideration of the experience of other states. The common thread was reduction in the cost to health care providers and their insurers of

awards and settlements, by considering a number of solutions. Among those were placing caps on non-economic damages, changing rules of evidence to provide for consideration of collateral sources for payment of benefits, allowing claimants and insurers to agree to periodic payments of future benefits and limiting contingency fees paid to attorneys. Many of these bills were patterned after the California Medical Injury Compensation Reform Act (MICRA) legislation.

Also, many of the measures considered include elements to improve patient safety. Texas promulgated a model "Best Practices" patient safety and risk management program for its nursing homes. Missouri convened a patient safety commission to examine systemic reforms that may significantly reduce medical errors. The Missouri patient safety commission consists of medical practitioners, licensing board members, as well as staff from the department of insurance. The Missouri patient safety commission has discussed relatively simple and cost-effective reforms that may have very salutary effects on patient safety. Other measures discussed by the Missouri patient safety commission are designed to fully educate patients about possible negative outcomes prior to medical procedures, thereby reducing the likelihood that patients will seek legal redress for injuries that are not the result of negligence. The Missouri patient safety commission was convened with the conviction that the most direct way to reduce medical malpractice rates is to reduce the number and severity of medical injuries.

The committee suggests that other states may want to thoroughly examine these issues and consider the efficacy of the experience in those states that have enacted cost reduction measures.

Survey of Market Interventions

During the survey of potential market interventions, the committee identified and studied several possible reforms. While the committee does not have specific recommendations on those reforms, the committee commends them for consideration by each individual state. The list is in the order that the reforms appear in the study. The needs of individual states may require varying emphasis on specific reforms.

Regulatory Reform

- Rate Adequacy Monitoring
- Statistical Data Collection
- Market Assistance Plans or MAPs

Tort Reform

- Damage Limitations, Caps
- Collateral Source Rules
- Periodic Payment of Future Damages
- Bad Faith (Over Limit) Awards
- Alternative Dispute Resolution and Mediation
- Contingency Fee Limitation
- Special Courts
- Advance Notice of Claims

Other Types of Reform

- Information-feedback Model for Loss Control
- Patient Compensation Funds
- Statutory Risk Sharing Mechanisms, Joint Underwriting Associations and Other Models
- Alternative Treatment of Trauma Centers and High Risk Specialties
- Patient Safety Measures and Data Reporting Issues
- Regulation of Insurer Investments

Conclusion

This study was conducted with the objective of reviewing regulatory and legislative solutions to be considered in response to a market crisis in availability and affordability of medical liability insurance. The committee acknowledges certain data limitations that precluded detailed analysis by specialty or individual location. Additionally, the scope of the study was limited to the analysis of claim losses as a major contributor to premium instability and availability problems. One of the underlying themes in nearly every piece of literature reviewed for this study, as well as the authors' own experiences with developing the report, was the fact that medical malpractice data was inconsistent, incomplete, difficult to obtain and even more difficult to interpret. The authors of this report agree with the conclusions and recommendations contained in the study released in 2003 by the GAO. Namely that state insurance regulators should identify the types of data that are necessary to properly evaluate the medical malpractice market—specifically, the frequency, severity and causes of losses—and begin collecting these data in a form that would allow appropriate analyses in the future.

Notwithstanding the data limitations discussed, the research indicates that underwriting losses were the major factor influencing the rate increases experienced by physicians and other health care providers over the past several years. The GAO reached a similar conclusion in a report published in June 2003. "Multiple factors, including falling investment income and rising reinsurance costs, have contributed to recent increases in premium rates in the sample states. However, GAO found that losses on medical malpractice claims—which make up the largest part of insurers' costs—appear to be the primary driver of rate increases in the long run."[1]

The GAO also examined the possibility that increased medical liability insurance costs had begun to affect health care access. While local problems were detected, health care providers seemed as yet able to avoid major disruptions in care. Emergency and obstetric services appeared most often adversely affected. This may highlight the need for specialty specific data. In its August 2003 report, the GAO summarized the situation, "Actions taken by health care providers in response to rising malpractice premiums have contributed to localized health care access problems in the five states reviewed with reported problems. The GAO confirmed instances in the five states of reduced access to hospital-based services affecting emergency surgery and newborn deliveries in scattered, often rural area where providers identified other long-standing factors that also affect the availability of services. In the five states with reported problems, however, the GAO also determined that many of the reported provider

[1] United States, General Accounting Office. Highlights, Multiple Factors Have Contributed to Increased Premium Rates. GAO-03-702 (Washington: GPO, 2003).

actions were not substantiated or did not affect the access to health care on a widespread basis."[2]

Undoubtedly, this study will be updated and refined as additional data become available, and the committee will continue to seek market improvements in the medical malpractice line of insurance.

[2] United States, General Accounting Office. Medical Malpractice: Implications of Rising Premiums on Access to Health Care (Washington: GPO, 2003).

INTRODUCTION

The NAIC decided that it was important to study the market conditions for medical professional liability insurance, often known as medical malpractice, in light of declining industry-wide financial results, withdrawal of significant national carriers, and the financial decline of other individual medical malpractice insurance providers. Anecdotal evidence provided to the NAIC suggests that in some states the market problems are so pronounced that access by the public to essential health care services has been affected. In its report citing both empirical and anecdotal evidence, the Congressional Joint Economic Committee stated that the medical liability system reduces access to healthcare by reducing the affordability of health care insurance as well as reducing the supply of health care by inducing doctors to retire from medicine or to avoid high-litigation specialties or geographic areas.[3] This is particularly true for trauma services and high-risk medical specialties such as neurosurgery, obstetrics and neonatal care. The NAIC members recognize that diversity of state tort laws and unique state market participants might make finding reasons for the rising prices and declining availability of coverage difficult on a countrywide basis. However, the financial results vary when one looks at individual state results. That offers hope for researchers as it allows them to review the characteristics of those states that have been successful in hopes of learning lessons that may be applied in other states that appear to be in crisis.

Since the late 1990s, there have been substantial rate increases for medical malpractice insurance in many states, while rates remained stable or increased only slightly in others. These rapid increases led to complaints from the medical community about the affordability of coverage. This, coupled with the inability of physicians to pass these costs to patients because of managed care arrangements, appears to have led physicians to curtail their practice in certain states or certain medical specialties to avoid these spiraling costs. There appears to be general agreement that there is a problem, however, there is no such agreement about causes and solutions.

The purpose of this study is to provide, at the request of the NAIC's Market Conditions Working Group, a synopsis of the financial condition of medical liability insurance market from 1991 to 2002 as well as a survey of independent research that has been performed on potential solutions, both tort and non-tort related. This report was written to provide the working group with a basis, in whole or in part, to make public policy recommendations intended to mitigate future crises. The study is based on a review of historical data collected and compiled by the NAIC as well as a review of other studies of medical malpractice. In addition, a hearing was conducted by the NAIC's Market Conditions Working Group in an attempt to assess the extent of the problem, learn about various stakeholders' perspectives and evaluate suggested solutions to address the situation. The principal researchers are NAIC Economist Davin D. Cermak, NAIC Director of Research Eric C. Nordman, CPCU, CIE, and Kenneth McDaniel, MBA, ARM, CFE (Fraud), of the Texas Department of Insurance.

[3] United States, Congress, Joint Economic Committee. Liability for Medical Malpractice: Issues and Evidence (Washington: GPO, May, 2003).

MEDICAL PROFESSIONAL LIABILITY

Doctors and other health care providers, as medical professionals, are held by the public and the courts to a higher standard of care than if they operated in other businesses. Professionals are generally expected to possess special knowledge or skills that set them apart from the rest of society. This special knowledge and skill generally come from a person's education and experience.[4] "Professionals are bound by law to (1) perform the services for which they were engaged and (2) perform these services in accordance with appropriate standards of care. The first duty is primarily contractual; the second duty arises from the principles of tort laws."[5]

Medical providers might be determined by a court to be liable if their action or inaction led to injury to a patient. Negligence occurs when harm results from a medical provider's failures to treat a patient to the same standard of care, as the patient would expect from a well-qualified medical professional.[6] This is the risk the medical provider seeks to insure when purchasing a medical liability policy.

It is important to note that there is a difference between medical malpractice and a bad medical result. Malpractice involves negligence on a medical provider's part. A bad outcome for the patient can occur from known and unavoidable medical risk, an unforeseeable adverse patient response or a medical accident that does not rise to the level of negligence. This complexity sets medical liability insurance apart from other liability coverages in that a higher percentage of premium dollars goes toward defense and cost containment expenses. Medical liability insurers spend substantial funds investigating and defending claims where there is an adverse patient outcome not resulting from negligence.

The Medical Professional Liability Insurance Market

For purposes of this report, medical liability will encompass insurance purchased by health care providers, hospitals, nursing homes and other institutions that provide health services. The report does not include those health care providers and health care institutions that choose to retain the risk of loss from medical mistakes rather than transfer it through insurance. Sometimes self-insurance, as retention is commonly known, is combined with an excess insurance policy that attaches at some level of loss and indemnifies the policyholder above that amount. There are also state-specific, statutorily enabled mechanisms that effectively function as insurers and provide medical liability coverage.

The predominant form of coverage offered by medical liability insurers is a claims-made policy. The evolution of occurrence policies to claims-made policies began during the medical liability crisis of 1975 as insurers tried to find more effective means of controlling loss costs. An occurrence policy is a liability policy where the coverage trigger is based on when the incidence takes place. Coverage applies if the incident occurred while the policy was in force, regardless of when reported to the insurer. In contrast, a claims-made policy is a liability policy where the coverage trigger is the report of the claim.

[4] Donald S. Malecki, et al., Commercial Liability Insurance and Risk Management, 3rd ed. (The American Institute for Property and Liability Underwriters, 1996).
[5] Malecki, et al.
[6] Malecki, et al.

Coverage applies if the incident is reported while the policy is in force.

Medical malpractice insurers operate much like other types of insurers. They collect premiums from policyholders and assign them to either the unearned premium reserve or other reserves. When losses occur, they either pay the loss or establish a loss reserve. Funds remaining after expenses and taxes ultimately flow to surplus. The length of time it takes to pay malpractice claims allows insurers an opportunity to earn investment income which helps offset its underwriting operations. Insurers are able to invest amounts held in surplus, unearned premium reserves and loss and loss adjustment expense reserves. Accounting rules require that insurers post their best estimate of the ultimate settlement value of reported, but unpaid losses. In addition, insurers are required to consider expected payments on claims that have occurred, but are not yet reported (Incurred But Not Reported—IBNR).

Loss adjustment expenses play a key role in medical liability coverage. Insurers are required to account for loss adjustment expenses in two separate categories—Defense and Cost Containment (DCC) and Adjusting and Other (AO). DCC expenses are particularly important in medical liability because many claims reported to insurers are determined to be noncompensable through negotiation, investigation or trial.

It is important to note that property and casualty rates, including medical liability rates, are made on a prospective rather than a retrospective basis. While increases in the frequency and severity of claims are recognized in ratemaking, the rates charged are required to be neither excessive, nor inadequate nor unfairly discriminatory for the future period when they will be charged. This means that insurers are unable to recoup prior losses in their current rate filings. Since some rate filings may not be reviewed under certain regulatory structures and because of the actuarial uncertainty in estimating future claims and losses for medical liability insurance, the success regulators achieve in controlling rates is uncertain.

State Regulatory Systems

States vary widely in both regulatory framework and regulatory philosophy. **Table 1** provides definitions of the various regulatory frameworks that are in common use today. Seventeen jurisdictions employ a prior approval law for medical liability rates. Twenty-three states use a file and use system; nine have a use and file system. New York uses a dual system, where the superintendent establishes rates for physician and surgeon medical malpractice coverage while other malpractice coverages are subject to prior approval. In Oregon, a flex rating system (modified prior approval) applies. A state can administer a file and use system with a waiting period in much the same way a state can administer a prior approval system with a deemer provision. Further, some states offer choices to insurers regarding the system that they wish to use for rate filing purposes.

Such wide variations in the state implementation of rating laws present unique challenges to determining the impact of these systems on the overall market performance. Some researchers have studied the effects of different systems on the medical malpractice market. Zuckerman et al. found “clear evidence that requiring prior approval of premiums is an effective way of lowering physician malpractice costs [premium],” but cautioned that “the effectiveness of prior approval regulation in controlling premiums

could have an adverse impact on the availability of insurance in the state…"[7] Rizzo found that non-competitive rating laws have had little independent effect on underwriting results in the medical malpractice industry, but that direct insurers (typically small physician, or hospital-sponsored programs) fare better (*lower loss ratios*) in states with non-competitive rating laws than they do under competitive rating laws.[8] Rizzo also found that while direct insurer market share is positively correlated to the loss ratio in states with competitive rating laws, the correlation is weaker in states with non-competitive rating laws.[9] Rizzo cautioned that given the comparison of these correlations, one should not conclude that non-competitive rating laws are the best way to improve underwriting results in medical malpractice.[10]

Non-Standard Market Mechanisms

Non-standard market mechanisms exist in medical liability insurance to fill voids left when standard, or primary, insurers cannot or will not insure particular risks. The presence of these entities in a market can impact the price and availability of insurance coverage. Three major types of non-standard mechanisms provide coverage in the medical liability market. First and most prevalent are surplus lines insurers, which are exempt from rate and policy form regulation. Second are the residual market mechanisms. Typically, these are mechanisms established either by state legislation or by the state insurance regulator and include state insurance funds, patient compensation funds (PCFs); state mandated insurance pools and joint underwriting associations (JUAs). The existence of residual market mechanisms in most states reflects policymakers' recognition that there is a need to ensure that medical liability coverage will be available where such coverage is mandatory or needed to provide stability to the market. Third are risk retention groups established under the Federal Liability Risk Retention Act. **Table 2** provides some useful definitions of the types of ownership identified in NAIC data.

Self-Insurance

Risk managers know self-insurance as retention. It occurs when a medical provider or a hospital chooses to pay for its own losses without involving an insurer or other risk transfer mechanism. Where a provider has no insurance or formal plan of retention, it is known simply as going bare, which is rare among physicians. To receive privileges to operate in a hospital, the medical provider is generally required by the hospital, or perhaps state law, to obtain professional liability insurance. The low frequency and high severity nature of medical professional liability makes the self-insurance option unattractive to most medical providers, even if hospitals or state government would accept that option.

Self-insurance may be a viable option for some large hospitals, nursing homes and other institutions that provide medical services. With assistance from a professional risk manager, a hospital or other large

[7] Stephen Zuckerman et al., "Effects of Tort Reform and Other Factors on Medical Malpractice Insurance Premiums," Inquiry 27 (1990): 167-182.
[8] John Rizzo, "The Impact of Medical Malpractice Insurance Rate Regulation," The Journal of Risk and Insurance 56.3 (1989): 482-499. Non-competitive rating laws are defined as laws that restrict insurer discretion in setting rates, usually through regulatory rate review and approval mechanisms or, in some cases, regulatory control of rates.
[9] Rizzo 482.
[10] Rizzo 498.

institution can establish a formal program where it sets aside adequate funds to pay for medical liability claims or pay claims as they occur and are adjudicated. There is no formal reporting mechanism to gather information about self-insured entities. The tax treatment by the Internal Revenue Service of funds held to pay claims is different when an entity is self-insured. Reserves for a self-insured plan cannot be set aside on a tax-deferred basis until they are paid out to a claimant. This makes comparison of self-insured operations with those purchasing medical liability policies difficult. Further, there is no central source of information on self-insured operations. Some self-insurance plans have recently created an overseas captive insurer further complicating tax and reserving considerations. The extent that self-insurance entities impact markets is unknown.

Ratemaking for Medical Liability Insurance

The basic building blocks for medical malpractice rates are the same as those of other property and casualty insurance products. The rate consists of the loss costs, or pure premium, plus the expenses of the insurer and a factor for profit and contingencies. Insurers use historic (past) loss and expense information to forecast and adjust current rates to those needed for a future period.

The Casualty Actuarial Society has developed a set of principles to provide the foundation for the development of actuarial procedures and standards of practice.[11] It is important that proper actuarial procedures be employed to derive rates that protect the insurance system's financial soundness and promote equity and availability for insurance consumers.

Principle 1: A rate is an estimate of the expected value of future costs.
Principle 2: A rate provides for all costs associated with the transfer of risk.
Principle 3: A rate provides for the costs associated with an individual risk transfer.
Principle 4: A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer.

In addition to these basic principles, actuaries must comply with many standards of practice. These standards address a variety of issues, including: risk classification, trending procedures, data quality, expense provisions, treatment of provisions for profit and contingencies, and documentation and disclosure. At the heart of medical malpractice ratemaking is the problem of the time lag between the date of an incident of negligence and the date a claim is finally paid. The average time from occurrence to payment is four to five years, with many claims taking much longer. When looking at data for policies issued five to ten years ago, many of the claims that arose have been paid. Amounts yet to be paid for these policy years are small when compared to the amounts already paid. When looking at data for more recent policy years, the remaining amounts to be paid are larger. For very recent years these amounts are larger than the amounts paid. Thus, the ratemaking actuary must strike a balance between data for older years with claim amounts close to their ultimate values, and more recent years where that is not the case. A second, and perhaps more important problem with this time lag is the period of time it will take to determine whether rates developed for today's policies are sufficient to meet the costs that develop over

[11] Casualty Actuarial Society, Statement of Principles Regarding Property and Casualty Insurance Ratemaking, (May, 1988: http://www.casact.org/standards/princip/sppcrate.pdf).

the next decade. Economic conditions, the composition of the medical malpractice insurance market, judicial conditions, among many other issues, will change as the claim experience for today's policies matures. Whether today's rates are adequate or not, Principle 4, above, does not allow for the recoupment of losses due to inadequate rates for past policy years. Past loss and loss adjustment expense can only be used to estimate the correct price for policies issued in the future, that is, "the expected value of all future costs..." associated with the policy.

Insurance Department Activity to Prevent Inadequate Rates

Since regulators are charged with assuring that rates are not excessive, inadequate, or unfairly discriminatory, it is incumbent on them to periodically review rate levels to see that they meet all three rating standards. This task is difficult as the typical workflow of an insurance department involves the review of rate filings that are developed and submitted by insurers at a time selected by the insurer and containing supporting information also selected by the insurer. The task of the regulator is to review the filings received. If an insurer has not changed rates and does not choose to submit a new filing, there is a time lag between the period where inadequate rates might be charged and the discovery of the rate inadequacy. The regulatory framework further complicates this. There are not generally specific time periods where an insurer is obligated to make a rate filing. As a result, there are occasions where inadequate rates could be charged for a period of time.

It should also be noted that in many jurisdictions, a finding of rate inadequacy is allowed under some circumstances. The NAIC's Property and Casualty Model Rating Law (File and Use Version) specifies "a rate is not inadequate unless such rate is clearly insufficient to sustain projected losses, expenses and special assessments in the class of business to which it applies and the use of such rate has or, if continued, will have the effect of substantially lessening competition or the tendency to create monopoly in any market." If the regulator is unable to prove that the inadequate rate will lead to insolvency or monopolistic behavior, in these jurisdictions, there is little that regulators can do to require insurers to charge more adequate prices.

Some attribute a perceived lack of attention to inadequate rates as one cause of the underwriting cycle that is observed in all property and casualty lines of business. Some reports have been critical of insurance regulators for failure to intervene when rates are inadequate to pay for future losses.[12] The Americans for Insurance Reform observes that the "unwillingness of regulators to disapprove rates that are…inadequate, despite their statutory authority to do so, is also a cause of the cycle."[13] It is also a political problem for insurance regulators. Health care providers do not complain when rates are lower than they should be, however it would politically difficult to order an insurer to raise rates when the regulator believes the rates are inadequate, and an insurer is not motivated to raise them at that time.

So that regulators can better perform their responsibility of assuring that rates are not excessive, inadequate or unfairly discriminatory, states might consider requiring rate filings on a prescribed schedule or perform other periodic monitoring of rate levels. When rates decrease in soft markets, an insurer that ignores the falling market rate or that is prohibited by regulators to match falling rates will lose the less risky policyholders to competitors and retain riskier policyholders not accepted by the

[12] July 23, 2002 letter from the Americans for Insurance Reform to the nation's insurance commissioners. p. 4.
[13] Americans for Insurance Reform letter, 4

competitor at the lower-priced coverage. The resulting book of business for the higher-priced insurer has a higher cost than before, causing the insurer to raise rates and subsequently lose additional lower-cost risks. This is a phenomenon of every business cycle; those who keep prices higher than the market face shrinking market share. The affect of adverse selection in the insurance business adds to this problem.

The Role of Reserving and Possible Reserve Deficiencies

One of the most difficult and important tasks for the casualty actuary is the estimation of the necessary future dollars needed to cover the unpaid liabilities of the insurer to claimants. This task is of critical importance to a medical liability insurer. "Loss reserving is the term used to denote the actuarial process of estimating the needed amount of loss reserves. A loss reserve is a provision for an insurer's liability for claims".[14] According to Wiser, the total loss reserve of an insurer is comprised of five elements:

- Case reserves assigned to specific claims;
- A provision for future development on known claims;
- A provision for claims that re-open after they have been closed;
- A provision for claims that have occurred, but have not yet been reported to the insurer; and
- A provision for claims that have been reported to the insurer, but have not yet been recorded.[15]

It should be noted that for most practical purposes, including financial reporting, the last four elements are combined into what is generally defined as IBNR losses.

A lengthy claim settlement process characterizes the medical liability insurance line of business. Thus, it is critical for the casualty actuary to make the best estimate possible of the ultimate settlement value of all losses that the insurer faces. One of the key elements in medical liability claims is loss development. The average time between an incident of medical negligence and the payment of a claim is four to five years, with many claims taking longer. As the amount paid for a claim arising from a given year grows, estimates of future reserves will be adjusted. Actuarial Standard of Practice 36, Regarding property and casualty Loss and Loss Adjustment Expense Reserves, states, "Actuarial estimates are inherently uncertain because they are dependent on future contingent events. Moreover, loss and loss adjustment expense reserve estimates are generally derived from analyses of historical data, and future events or conditions often differ from the past. Even when appropriate actuarial techniques and assumptions indicate that the stated reserve amount is reasonable, the actual amount necessary to settle the unpaid claims can be significantly different from the stated reserve amount." For example, if juries in a particular jurisdiction change awarding patterns, all known claims tend to be adjusted accordingly to reflect the new pattern of damage awards. Actuaries then rely on these revised estimates in their evaluations of the insurer's liabilities. This can result in significant increases in loss reserves if juries are tending toward larger damage awards. It should be noted that while few claims actually go to trial, the damages awarded by juries in those few trials do impact the settlement agreements for the claims that do not. This is an example of the reasons reserves on many known claims are adjusted.

[14] Ronald F. Wiser, Foundations of Casualty Actuarial Science, 4th ed. (Arlington, VA: Casualty Actuarial Society, 2001).
[15] Wiser, 197.

With each annual financial statement, insurers update their best estimates of the final cost for claims in a given year. As prior years mature, these estimates for the older years get closer to a final figure. The adjustment to estimates for prior years impacts an insurer's income statement in the year of the adjustment. This process also impacts ratemaking. When using five to ten years of data to determine future rates, the ratemaking actuary must use estimates of the ultimate cost for those years. When reserves in the financial statement are increased or decreased for a prior year, those changes impact the data used to estimate the full cost of claims to be covered in the future. This is equally true for estimates of losses and for estimates of loss adjustment expenses.

THE PUBLIC HEARING ON MEDICAL MALPRACTICE

The Market Conditions (C) Working Group held a public hearing on medical malpractice markets. The working group heard from three invited speakers. Dr. Donald Palmisano testified on behalf of the American Medical Association (AMA). Dr. Richard E. Anderson, President and CEO of The Doctors Company provided the perspective of a medical liability insurance provider. Jay Angoff, a Missouri attorney provided a lawyer's perspective on behalf of the American Trial Lawyers Association (ATLA). Not surprisingly, there was not a consensus as to the causes of the medical malpractice crisis or appropriate remedies to address the situation.

The AMA recommends the adoption of a uniform federal approach to resolve the crisis. This would include prompt and fair compensation to patients that are injured when a medical provider breaches the generally accepted standard of care. The AMA believes that these injured patients should receive full payment for out-of-pocket "economic" losses and reasonable compensation ($250,000) for "non-economic" losses. The AMA supports the Help Efficient, Accessible Low-Cost, Timely Healthcare (HEALTH) Act (H.R. 5), which has passed the House of Representatives earlier this year (2003). The AMA also supports reform that would encourage health care providers to report health care errors without fear of reprisal so that the errors can be studied to improve patient safety and quality of care.

Dr. Anderson believes that the 1975 MICRA reforms were effective in providing a balance between adequate patient compensation for negligence by health care providers and constrained costs of medical liability insurance. He believes that increasing severity of losses caused the current medical liability crisis, presenting statistical information from the Doctors Company to support his contentions. He blames managed care for an erosion of trust that was present in doctor-patient relationships. He is also very supportive of patient safety efforts.

Jay Angoff believes that it was Proposition 103 that makes California's law work, not MICRA. He provided statistics to indicate that caps of non-economic damages are ineffective. He believes that there were several causes for insurance underwriting cycles that could be addressed by insurance regulators. He observed that changes in insurers' investment performance, the cost of reinsurance, lack of diligent enforcement of rating laws by insurance regulators and the anti-trust exemption enjoyed by insurers were the primary reasons that underwriting cycles occur. He believes addressing these four elements would alleviate the periodic wide swings in availability and affordability.

A complete transcript of the hearing held March 8, 2003, along with accompanying slides for two of the speakers is available from the NAIC.

MARKET ANALYSES FROM OTHER STUDIES

Much research has been published examining market phenomena of past as well as current medical malpractice insurance crises. Conning and Company, a consulting and actuarial firm, produced a series of strategic studies of the medical malpractice insurance industry. In 1994, it reviewed the state of the market and concluded that while profits had been strong for a number of years prior to the report, there was evidence that competitive pricing, increasing current-year claims experience, declining investment yields and declining loss reserve redundancies could reduce company profits in the future.[16] The study also found that markets were becoming less fragmented—insurers were having an increasingly difficult time writing specialized risks—and that volatility was increasing as new types of risks emerged.[17] Conning also argued that smaller insurers were experiencing increasing pressure to consolidate with other companies in order to survive in the increasingly competitive market.[18]

In 2000, Conning released another report that discussed the deteriorating conditions the market had experienced.[19] Conning presented three conclusions about why the market had deteriorated. First, the industry was not prepared to deal with the competitive pressures and increasing loss severity and that many insurers appeared unable to price, underwrite or manage losses adequately.[20] Second, because surveyed insurers indicated that they intended to raise rates and grow their business simultaneously, the lack of "clear and focused strategies to reduce claims costs, and with continued competition driven by market share growth goals, it is unlikely that the (potential) increases in rates will be sufficient to make the industry profitable."[21] Third, the report suggests many of the industry's challenges are a result of an increased awareness of the occurrence of medical errors and frustration with increasing costs and reduced benefits of health insurance.[22]

In 2002, Conning released an even more extensive report than the 2000 work.[23] This report found that the medical malpractice insurance market had deteriorated rapidly for several reasons: volatile year-to-year change in premium; aggressive reserve takedowns and significant increases in equity investments in the bull market had disappeared; rapidly deteriorating loss ratios as a result of dramatically increasing severity and claims payment as well as increasing defense and investigation costs; an increasing reliance on reinsurance; and the development of a large reserve deficiency.[24] The report also found that although all customer markets were producing very poor underwriting results by year-end 1999, commercial markets (i.e. hospitals, nursing homes and managed care organizations) had the greatest problems.[25] The research found that since the 1970s crisis, the market had divided into three separate segments of

[16] Conning and Company, Challenges in Medical Malpractice: Capital, Consolidation, and Managed Care (Hartford, CT: Conning and Company, 1994).
[17] Conning and Company, 1994.
[18] Conning and Company, 1994.
[19] Conning and Company, Medical Malpractice Insurance: Ills Diagnosed, Cures Elusive (Hartford, CT: Conning and Company, 2000).
[20] Conning and Company, 2000.
[21] Conning and Company, 2000.
[22] Conning and Company, 2000.
[23] Conning and Company, Medical Malpractice Insurance: A Prescription for Chaos (Hartford, CT: Conning and Company, 2001).
[24] Conning and Company, 2001.
[25] Conning and Company, 2001.

insurers; traditional insurers, provider-owned insurers, and captives and risk retention groups, each having their own business interests.[26] Conning also found that when it came to growth strategies, insurers that had the most difficult time in the market were those that grew most aggressively between 1992 and 1997 as well as traditional insurers that entered the medical malpractice market in the 1990s.[27] Conning identified several factors that historically contributed to the growth of medical malpractice that are anticipated to impact future growth: loss trends driven by innovation and technology; increased agreement on defined standards of care; increased spread of medical malpractice insurance, which created a broader base of targets for malpractice lawsuits and discouraged alternative solutions to substandard care, contingency fee lawyer reimbursements, citizen juries and nature of tort pleadings in the U.S. courts.[28] The report suggested that in coming years, three forces will define the changing medical malpractice market: reinsurance affordability and availability, the federalization of health care oversight and managed care legislation or court decisions and the increased use of the Internet by consumers, providers and insurers.[29]

The Americans for Insurance Reform, examining how much money insurers have taken in and what they have paid out over a 30-year period, reported two major findings.[30] First, they found that the amount medical malpractice insurers have paid out, including all jury awards and settlements, directly tracks the rates of medical inflation.[31] Second, they found that insurance premiums (in constant dollars) increase or decrease in direct relationship to the strength or weakness of the economy, reflecting the gains or losses experienced by the insurance industry's market investments and their perception of how much they can earn on the investment "float" that doctors' premiums provide them.[32]

The AMA issued a 2002 report on the medical professional liability market.[33] The report found that while the underwriting cycle can account for the periodic nature of rate escalations, it does not fully account for the overall upward trend in premiums or the extremely high levels to which they rise.[34] These outcomes are attributable to trends in claims severity and other factors, such as jury awards and settlements and the frequency of million dollar and higher verdicts.[35]

In 1973, the Secretary of the U.S. Department of Health, Education and Welfare established a commission to study the medical malpractice insurance market. The commission published several findings and recommendations with respect to the insurance regulatory structure.[36] Many of these issues persist into the current medical liability crisis. At the time, the commission found that medical liability insurance was available and that the insurance market was competitive, even though individual

[26] Conning and Company, 2001.
[27] Conning and Company, 2001.
[28] Conning and Company, 2001.
[29] Conning and Company, 2001.
[30] Conning and Company, 2001.
[31] Americans for Insurance Reform, Medical Malpractice Insurance: Stable Losses/Unstable Rates (New York: Americans for Insurance Reform, 2002).
[32] Americans for Insurance Reform.
[33] American Medical Association, "Medical Professional Liability Insurance," Health Care Financial Trends Report (Chicago: American Medical Association, April 2002).
[34] American Medical Association.
[35] American Medical Association.
[36] United States, Department of Health, Education, and Welfare, Medical Malpractice: Report of the Secretary's Commission on Medical Malpractice (Washington, DC: GPO, 1973).

practitioners may have had more difficulty locating insurance sources.[37] With respect to rate making and rate classification, the commission found that rates based on groups of physicians and institutions for rating purposes may not be equitable for all medical providers or in the best interests of the public and under some circumstances may affect cost and availability of professional liability insurance.[38] The commission also found that inadequacies in the collection and analyses of appropriate data precluded the development of sound actuarial practices and rates and that state regulators were then generally inadequately equipped to effectively monitor the medical liability ratemaking process.[39] The commission recommended that the NAIC work with the insurance industry to establish a uniform statistical reporting system for medical malpractice insurance and that data be reported to a single data collection agent who would compile it, validate it and make it available to state insurance regulators, carriers and other interested parties.[40]

In a 2003 report, the GAO examined the factors contributing to the current medical liability crisis.[41] It found that several factors could be attributed to the crisis in the seven states that it studied. Those factors include: rapidly increasing claims, decreasing investment income, vigorous competition in the medical malpractice market and rapidly increasing reinsurance costs for medical malpractice insurers. While the report to Congress did not recommend any executive action, it did recommend that Congress encourage NAIC and state insurance regulators to "identify and collect additional data necessary to evaluate the frequency, severity, and causes of losses on medical malpractice claims."[42]

REVIEW OF MEDICAL MALPRACTICE INSURANCE MARKET, 1992-2002

Insurance regulators are interested in understanding how effectively a market functions from two perspectives. The first is to determine whether or not the medical liability market is providing the consumer with a reliable product at an affordable price. The second is to make sure that insurers remain solvent to protect the integrity of the market as well as ensuring that consumers will have their claims paid when needed.

An analysis of data can only be as good as the data itself. This study agrees with the GAO's finding, as well as those of other researchers, that there is insufficient available data to study every aspect of medical malpractice insurance market problems. There are essentially two important limitations to the data available from NAIC sources that merit discussion. First, many insurers, such as self-insurance plans and state-mandated entities, do not file financial data with the NAIC. In some states, such as Texas, these entities account for a large portion of the medical malpractice insurance market. The second limitation is that the data provided to the NAIC is not sufficiently detailed to examine where, and to what extent, problems exist. Analysis of available data shows that, in broad terms, there is a market

[37] Department of Health, Education, and Welfare, 38.
[38] Department of Health, Education, and Welfare, 43.
[39] Department of Health, Education, and Welfare, 45.
[40] Department of Health, Education, and Welfare, 45.
[41] United States, General Accounting Office, Medical Malpractice Insurance: Multiple Factors Have Contributed to Increased Premium Rates (Washington, DC: GPO, 2002).
[42] Ibid, p. 7

problem in medical malpractice. However, the problems are likely to occur within certain medical specialties and/or certain locales with greater severities that are not identifiable by available data. These limitations point to a need to develop a new statistical plan to collect data in a more detailed format.

Because of these limitations, there is no way to determine what portions of losses are driven by actual medical expense or by payment for non-economic/punitive damages on an aggregate basis. The data are also not useful to the medical profession and others to discover root causes of adverse events for risk management, claim prevention, or patient safety purposes. The data for these purposes are available only through closed claim data provided by medical liability insurers responding to individual state data calls. To that extent, this report will recommend the NAIC consider collecting additional data that would be useful to facilitate meaningful analyses about medical liability markets.

Although the NAIC collects extensive financial data annually from most insurers in the U.S., several insurance providers are not required to file annual statement data to the NAIC. Since the database does not include all medical malpractice insurers, the analyses of data available in the NAIC database will look at average values, in particular mean and median insurer values, to provide a picture of what the typical insurer that files financial data with the NAIC faces in the market.[43] It can be reasonably assumed that insurers who are not required to file annual statement data with the NAIC have similar experiences in the marketplace as those that do.

There are also other caveats about the data that need to be considered. One concern is that affiliated insurers within an insurance group do not directly compete against one another; therefore, it would be more appropriate to examine insurers on a by-group basis.[44] However, because of data limitations, this report examines insurers on a legal entity basis and not by group. The data also contains insurers that may have withdrawn from the market or suspended writing new business, but continue to report losses. These insurers continue to provide financial data to the NAIC, but do not indicate whether they are active in the market. This poses an additional problem for market analyses. These insurers usually report a very small level of premium, which may create the appearance that there are many insurers in the market when in fact there may be very few actively writing business. To address this problem, this report will include the financial data of those insurers that have written at least 2 percent of a given state's direct written premium. This limitation provides a consistent representation of market concentration between states (between 72-91 percent of a state's direct premium is written by those insurers with at least 2 percent of the market). Despite these caveats, the financial data collected by the NAIC is the only national insurer financial database available.

Premium, Losses and Profitability

Long-run profitability is one of the most important indicators of market problems in an insurance market. Profits that are extraordinarily high over a period of years may indicate that competition in the market is stifled and prices are artificially high; that is, some insurers are able to charge higher rates than they would charge if there were additional insurers in the market driving prices down. Conversely, weak

[43] In situations where data exhibits a skewed distribution, i.e. the mean and median values are not approximately equal, the median is generally the best measure of central tendency. Accordingly, the median value will be the measure of central tendency referred to most often in this report.

[44] The term 'insurer' refers to a legal entity writing medical liability insurance premium.

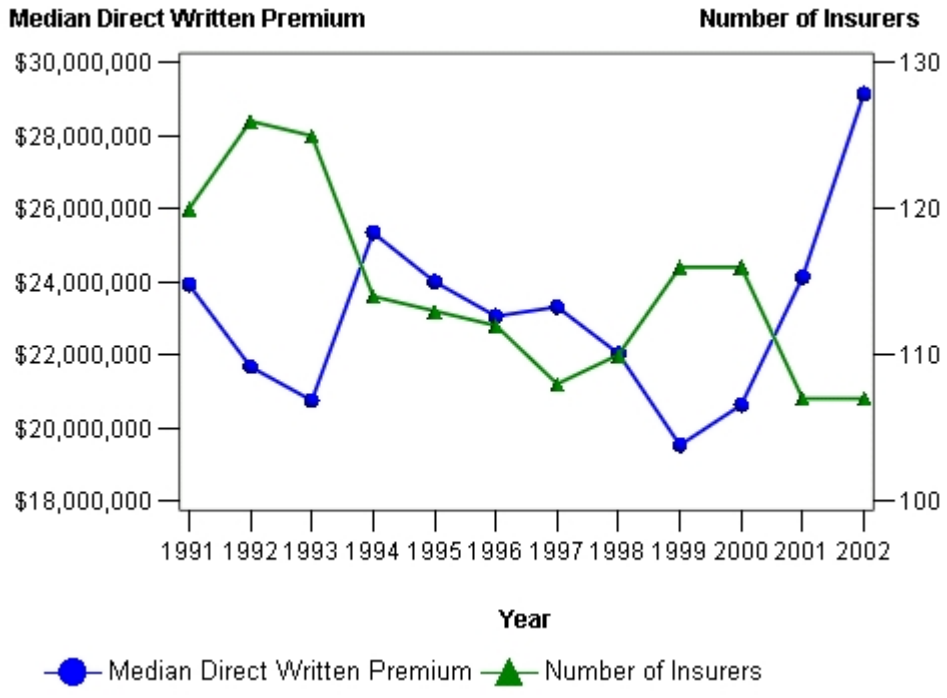
profits over a number of years may indicate that there are competitors in the market charging inadequate prices in order to gain market share. It could also indicate an inability to raise premium to cover costs. An insurer's profitability is determined by the difference between its revenues and costs. This section will examine both of these components as well as the profitability of insurers.

Premium

Long-run premium growth in insurance markets is generally a constant phenomenon, but may fluctuate in the short run. **Figure 1** shows the trend in median insurer direct premium written from 1991 to 2002, adjusted for overall inflation[45] as well as the number of insurers reporting medical liability insurance. The graph shows a moderate negative correlation (-0.5369) between the median insurer direct premium written and the number of insurers writing premium in the United States. This relationship suggests that insurers entering the medical liability market during this period could have been attempting to capture market share from existing insurers by reducing premium rates rather than capitalize on any market growth. Another explanation may be that there is a time lag between changes in rates and when insurers enter the market

Figure 1—Countrywide Direct Premium Written

(In 2002 $USD)



Source: National Association of Insurance Commissioners.

[45] Where applicable, the data in this report is adjusted by the Bureau of Labor Statistics Consumer Price Index for All Urban Consumers series in terms of 2002 U.S. dollars. This data can be obtained from the Bureau's web site: http://www.bls.gov.

Table 3 shows that, when adjusted for general inflation, the median insurer premium for an individual insurer was $23,918,287 in 1991 and $29,152,190 in 2002. Median insurer premium reached a low of $19,521,779 in 1999. Median insurer premium increased 49.33 percent from 1999 to 2002. **Table 4** shows a large difference between the median and mean values across nearly all states in 2002, indicating that several large insurers write a majority of the premiums written in the market. New York had the highest median insurer premium written with $80,018,909. South Dakota had the lowest median insurer premium written with $601,951. It is important to note that the total columns shown in these tables do not represent the total medical malpractice markets, but the direct written premium by insurers with at least 2 percent of any state's direct written premium.

Anecdotal evidence suggests that segments of the medical malpractice market (e.g., medical specialties such as OB-GYN and neurosurgery) are experiencing the most acute rate increases. The NAIC collects medical liability premium aggregated to include all segments of the market (e.g., physicians, hospitals, dentists, nursing homes, etc.), which does not allow for thorough analyses of premium increases by market segment prevalent in the medical liability market. To facilitate meaningful research and public policy initiatives, the authors of this report recommend that the NAIC develop a statistical plan to identify a subset of medical specialties relevant to market analyses and collect insurer premium data by state for those specialties on an ongoing basis. The purpose of this data should be to examine the availability and affordability of insurance within these specialties. While there has also been anecdotal evidence suggesting rate differences between urban and rural markets, the authors of this report believe collection of this level of data should remain within the domain of state regulators in their function of rate regulation and do not recommend including this level of detail in a statistical plan.

Losses

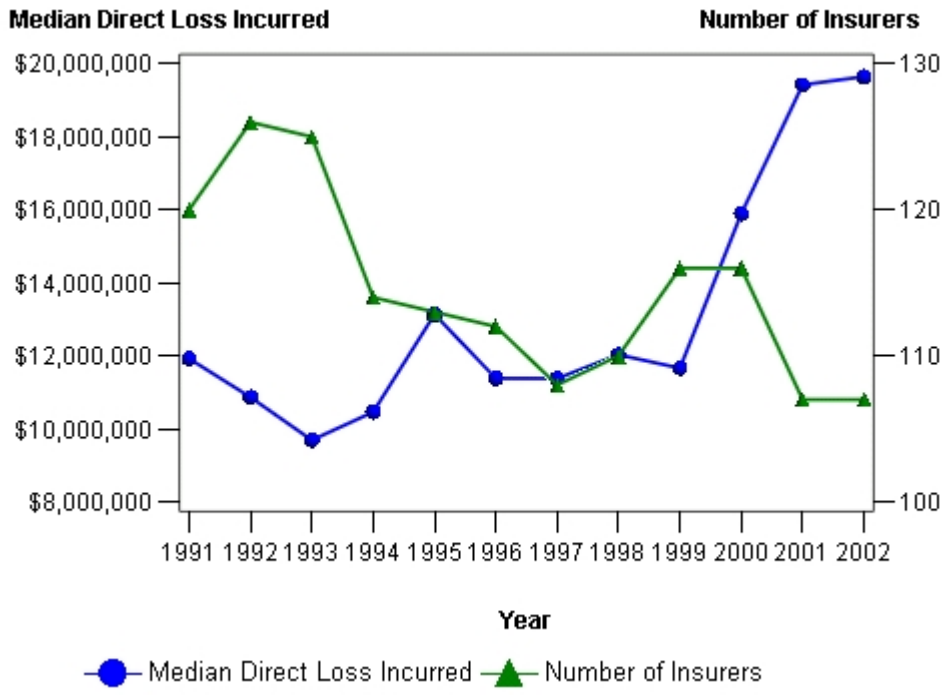
Losses are the major contributing factor in determining medical liability rates. Insurers consider historical patterns in both incurred loss and paid loss for ratemaking purposes. Incurred losses are the insurer's estimate of the total value of all its insurance claims received during the annual statement year.[46] Paid losses are the actual losses paid by an insurer during the annual statement year regardless of when the claim was filed with the insurer.

[46] A negative direct incurred loss is usually the result of reserve reductions for prior years that are larger than incurred loss for the current year. Since the reserve reductions and current year incurred loss are reported in the same accounting period, the result is a negative number."

Figure 2 shows the trend in inflation-adjusted median insurer direct losses incurred from 1991 to 2002 as well as the number of insurers reporting medical liability direct premium written. Median insurer incurred losses were volatile in the early 1990s, but did not exhibit either a strong upward or downward trend. Incurred losses increased significantly in 2000 and 2001. The median insurer losses incurred increased 72.65 percent from 1996 to 2002.

Figure 2—Countrywide Direct Losses Incurred

(In 2002 $USD)



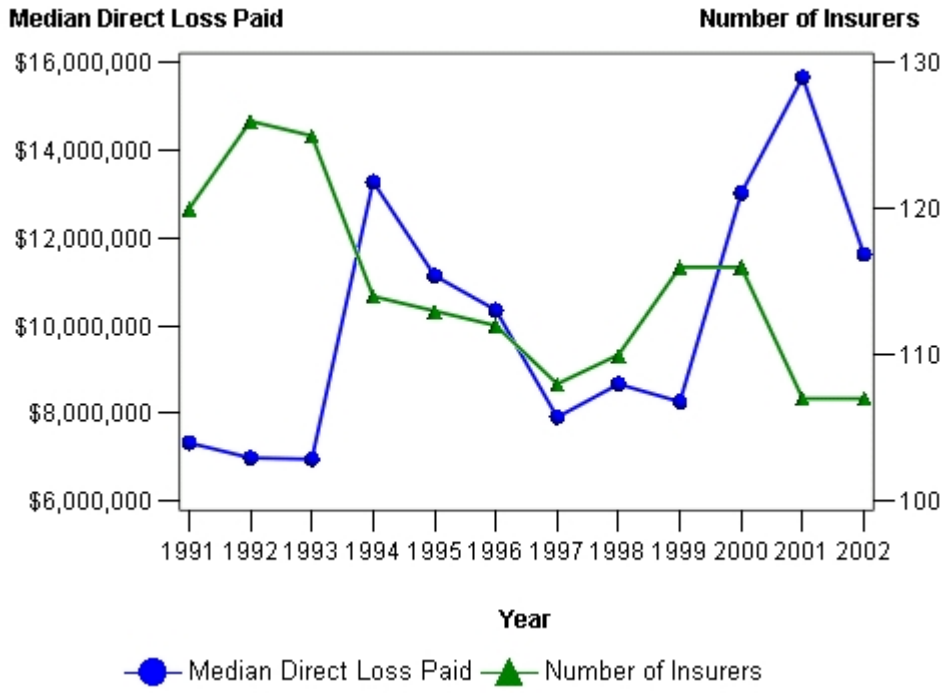
Source: National Association of Insurance Commissioners

Table 7 shows that inflation-adjusted median insurer direct losses incurred were $11,922,414 in 1991 and $19,649,215 in 2002. Median insurer incurred losses reached a low of $9,688,475 in 1993. The data shows a moderately strong negative correlation (-0.5876) between the number of insurers reporting medical liability insurance premium and the median insurer incurred loss. **Table 8** shows direct incurred losses by state in 2002. Median insurer incurred losses ranged from $33,647,422 in New York to $136,839 in North Dakota. It is important to note that not all incurred losses are represented in the data. Insurers with less than 2 percent of the direct written premium experienced some incurred losses. There are also insurers that have not reported direct written premium (i.e. left a market) but continue to incur losses through occurrence policies and run-off coverage on claims-made policies.

Figure 3 shows the trend in median insurer direct losses paid for 1991 to 2002. Median insurer losses paid trended steadily upward, but with irregularity during the analysis period. Overall, median insurer losses paid increased by 58.8 percent between 1991 and 2002.

Figure 3—Countrywide Direct Losses Paid

(In 2002 $USD)



Source: National Association of Insurance Commissioners

Table 9 summarizes direct losses paid using countrywide data. A large difference between the mean and median insurer paid losses indicates that the median value is more representative of what the typical insurer experienced during the analysis period. There is a moderately strong negative correlation (-0.5812) between the number of insurers and median insurer direct losses paid, indicating that the amount of losses paid by insurers in the market may also have an impact on an insurer's decision to remain in the market. **Table 10** shows direct losses paid by state in 2002. As to be expected, the data shows large variations in paid losses across the states. The median paid losses ranged from $0 in New Hampshire and Vermont to $81,319,218 in New York.

Insurer losses have been the driving force of medical liability rate increases over the past several years. However, there is debate about why costs are increasing. On the one hand, some argue that one cause of increased losses has been an increase in economic costs; those costs the insurer pays in medical care, lost wages, etc. On the other hand, some argue that the driving force of loss increases has been an increase in non-economic damages; those damages insurers pay to compensate for pain and suffering, loss of companionship, punitive damages, etc. To provide meaningful analyses on the impact of economic and non-economic damages on insurer losses, the authors recommend the NAIC study an appropriate methodology for reporting specific types of loss costs and include the collection of this data by state by specialty in a statistical plan.

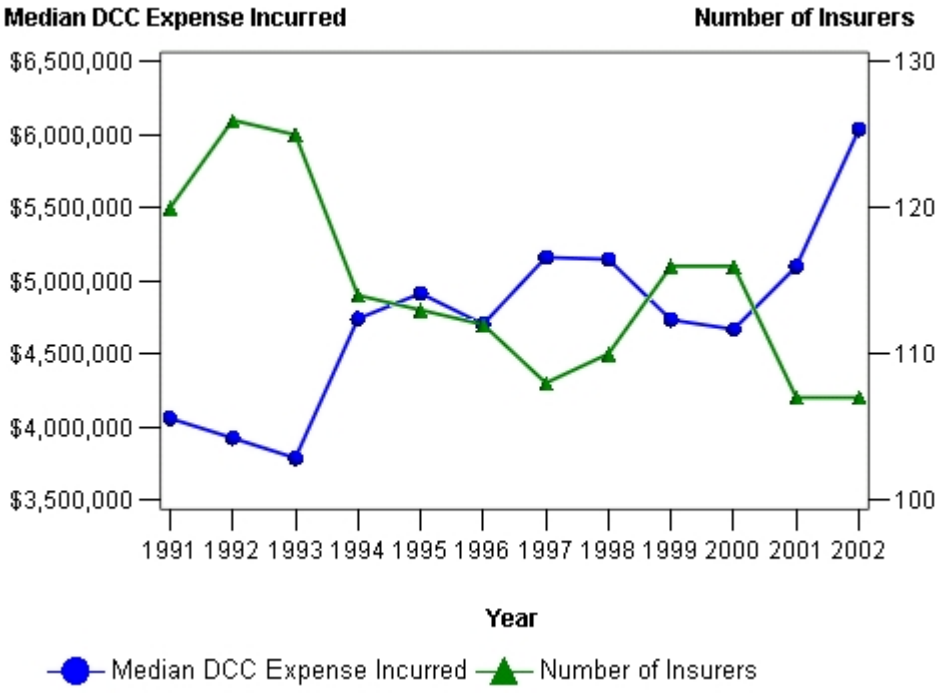
Loss and Other Expenses

Insurers incur other costs in addition to claims payments. One of the largest costs to medical liability insurers is defense cost and containment expense (DCC), previously known as allocated loss adjustment expense (ALAE). These are expenses the insurer incurs as a result of researching the validity of a claim and defending a claim in the event of litigation.

Figure 4 shows the trend in DCC expenses and number of insurers from 1991 to 2002. Median insurer DCC expenses incurred increased 48.8 percent during this time period.

Figure 4—Median Defense and Cost Containment Expenses Incurred

(In 2002 $USD)



Source: National Association of Insurance Commissioners

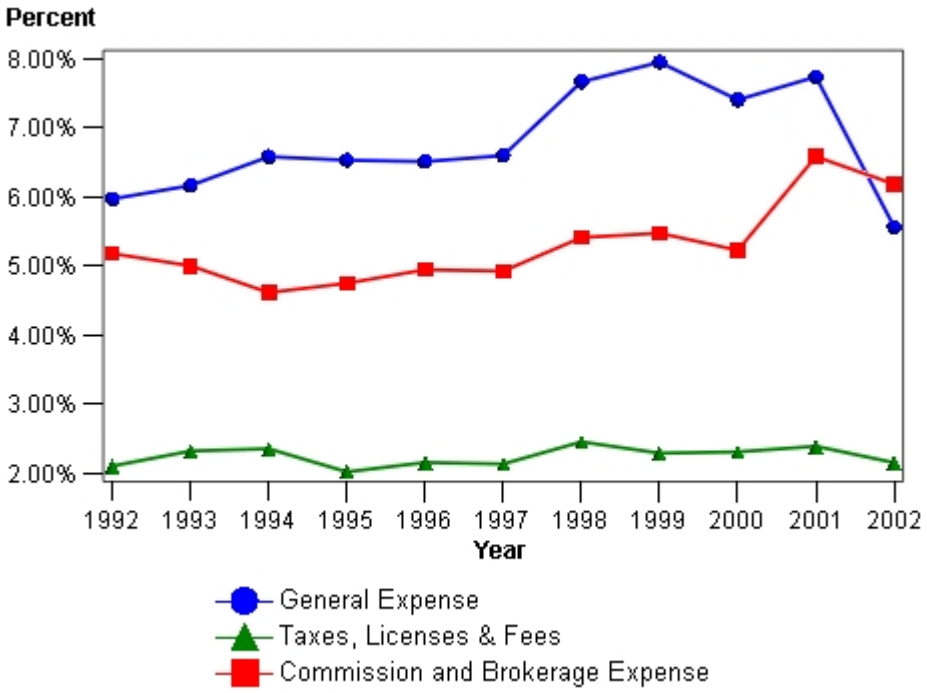
Table 11 shows the inflation-adjusted median insurer DCC expenses from 1991 to 2002. There is a moderately weak negative correlation (-0.3007) between the number of insurers and the median insurer DCC expense incurred, indicating that increasing DCC expenses may be a factor inducing insurers to leave the medical liability market. **Table 12** shows DCC expenses by state for 2002. New York had the highest median insurer DCC expenses incurred with $17,165,493 and Minnesota the lowest with $-47,862. As with premium and losses, there is a wide variation in median DCC expenses incurred between states. The data shows a no significant correlation (-0.0841) between the median insurer DCC expense incurred and the number of insurers.

Medical liability insurance has a larger percentage of DCC expenses to premium than other property and casualty insurance. The authors recommend the NAIC consider collecting DCC expenses by specialty subset within any statistical plan it undertakes. The authors also recommend the NAIC consider collecting other expense data by state.

Insurers also incur other expenses related to medical liability insurance. **Figure 5** shows trends in other expenses from 1992 to 2002 as a percent of earned premium. Insurer general expenses to premium trended upward throughout this period, while insurer commission and brokerage expenses to premium increased slightly. Insurer taxes, licenses and fees to premium have been relatively stable. The decreasing general expense ratio could be credited to cost-cutting efforts of insurers or to rate increases caused mostly by increasing losses.

Figure 5—Medical Liability Expenses to Premium

(In 2002 $USD)



Source: National Association of Insurance Commissioners

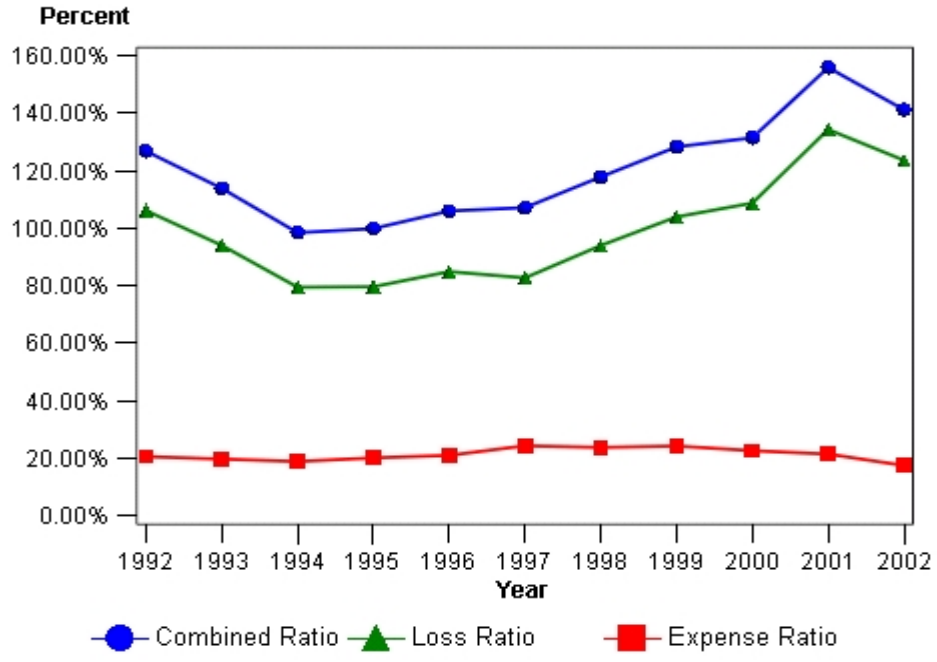
Table 14 and **Table 15** show the mean insurer expenses in dollar terms as well as expenses as a percent of premium, respectively. General expenses and commission and brokerage expenses trended upward while taxes, licenses and fees expenses remained relatively stable both in aggregate dollars and as a percent of premium. General expenses as a percent of earned premium experienced a large decrease from 2001 to 2002. General expenses (-0.8227), taxes, licenses and fees (-0.7498) and commission and brokerage expense (-0.6487) show strong negative correlations to the number of insurers.

Profitability

Increased insurance prices can be caused by a number of things including higher loss and expense costs, lower interest rates, reserve adjustments, decreased competition and regulatory influence in the market. An important question is whether premiums have been sufficient to cover insurers' costs, including their cost of capital. Unfortunately, it is not easy to measure insurers' profitability for any specific line of insurance. Multi-line insurers do not confine their operations to one type of insurance, so it is necessary to allocate expenses and investment income from an insurer's total operations to estimate profits for a specific line of insurance. An additional complication is the fact that insurers' surplus by insurance line must be allocated in order to estimate total profits and a rate of return on net worth. Further, insurers report financial data primarily on a calendar-year basis, but calendar-year profits can be an imperfect measure of the insurers' performance, as premiums are earned over the term of the policy, but claims payments and reserve changes associated with that policy term can stretch out over years.

Since insurer profitability is measured after considering reinsurance, the following analyses will look at factors on a net-of-reinsurance basis. **Figure 6** shows median insurer combined, loss and expense ratios from 1992 to 2002 on a net basis as reported on the NAIC Insurance Expense Exhibit. Both the combined and loss ratios have steadily trended upwards since 1994, declining in 2002. Insurer expense ratios remained steady during the analysis period. Understanding the limitations of measuring profitability directly, one can use several different tools to identify profitability. The traditional measure is the combined ratio, which is equal to the ratio of losses and loss adjustment expenses incurred to premiums earned plus the ratio of other expenses and dividends to policyholders to premium written. A combined ratio that exceeds 100 percent implies negative underwriting profits, i.e. premiums are less than loss costs and expenses.

Figure 6—Medical Liability Insurance Combined, Loss and Expense Ratios



Source: National Association of Insurance Commissioners

Table 16 shows the mean insurer profitability results for medical liability from 1992 to 2002. The industry has experienced underwriting losses in nine out of 11 years and pre-tax losses in 10 out of 11 years. During this period, the industry experienced total losses on underwriting business and investment gains after taxes in the two most recent years, 2001 and 2002. Over the course of the analysis period the data shows that countrywide, medical liability insurance was profitable in the early to mid-1990s, becoming less profitable in recent years. There are moderate positive correlations between the number of insurers in the data and underwriting profit/loss (0.2209), pretax profit/loss (0.3197) and total profit/loss (0.4406), indicating that these could be factors in determining whether an insurer continues writing insurance in the market. The data covers all forms of medical liability specialties. This may obscure losses sustained by insurers who specialize in certain areas of medical liability insurance that are more or less profitable that the market as a whole.

Table 17 shows profitability as a percent of net premium earned. The data shows underwriting losses each year except 1994 and 1995 and pretax losses for each year except 1994, with those loss percentages increasing from 1992 to 2001. In spite of this trend, total profits were positive until 2001. Only total profits (loss) showed any significant correlation (0.4410) to the number of insurers.

Currently, sufficient data to calculate the combined ratio profit and losses on a by state basis is not readily available. The *Profitability Report By Line By State* attempts to estimate some of these calculations from annual statement data. However, since these calculations are based on all medical malpractice insurers and many of the numbers are appropriated across lines of business, the estimates were incompatible with the data used in this report. The authors recommend the NAIC include in a statistical plan the necessary data elements to calculate combined ratios and profits and losses by state, by medical specialty. This level of data could provide meaningful insight about the profitability of certain types of coverage in individual state medical liability markets.

Industry Investments

Because of the nature of insuring exposures against future losses, insurers typically maintain large investment portfolios as a reserve to pay future losses. Insurers generate income from their investments by investing in bonds, stocks and other financial instruments, which are used to offset premium rates they charge.

While insurers invest in a wide range of investments, they tend to invest in short-term instruments that have low risk of loss of value, such as cash and short-term investments as well as government and corporate bonds. **Table 18** and **Table 19** show the insurer distribution of total invested assets in the medical liability insurers' portfolio for insurers with at least 50 percent of their written premium in medical liability insurance.[47] A majority of these insurers maintained a conservative investment portfolio during the analysis period. Approximately 11 percent of invested assets were held in the stock market.

The values of assets an insurer reports are an important part of its market capacity. Capacity, or the ability to take on additional risk, is determined by the amount of insurer surplus, which is the difference

[47] Invested asset values represent the total asset valuations as reported on the assets page of the NAIC annual statement.

between its assets and liabilities. Capacity determines whether an insurer is able to continue writing its current business as well as add new risks to its portfolio. If asset values decline, surplus also will decline by the same amount, assuming liabilities have not changed. In the case of medical liability insurance in the past several years, the industry witnessed a period of increased claim payments and increased liabilities, all of which has, to varying extent, reduced the industry's ability to make additional insurance coverage available.

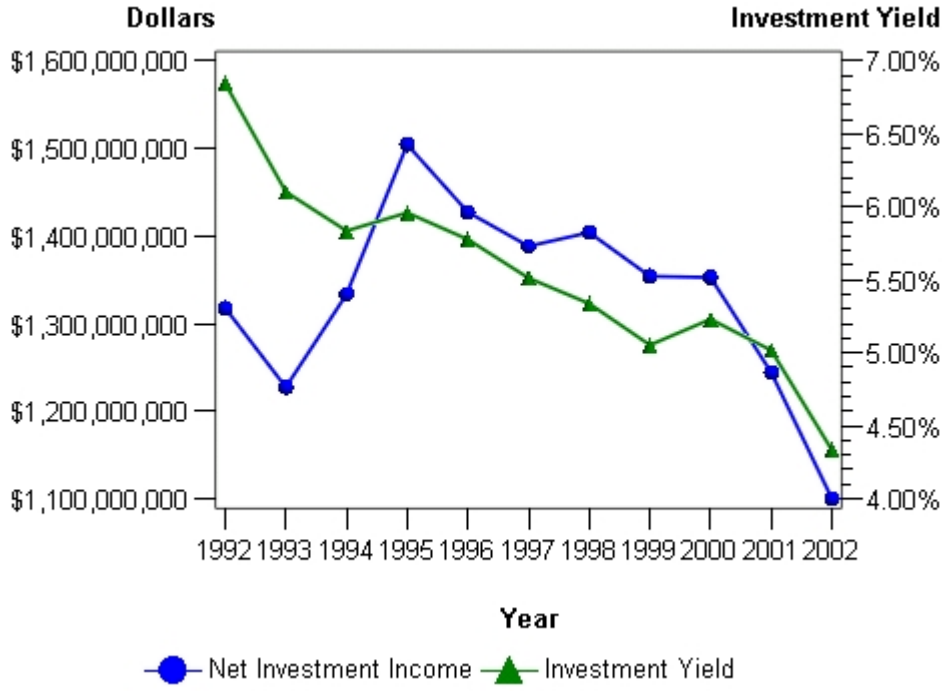
Investment Income

Expected future investment income is included in insurer premium rate calculations, which in effect offset the losses an insurer expects. If the insurer overestimates its expected income while its losses increase, the result will be an increase in its loss ratio, which can be significant in some cases.

Table 20 and **Figure 7** show the relationship between total net investment income and the investment yield insurers earned on their investments[48]. Both trended downward during the analysis period. The investment yield for medical liability insurers ranged from 6.84 percent in 1992 to 4.33 percent in 2002. One criticism expressed about investment income is that medical liability insurers have been using premium increases to replace their investment losses over the past several years. If this were the case, one would expect to see changes in investment income track differently than the investment yield. However, the data shows that changes in net investment income have trended fairly close to changes in investment yield, indicating that insurers have not been using premium increases to purchase investment assets in order to increase their investment gains.

[48] The investment yield is calculated as: Investment Yield = [(Net Investment Income) / (0.5 * (Total Cash and Invested Assets, Current Year + Total Cash and Invested Assets, Prior Year))]. The direct premium earned, net underwriting gain and net investment income are reported on the underwriting and investment exhibit of the NAIC annual statement. These data are aggregated for all lines of business written by the insurers in the database and are not appropriated based on the amount of medical malpractice insurance written.

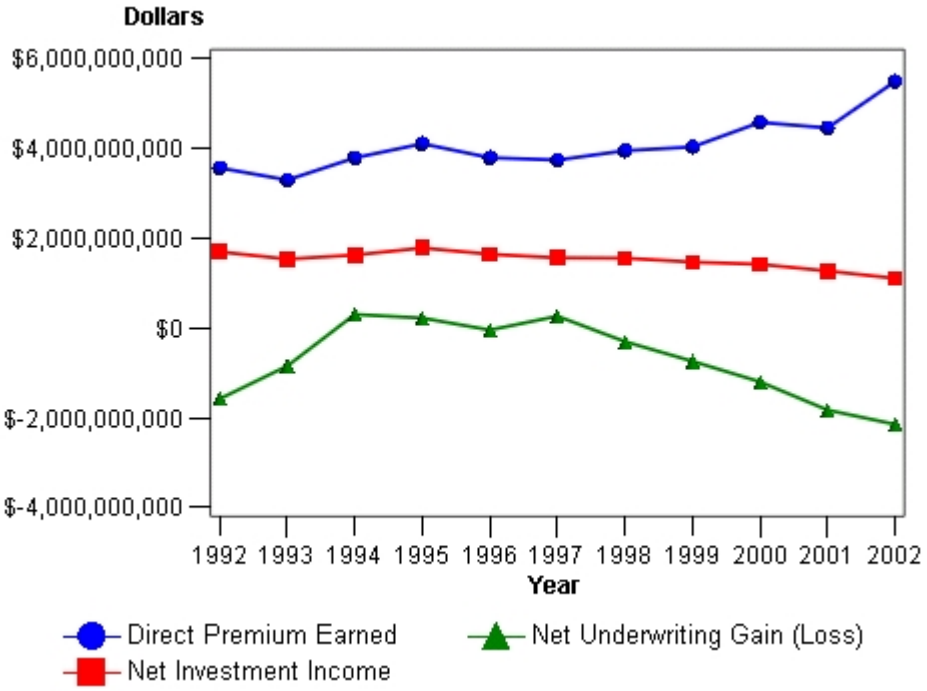
Figure 7—Investment Yield and Net Investment Income



Source: National Association of Insurance Commissioners.

Table 20 and **Figure 8** show trends in premium earned, net underwriting gains and net investment income for insurers included in this report that have at least half of their direct written premium medical liability insurance. The data shows that insurers have experienced increasing underwriting losses since 1997, which are a result of loss and loss expenses over and above its earned premium. The data also shows that net investment income from its investment portfolio has declined during the analysis period. Net underwriting gains and net investment income declined by 74.27 percent and 16.52 percent respectively, between 1992 and 2002, while premium earned increased by 54.09 percent during this time. Relative to changes in earned premium and, in particular, net underwriting gains, changes in investment income have been minor.

Figure 8—Total Premium Earned, Net Underwriting Gain and Net Investment Income



Source: National Association of Insurance Commissioners.

While a decline in investment income since 1997 may have put upward pressure on medical liability insurance prices, much of the increase in premium appears to be attributable underwriting results during the analysis period. The GAO reached a similar conclusion in a report published in June 2003.[49]

Surplus Analysis

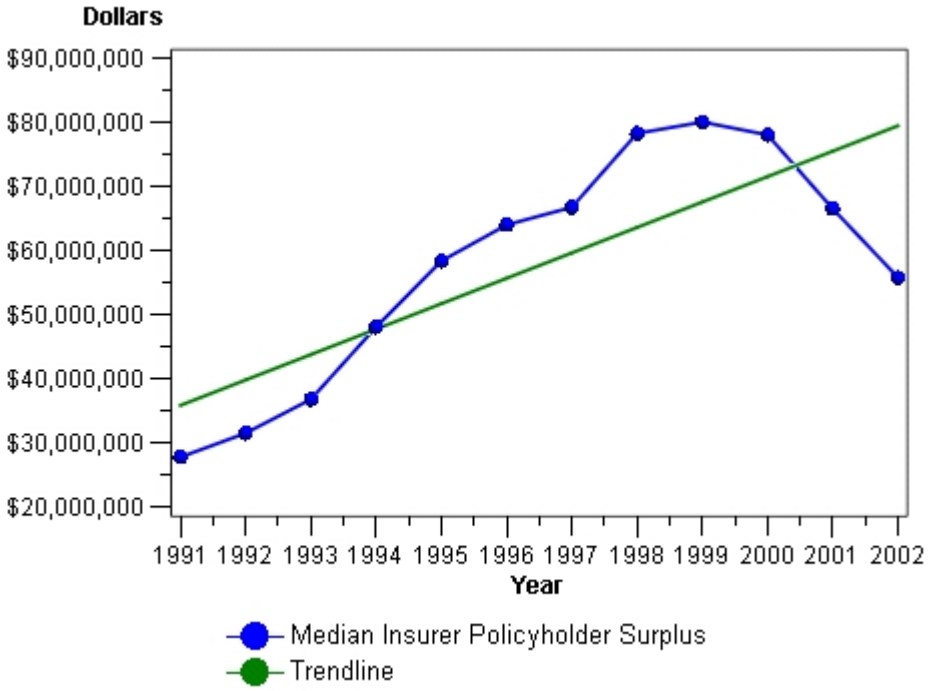
Insurer surplus analysis can provide information about two important aspects of an insurance market. First, the capacity of an insurer to provide insurance is reflected in its policyholder surplus. If surplus increases over time, this may indicate that insurers are more able to take on additional risks in the market. Conversely, if surplus decreases, it may indicate that insurers are not only unable to write new business, but may have problems renewing their existing business. Secondly, a company's surplus ratio—the ratio of policyholder surplus to total assets—gives an indication as to whether an insurer has adequate protection against unexpected losses.

Figure 9 shows the trend in median insurer policyholder surplus from 1991 to 2002. The median insurer value trended upward during the analysis period, however, the median insurer surplus decreased by 30.27 percent between 1999 and 2002. The graph suggests that insurers were able to expand capacity throughout much of the 1990s, but then capacity declined after 1999. The decline in median insurer policyholder surplus combined with the indicated decline in number of insurers suggests a precipitous drop in countrywide capacity or median insurer policyholder surplus.

[49] United States, General Accounting Office, Medical Malpractice Insurance: Multiple Factors Have Contributed to Increased Premium Rates (Washington, DC: GPO, 2002).

Figure 9—Median Insurer Policyholder Surplus

(In 2002 $USD)

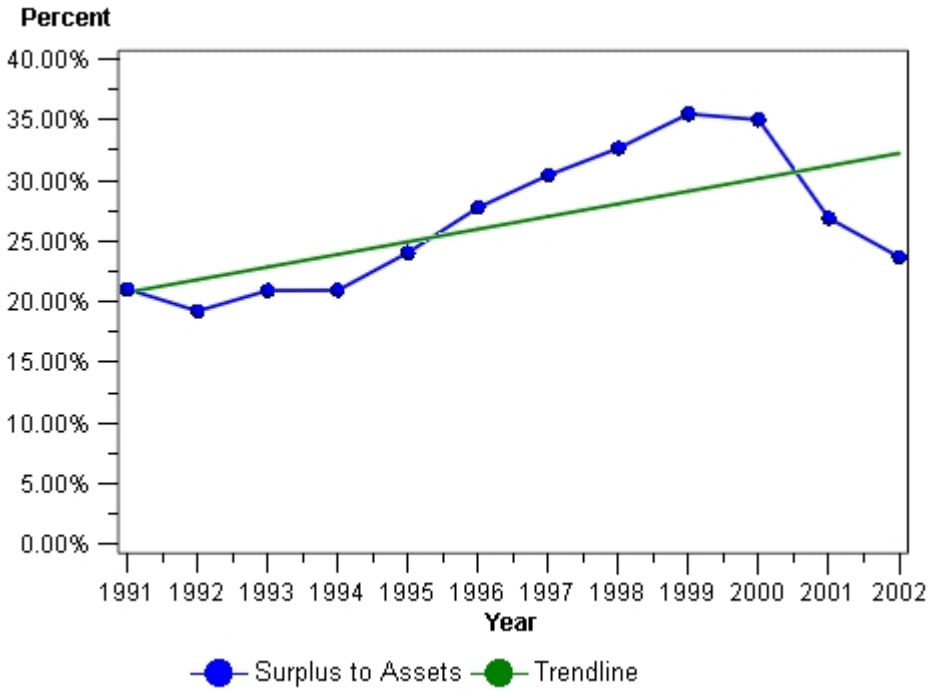


Source: National Association of Insurance Commissioners.

Table 21 shows statistics on insurer surplus. The difference between the mean and median again suggest there are a few insurers in the market with large surplus and many with smaller amounts. The number of insurers reporting medical liability showed a moderately strong negative correlation with median insurer surplus (-0.4938). This indicates that competition in the market *may* have a negative impact on the surplus an insurer brings to the market. **Table 22** presents total assets of medical liability insurers. The difference between the mean and median values suggests that the median value is more representative of the typical medical liability insurer. The data shows that median insurer assets have trended upward (25.05 percent) throughout the analysis period.

Figure 10 shows the trend in the surplus ratio for 1991 to 2002 for medical liability insurers. The surplus ratio reflects an increase (50.55 percent) from 1991 to 1999 and a decline (-29.47 percent) from 1999 to 2002. The surplus ratio suggests that insurers were able to prepare themselves relatively well for unexpected losses during much of the 1990s, but that ability decreased sharply beginning in 1999. The data also shows a moderately strong negative correlation between the numbers of insurers reporting medical liability insurance premium with the median surplus ratio (-0.4056), indicating that competition may impact the median insurer's surplus ratio.

Figure 10—Policyholder Surplus to Total Assets, Countrywide



Source: National Association of Insurance Commissioners.

Reserve Analysis

An insurance company is required to hold loss reserves that make a reasonable provision for all unpaid loss and loss expense obligations of the company under the terms of its contracts and agreements with policyholders, reinsurers, etc. This requirement is for all lines of business in which an insurer writes and not just individual lines, such as medical liability. A reserve analysis of an individual line of business is still legitimate, but it is not an indicator of solvency for the industry without consideration of the other lines of business written by these companies. The analysis here will focus on medical liability insurance reserve adequacy as it pertains to premium rates as opposed to insurer solvency.

Schedule P from the NAIC annual statement filings can be used to analyze industry reserves and estimate a reserve adequacy for both occurrence and claims-made policies. The NAIC uses Schedule P to project the industry reserve adequacy. The analysis focuses on the industry reserve position for those insurers who file with the NAIC, and is not necessarily a reflection of reserve adequacy for any individual company.

The selected tail factors and the number of years of historical development used to project the future development are two items that have significant impact on the reserve estimate. Since a claim may be paid many years after the actual medical mishap occurred, medical malpractice insurance is considered a long-tailed line. Because of this, insurers have to estimate losses many years into the future. To develop

estimates beyond the 10 years included in Schedule P a tail factor is calculated. Tail factors are selected based upon rate filing and industry information not included in Schedule P and actuarial judgment. The factors are then applied to Schedule P data. Another item with significant impact on the reserve estimate is the number of years of historical development used to project the future development. Typically, use of fewer years is more responsive to recent trends, but use of more years provides more stability in the projections.

Table 23 shows the results of several different loss development factor selection methods used to estimate reserve deficiencies. Each method estimates an aggregate reserve deficiency. The estimates range from a deficiency of $2.68 billion to $5.23 billion. It is possible that these estimates are understated for two reasons. First, entities that are not required to file annual statement information with the NAIC may also have reserve deficiencies and those are not included in these estimates. Second, insurers develop data for ten years for annual statement filings, whereas medical malpractice claims can remain open for a much longer period of time. It is also possible that these estimates are overstated. Insurance companies are often allowed to discount their losses to measure the time value of money. For a claim that is anticipated to cost $1,000 in 10 years, the insurance company may only have to report $950 (or whatever the value of the claim would be if paid today). The non-tabular discounts reported in Schedule P amount to approximately $850 million for the 1993-2002 accident years.

While the analysis suggests that the industry is under reserved, there are some potential drawbacks of the analysis:

- Tail factors are difficult to determine since Schedule P includes only ten years of development.
- Reasons for the increasing loss development in the most recent years and in the 2002 calendar year are difficult to ascertain from Schedule P data alone.
- Losses are combined with allocated loss adjustment expense (ALAE). Because development patterns vary for these, a shift in the percentage of loss versus ALAE will distort the development patterns.
- Data is combined for occurrence vs. claims-made, but there are no further separations into more homogenous groups, such as physicians and surgeons, hospitals, long-term care, miscellaneous facilities, home health care, nurses, etc. In total, the development can be reliable when there is not a significant shift among groups. A change in the mix of business on an industry-wide basis could distort the loss development factors selected.
- Potential changes in development expected from changes in future inflation have not been included.
- Schedule P analyses could be distorted if there are significant mergers, changes in reinsurance coverage, or changes in claims management practices.

Fitch Ratings studied the reserve position at year-end 2002 for numerous lines of business.[50] They found "unfavorable reserve development on prior underwriting periods in the past two years." For medical malpractice, Fitch concluded that reserves are deficient by $5 billion to $5.2 billion, or 22.9 percent to 23.6 percent of carried reserves. For all lines combined, they also noted there are higher paid to incurred ratios, particularly for the 1998 to 2001 development years. Reasons cited are that there could be faster

[50] Fitch Ratings, Inc., Property/Casualty Insurance Reserves at Year-End 2002: Filling in the Hole – Slowly (New York: Fitch Ratings, Inc., 2003).

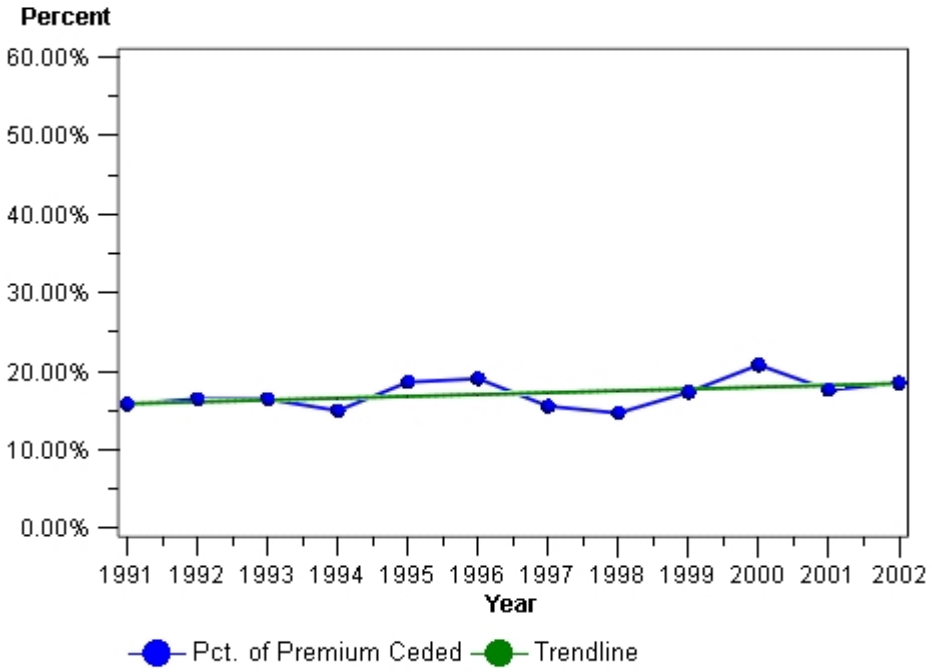
loss payouts or that incurred losses for the period are understated. It should be noted that Fitch's analysis, which also used a Schedule P analysis, is also subject to the same drawbacks described above.

Reinsurance Analysis

Insurers enter into reinsurance contracts with other insurers to limit their exposure to potential losses. Limiting exposure allows insurers with lower capitalization the opportunity to write business they would not be able to write themselves because of insufficient surplus. Capacity to write business can decline when primary insurers are no longer able to obtain reinsurance in the market. This usually occurs when reinsurers do not have capacity themselves to expand their business or when they perceive a particular line of insurance as too risky to provide coverage at the price the primary insurer offers.

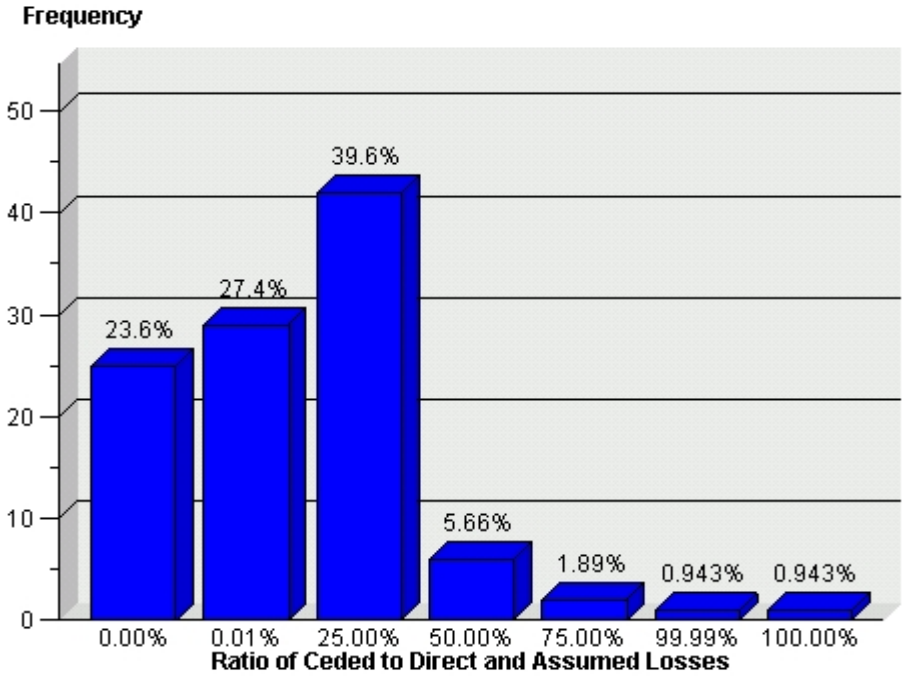
There is no strict distinction between a primary insurer and a reinsurer. While many insurers write primarily direct insurance and other insurers provide primarily reinsurance, there are insurers that participate in the market as both a direct insurer and a reinsurer. This research defines a direct insurer as any insurer that writes more direct insurance than it assumes from other non-affiliated insurers. **Figure** 11 shows the growth in premium ceded to non-affiliated insurers and reinsurers from 1991 to 2002. Most direct insurers tend to reinsure only a small portion of their medical liability risk. Over the analysis period, there has been no significant increase (0.08 percent annually) in the trend to reinsure larger portions of risk, which could be a result of insurer knowledge of its risks or unavailability of affordable reinsurance coverage. Direct insurers do tend to limit reinsurance purchases to the minimum perceived necessary due to its cost. **Figure 12** shows that most insurers (90.6 percent) reinsured less than 50 percent of their medical liability risk in 2002. **Table 24** shows the mean direct premium written, ceded and assumed from 1991 to 2002. The percentage of written premium ceded ranges from 14.67 percent in 1998 to 20.81 percent in 2000.

Figure 11—Insurer Ratio of Ceded Premium to Direct and Assumed



Source: National Association of Insurance Commissioners.

Figure 12—2002 Distribution of Insurers by Percent of Risk Ceded to Non-Affiliated Insurers



Source: National Association of Insurance Commissioners.

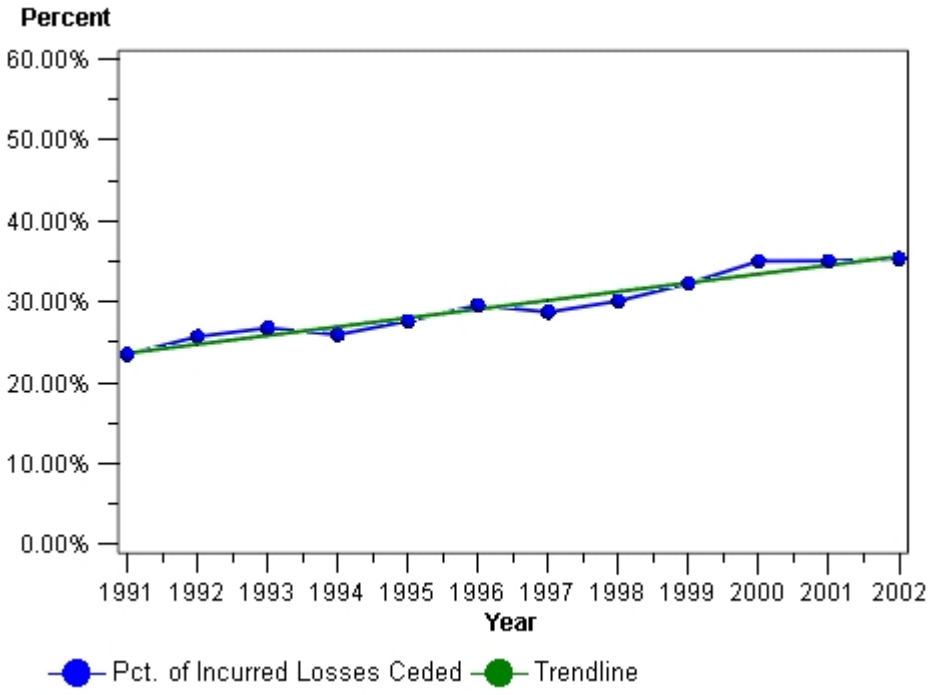
Figure 13 and **Table 25** show the percent of paid losses recovered from reinsurers of its direct and assumed business. Insurers recovered less than half of paid losses from reinsurers. The percentage of paid losses recoverable increased 0.67 percent annually during the analysis period, ranging from a low of 27.49 percent in 1992 to a high of 39.66 percent in 2001.

Figure 13—Ratio of Paid Losses Recovered

Source: National Association of Insurance Commissioners.

Figure 14 and **Table 26** show a similar trend in the percent of incurred losses ceded. The percentage of incurred losses ceded increased annually by 1.09 percent from 1991 to 2002, with a low of 23.48 percent in 1991 to a high of 35.33 percent in 2002.

Figure 14—Ratio of Incurred Losses Ceded



Source: National Association of Insurance Commissioners.

The steady growth in the percent of risk reinsured coupled with a small percent of premium ceded to reinsurers suggests that insurers have been able to identify their riskiest exposures and obtain reinsurance for those exposures. As primary insurers seek reinsurance for their riskiest exposures while going without it for less risky exposures, they should expect to see an increase in the market price of coverage offered by reinsurers.

Competition

Medical liability markets tend to be more geographically restricted than most other insurance markets, which means insurers tend to write business within a particular region or state. According to the GAO, "physician-owned and/or operated insurers now cover 60 percent of the market."[51] There are now very few truly national medical malpractice carriers.

Market concentration is measured typically in terms of concentration ratios, which represent the combined market share of some given number of the largest sellers, or in terms of the Herfindahl-Hirschman Index (HHI), the sum of the squares of the percentage market share of each firm. The HHI reflects both the distribution of the leading firms' market shares as well as the composition of the rest of the market. The HHI also weights the market shares of the larger firms more heavily, which better

[51] General Accounting Office, Multiple Factors, 6.

reflects their relative market power than the market share percentage calculations.

While neither economic theory nor experience has established empirical measures of market concentration in a particular industry, the U.S. Justice Department has established merger guidelines for certain industries using the HHI.[52] Under these guidelines, a post-merger market with an HHI in excess of 1,800 is considered highly concentrated. A proposed horizontal merger between two firms that would result in such a market is likely to provoke a challenge from the Justice Department, depending on other circumstances. A post-merger market with an HHI between 1,000 and 1,800 is considered moderately concentrated. A post-merger market with an HHI of less than 1,000 is not considered concentrated. A horizontal merger resulting in such a market is unlikely to encounter opposition.

The Justice Department looks at a number of additional factors in determining its position on a particular merger. It also should be pointed out that these criteria have been developed to evaluate mergers in national industries, broadly defined. The purpose here is to evaluate the structural competitiveness of medical liability insurance by state, which is more narrowly defined. There are a number of industries with HHI values in excess of 2,000 at the national level that are considered competitive. While the Justice Department guidelines provide some perspective, they should not be used as absolute standards to determine the competitiveness of a market or to determine whether additional market regulation is warranted.

Table 27 shows concentration ratios and HHI values for insurers writing at least 2 percent of the medical liability premium in any state for 1991-2002. Market concentration in the medical liability market increased slightly between 1991 and 2002. While the number of insurers trended downward (-1.33 percent annually) during the analysis period, it appears the largest insurers gained some market share as a result.

While examining countrywide data over a period of years gives a general idea of how the competitive nature of the medical liability market has changed, examining statewide data tells more about whether a particular market may lack competition. This is particularly true in medical liability since companies tend to be geographical in nature. However, a word of caution is necessary when looking at statewide data that insurers provide to the NAIC. The data contains many insurers, often captives that do not actively compete in the market. Because they may write insurance for a specific group of hospitals, nursing homes or medical specialties. In theory, a state may have many insurers indicating strong competition, but each insurer could have a monopoly in its niche market, thereby creating only the appearance of competition. This type of information cannot be determined in this report with currently available data. Additionally, some insurers may not write new business, for a variety of reasons, including surplus limitations that prevent them from market activity. These aspects should be taken into consideration when assessing the competitive nature of a market.

Table 28 compares market share for two different ranges and the HHI by state in 2002. Virginia had the most active insurers with 15 writing at least 2 percent of the state's direct written premium and Maine the fewest with 4. The mean and median market concentration of the four largest insurers was 79.19 percent and 81.54 percent respectively.[53] The range of market concentration ratios for the four largest

[52] United States, Department of Justice, Merger Guidelines (Washington, D.C. GPO, 1984).
[53] Market concentration is calculated as the percent of market share of the four largest insurers to the rest of the market in terms of direct written premium.

insurers was 38.19 percent in Virginia to 100 percent in Maine. The mean and median market concentration of the eight largest insurers was 98.46 percent and 100 percent respectively with a low of 68.39 percent in Virginia. As would be expected from economic theory, there is an approximately inverse correlation between the number of insurers writing premium in a market and the concentration of business they write. In other words, states with a larger number of insurers writing business appear to have less market concentration among the largest insurers. It also appears that, from the data, states with smaller populations have more concentrated markets than states with larger populations.

The mean and median HHI was 2,676 and 2,254 respectively, ranging from 744 in Virginia to 5,699 in Alabama. Thirty-seven states had an HHI greater than 1,800, which would be considered highly concentrated by the DOJ's guidelines for review of merging markets. Twelve states had an HHI between 1,000 and 1,800, which would be considered moderately concentrated by the DOJ's guidelines, while only two states had an HHI less than 1,000. As discussed above, these numbers may be misleading because many of the insurers included in the HHI may not be writing new business, or are not directly competitive.

Entries and Exits

The initial investment in physical facilities needed to start an insurance company is relatively small compared to more capital-intensive industries such as manufacturing. The minimum capital and surplus requirement to become licensed or authorized to write medical malpractice insurance in most states is $2 million or less, which is not a significant sum by itself in relation to most insurers' total premium volume for all lines of business written. **Appendix A** lists minimum capital and surplus requirements by state for medical liability insurers. Insurers cannot write an unlimited amount of business. As a rule of thumb, an insurer will tend to maintain at least a dollar of surplus for every dollar of premium volume before it writes additional business. This raises the financial requirement considerably for a new insurer intending to acquire a significant market share in a large state.

In addition, there are non-monetary barriers to entering the medical malpractice market. Some can be readily overcome, but others present more difficulty.

1. Regulatory constraint: Most medical malpractice insurers may not sell across state lines without filing for license or authorization. Rates and forms must be adjusted to local requirements.
2. Insured resistance: Insurers operating on a mutual or reciprocal exchange basis may face difficulty convincing member insureds to support moving into new markets, whether it is a new state or specialty area. Insureds of provider-owned or operated insurers (60 percent of the national medical malpractice market) may be averse to risking capital gathered over years in its primary market.
3. Lack of specialty market experience: Underwriting, pricing and defending claims in a new market, whether it is a new state or specialty, require specialized and local knowledge.
4. Lack of locally knowledgeable staff: Staffing a start-up insurer or an expansion office means selecting from a small pool of experts. Employees skilled in the facets of operating a medical malpractice insurer are scarce on the national level and scarcer still in local markets.
5. Exit costs: The known and unknown costs of exiting a line of medical malpractice may be daunting to a start-up insurer or an existing insurer considering entry into a new market.
6. Pricing difficulty: Third-party liability insurance is subject to socio-legal developments that can

rapidly render assumptions on future losses obsolete. Medical malpractice is very volatile.

7. Adverse financial history: There have been three major medical malpractice crises since 1975, each with adverse financial effects on insurers of the time. The provider-owned or operated insurers mentioned above came into existence beginning with the 1975 crisis when traditional stock commercial insurers did not return in number to the medical malpractice market place.

There are other costs involved with market exits. Unique to medical malpractice markets is the long tail associated with malpractice claims. It can take up to twenty years to run off all claims incurred during active participation in a medical malpractice market. This keeps insurers committed to claims expenditure long after premium income has ceased. Insurers will also lose the value of any investments they have made in establishing operations in the market from which they are withdrawing.

The prospect of such costs can sometimes serve as a deterrent to entry altogether. They also may induce insurers to sustain inadequate profits for a period while assessing the need to withdraw. **Table 29** and **Table 30** show the number of insurers entering and exiting the medical liability line countrywide and by state, respectively. Countrywide, the net change in insurers entering and exiting the market shows a fair amount of variation. The data indicates that entry and exit countrywide does not appear to be restricted, which would indicate that medical liability is competitive in that respect.

Regulatory exit restrictions pose a different issue. To provide policyholder protection, a number of states impose some limitations on insurers' ability to withdraw from the market for liability lines, such as requirements to give policyholders advance notice, delayed withdrawal requirements, residual market assessment obligations and "lock-in" provisions, i.e., prohibitions against selectively withdrawing from some lines of business while continuing to write others. When insurers choose to withdraw from a market, regulators require them to offer coverage for the run off to non-renewed claims-made insureds, which are now a majority of medical malpractice policyholders.

Standard vs. Non-standard Markets

As discussed earlier in this report, persons unable to purchase insurance coverage in the traditional, or standard, insurance markets can generally find coverage with non-standard insurers, usually at a higher price. **Table 31** through **Table 35** provides medical liability direct premium written statistics. In 2002, stock insurers wrote 49.39 percent of all direct medical liability premiums. Mutual insurers and reciprocals wrote 25.50 percent and 17.71 percent, respectively, of the countrywide direct premium. Non-standard markets made up 7.4 percent of the direct premium written in 2002, with surplus and excess lines insurers writing 1.81 percent of all premiums countrywide. It is important to remember that not all insurers are required to report financial data to the NAIC for a variety of reasons. These insurers are typically, but not limited to, single-state insurers, non-standard insurers and state-operated entities. It is suspected that larger portions of non-standard insurers do not file financial data relative to standard insurers.

Caution should also be taken when looking at data for risk retention groups. The NAIC does receive filings for such entities, but it is not known how many of these groups do not file annual statement data because state regulators generally do not provide exemption information to the NAIC. This is likely a particular problem when analyzing state markets as opposed to countrywide analyses. Bear in mind also

that excess line and surplus line insurers typically price products significantly higher than standard markets do, so their relative premium volume likely does not correspond to their percentage of exposures in the marketplace. The NAIC currently does not have sufficient data to examine this facet of the market.

Availability

Availability is a very important aspect of insurance market performance. It is a general term that can be interpreted in various ways. In crisis periods, medical liability insurance coverage is often available through non-standard market mechanisms. However, this market presents a number of disadvantages and is generally not a desirable source of coverage for most. Availability of coverage in non-standard markets is not an indicator of medical malpractice market health.

A more meaningful indicator is the availability of medical liability coverage in the admitted market.[54] Yet even this variable is not easily quantifiable from readily available data. The number of insurance carriers willing to offer coverage and the terms they would offer can vary dramatically among different medical specialties and states. A commonly used proxy for availability in those states that have a residual market mechanism is the proportion of total premiums written through the residual market, which is shown in **Table 34**. This is a less than perfect proxy for availability. Some risks may actually choose to obtain coverage through the residual markets when they could purchase coverage in the voluntary market.

Insurers contend that residual market growth and operating losses can be caused by inadequate voluntary market rates. If these insurers are unable to charge a premium to an insured sufficient to provide a fair return on investment, they may be disinclined to offer coverage. The greater the degree of rate inadequacy, in this view, the greater the number of insureds thrust into the residual market. It should be noted that the lack of a residual market mechanism does not imply that insurance coverage is available for everyone in the voluntary market. It this case, there may be no insurance coverage available at any cost.

If premiums in the residual market are insufficient to cover losses and servicing carrier fees, then an operating deficit results. This deficit may, in some states, be recovered through assessments on voluntary market insurers. To the extent that insurers are able to recover the assessments through higher voluntary market rates, the burden of the residual market is borne by purchasers of medical liability insurance from voluntary market insurers. This may increase purchaser incentives to self-insure, if that is a viable option. Alternatively, to the degree that insurers are not allowed to recover assessments through higher rates, insurers may be influenced to decrease their voluntary market business. This can lead to a situation in which growing residual market losses cause further shrinkage of the voluntary market, which in turn increases residual market losses. Regulators do not deny the potential for this cycle, but they also raise other issues about performance of the residual market. There are concerns about the quality of service that residual market risks receive and the incentives servicing carriers have to properly administer policies and control costs.

[54] An admitted market is comprised of insurers that are licensed to sell and service insurance policies in a particular state. Insurers, generally surplus lines insurers, may be allowed to sell and service insurance policies in a state without being licensed by state regulators to do so.

Solvency

Solvency is critical to the integrity of the insurance contract. State insurance regulators' primary responsibility is to protect policyholders and claimants against insurer insolvencies. This responsibility is met through financial regulation and state guaranty funds.

State regulators seek to reduce, but not necessarily eliminate, the incidence and cost of insolvencies. There is a presumed need to balance insolvency risk with the cost and availability of insurance. Some possibility of failure is inherent in a competitive market. State guaranty funds ensure that insurance claims are paid according to statutory benefit provisions. These insolvency costs are passed back to solvent insurers through assessments on premiums. Some states allow insurers to recoup guaranty fund assessments through higher rates while others allow premium tax offsets. Claimants may suffer inconvenience if forced to recover through a state guaranty fund, but insureds are insulated from most adverse effects unless a catastrophic claim has occurred. For former claims-made insureds, including retired providers, the risk is that they may lose run-off coverage and become exposed to uncovered suits.

Beginning in 1994, property and casualty insurers began submitting risk-based capital filings annually to the NAIC. The risk-based capital system, established under the Risk-Based Capital for Insurers Model Act, uses a formula establishing a minimum capital requirement for insurers based on the insurer's size and risk. Comparing the insurer's risk-based capital (RBC) requirement to its own statutory capital indicates whether an insurer is at risk of becoming insolvent. The model law allows regulators to intervene when capital requirements are not met.

Under the model act, the first level of regulatory intervention is the Company Action Level triggered when the total adjusted capital (TAC) to authorized control level (ACL) RBC falls below 200 percent. At this action level, insurers are required to submit an RBC Plan to the domiciliary (home state) regulator identifying both problems and corrective actions the insurer intends to take to bring its RBC level above 200 percent. The second level of regulatory intervention is the Regulatory Action Level triggered by a TAC to ACL RBC fall below 150 percent. The insurer is required to revise its RBC Plan and submit to the domiciliary regulator's request to perform examinations or analyses of its assets, liabilities and operations. The third action level, the Authorized Control Level, is triggered when the TAC to ACL RBC falls below 100 percent. At this level, the insurer must comply with the requirements of the first two levels. It also gives the domiciliary regulator the discretionary authority to place the insurer under regulatory control through its rehabilitation or liquidation act. The fourth and most severe level, Mandatory Control Level, is triggered when the TAC to ACL RBC falls below 70 percent. At this level, the company is placed under the control of the domiciliary regulator in accordance with the state's rehabilitation and liquidation act.

Table 36 shows the number of medical liability insurers that have reached RBC triggers since 1994. Not all insurers are required to make RBC filings with the NAIC, so the number of insurers included in this analysis is fewer than in other sections of this report. The number of insurers in each of the action levels remained consistent between 1994 and 2000. However, coinciding with the hardening insurance markets and recession in 2001, more insurers triggered the Mandatory Control Level than in past years. Surviving medical liability insurers may have been financially stronger during this period than in past crises. However, some hospitals reportedly have eased credentialing requirements as insurer rating services downgrade many insurers below A or excellent ratings.

Other Market Performance Dimensions

Prices, profit, availability and solvency are not the only dimensions of market performance that are of concern. Quality of service, efficiency and innovation are also important parameters in terms of how well markets are served. Unfortunately, it is difficult to obtain data or measure performance in these areas.

Quality of service encompasses a number of different variables, including the accuracy/timeliness of policy issuance and rating adjustments, loss prevention and safety engineering and claims adjustment. In a competitive market, insurers should be spurred to provide the highest level of services commensurate with what insureds are willing to pay for these services. Insureds may differ in their demand or preference for different services. Consequently, insurers may differentiate themselves in terms of the level of service they provide based on insureds' preferences and may adjust their rates accordingly.

Similarly, efficiency and innovation are important parameters, but are difficult to measure. Some analysts have used expense ratios (i.e., expenses divided by premiums) to measure efficiency, but expense ratios can be misleading for a number of reasons. Because statutory accounting requires insurers to book expenses when they are paid, as opposed to when related income is earned, expense ratios can be misleading when insurers are either growing or contracting their book of business. Lower expenses could also reflect diminished quality of service, rather than greater efficiency.

Innovation can be targeted at improving efficiency and lowering loss costs and expenses, developing new products and services or improving the insurer's ability to more accurately estimate future loss costs. Medical liability insurers face certain statutory and regulatory constraints in their ability to develop new products and services. Market pressures on prices may further induce some carriers to become more innovative.

SURVEY OF MARKET INTERVENTIONS

Regulatory Reform

Rate Adequacy Monitoring

Some have suggested that state regulators have allowed insurers to under price medical professional liability insurance. This can be attributed to naïve pricing or excessive risk taking by insurers during soft markets and there are those who maintain this could contribute to the severity of subsequent hard markets. To avoid under pricing, insurance regulators that have rating laws that allow them to do so could monitor the adequacy of rates filed by insurers to assure that rates employed in the market meet the rate filing standards. Insurers could be encouraged to maintain adequate rates. Further if insurers have not made filings recently in a time when the regulator is aware that medical liability prices are generally rising, the regulator could contact these insurers to encourage them to make appropriate filings for rate adequacy.

Statistical Data Collection

One of the underlying themes in nearly every piece of literature reviewed for this study, as well as the authors' own experiences with developing the report, was the fact that medical malpractice data was inconsistent, incomplete, difficult to obtain and even more difficult to interpret. The authors of this report agree with the conclusions and recommendations contained in the study released in 2003 by the GAO. Namely that state insurance regulators should identify the types of data that are necessary to properly evaluate the medical malpractice market—specifically, the frequency, severity and causes of losses—and begin collecting these data in a form that would allow appropriate analyses in the future. This could be accomplished on a state-by-state basis; however, it is more practical for the states to do this collectively through the NAIC.

Market Assistance Plans or MAPs

Market Assistance Plans (MAPs) have been used successfully in several states. A MAP is an organized effort, typically a joint public-private endeavor, to match those having difficulty obtaining insurance with a willing insurer. The MAPs work very well when there are only minor market difficulties. The typical development of a MAP occurs when the insurance department and state legislators receive complaints about either the availability or affordability of coverage that cannot be met by ordinary measures. Generally, discussion with the insurance industry will lead to an offer to host or participate in the MAP. Insurers are motivated to sell as much insurance as possible given financial, regulatory and market constraints. It is in their interest to cooperate with the legislature to assist in making sure that the market is adequately served.

Most MAPs are voluntary in nature with participating insurers evaluating the risks presented to them to see if the particular piece of business can be placed. There is generally a high success rate because the insurers may be concerned about further regulatory or legislative actions. They are also motivated by profit potential and sometimes are able to work with those seeking coverage on loss control measures to improve the profit potential for the insurer. MAPs work best where insurers still have capacity to write new business at a rate acceptable to purchasers.

Tort Reform

Claims paid by medical liability insurers are based on the civil justice system of each state in which they operate. Tort reform initiatives, particularly medical malpractice reform, generally refer to the variety of solutions states have introduced to change the legal environment for compensating claimants. The goal of these reforms is generally to limit the frequency of lawsuits and/or the amount paid per claim. Reductions in these areas subsequently reduce costs to insurers, which in turn restrain premium increase over time.

In this section is a discussion several of the more common types of tort reform states have tried. It is important to note that the U.S. Congress has considered legislation to enact specific tort reforms that would affect states in dramatically different ways. In fact, the House of Representatives passed the

HEALTH Act of 2003.[55] A similar bill was introduced in the Senate; however, no action has been taken on it. These bills contain damage limitations that would limit recovery of non-economic damages.

The U.S. Department of Health and Human Services produced a report on the medical malpractice crisis in 2002.[56] The report argued that patient access to care and safety had been impacted by the most recent medical liability crisis.[57] The report also argued that health care costs had increased as a result of the crisis and the litigation system was responsible for the crisis.[58] The report concluded that the crisis was less acute in states that had tort reforms in place.[59] The report recommended federal reforms that: improve the ability of patients to receive unlimited compensation for economic losses; cap recoveries for non-economic damages at a reasonable amount ($250,000); reserve punitive damages for cases that justify them; provide for payment of judgments over time; provide that a case may not be brought more than three years following the date of injury or one year after the claimant discovers an injury or, with reasonable diligence, should have discovered the injury; inform the jury if a plaintiff has another source of payment for the injury, such as health insurance; and provide that defendants pay any judgment in proportion to their fault, not on the basis of how deep their pockets are.[60]

There has been a significant amount of research on tort reform in general. The researchers take very different approaches in their analyses. Much of the research focused on the impact of tort reform measures on claim costs to insurers and subsequently premium to consumers. Viscusi, et al. found that "tort reforms intended to constrain costs and enhance profitability did neither. Yet, these results suggest that premiums were dampened by the introduction of a reform measure." [61] The authors offered two explanations for this observation. First, "if liability reforms stabilized insurance companies' expectations about the losses that would be experienced for policies currently being written, this could restrain premiums even though current losses are unaffected." Second, "the reform measures were correlated with states in crisis; there is the possibility that insurance was being rationed in those states."

Viscusi and Born found that "liability reforms increased insurer profitability (that is, decreased loss ratios), where the main mechanism of influence was through decreasing losses. The quantile regression estimates imply that the greatest effects of liability reform are on the most unprofitable firms and that the effect is not uniform across the entire market."[62] The authors also found that "the influence of the liability reform variables on loss ratio is accompanied by a comparable pattern of influence on loss levels. In contrast, premiums seem only modestly affected by the liability reform measures, so that the main mechanism has been to reduce the losses associated with policies as opposed to raising the price that can be charged."[63] The authors state that "liability reform not only enhances profitability, but also

[55] The House of Representatives have passed tort reform bills including $250,000 caps on non-economic damages nine times since 1995.
[56] United States, Department of Health and Human Services, Confronting the New Health Crisis: Improving Health Care Quality and Lowering Costs By Fixing Our Medical Liability System (Washington, DC: GPO, 2002).
[57] Department of Health and Human Services 2.
[58] Department of Health and Human Services 7.
[59] Department of Health and Human Services 14.
[60] Department of Health and Human Services 19.
[61] W. Kip Viscusi, et al., "The Effects of 1980s Tort Reform Legislation on General Liability and Medical Malpractice Insurance," Journal of Risk and Uncertainty 6 (1993): 165-186.
[62] Kip W. Viscusi and Patricia Born, "Medical Malpractice Insurance in the Wake of Liability Reform," Journal of Legal Studies 24 (1995): 463-490.
[63] Viscusi and Born.

diminishes uncertainty by having its greatest effect" on the most unprofitable insurers.[64]

The AMA found that professional liability insurance (PLI) premium increases are driven in large part by verdict awards and settlement costs and that the relative frequency of very large awards is increasing.[65] The report found that manual PLI rates for California, a state which caps damages, are less than half those in the largest states that do not have similar tort reform.[66] The AMA suggested that the most promising tort reform proposals might be those that focus on elements such as award caps. They also encouraged the development of policy initiatives to stabilize supply, finances and operations of carriers that may offer a more productive approach to mitigating PLI crises. They also suggested that local initiatives developed to deal with a medical malpractice crisis must take into account the local drivers of premium increases that predominate within individual jurisdictions.[67]

Another goal of tort reform measures is to reduce budgetary costs to health care providers. Danzon argued that the outcome of such reforms "is likely to result, at best, in simply shifting costs from medical providers to patients and taxpayers; at worst, total social costs may actually increase if, for example, deterrence incentives are weakened."[68] Thorton found that "tort signal effects appear to prompt primary care physicians to work longer hours in an effort to devote more time and attention to patients…" which "…may well reduce the incidence of negligence and increase the quality of care. Evidence from simulations also suggests that the impact of these defensive actions on utilization and fee, at the margin, may be relatively minor." [69] Kessler and McClellan found that their analysis results "suggest that reforms in law affect physicians' attitudes, both by reducing the probability of an encounter with the liability system and by changing the nature of the experience of being sued, for those physicians who defend against malpractice claims."[70]

Several researchers have studied the impact of tort reforms enacted following prior medical liability crises. In 1986, the GAO performed a case study of six states (Arkansas, California, Florida, Indiana, New York and North Carolina) that had enacted tort reform measures following the crisis in the 1970s.[71] The study involved surveys of organizations representing physicians, hospitals, insurers and lawyers. The study found that in two states, those groups surveyed believed that tort reforms had helped to moderate upward trends in the cost of insurance as well as the average amount paid per claim, while those surveyed in the other four states felt that tort reforms had little effect in their states.[72]

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[64] Viscusi and Born.
[65] American Medical Association, "Medical Professional Liability Insurance," Health Care Financial Trends Report (Chicago: American Medical Association, April 2002).
[66] American Medical Association, Trends.
[67] American Medical Association, Trends.
[68] Patricia M. Danzon, "Liability for Medical Malpractice," Handbook of Heath Economics Ed. A.J. Culyer and J.P. Newhouse, (London: Elsevier, 2000) 1371.
[69] James Thornton, "The Impact of Medical Malpractice Insurance Cost on Physician Behavior: The Role of Income and Tort Signal Effects," Applied Economics 31:7 (1999) 779.
[70] Daniel P. Kessler and Mark McClellan, The Effects of Malpractice Pressure and Liability Reforms on Physicians' Perceptions of Medical Care (National Bureau of Economic Research Working Paper, 1998) http://www.nber.org/papers/w6346.
[71] United States, General Accounting Office, Medical Malpractice: Six State Case Studies Show Claims and Insurance Costs Still Rise Despite Reforms (Washington: GPO, 1986).
[72] General Accounting Office, Six State Case Studies.

In a report to the Senate on the impact of tort reforms on medical malpractice frequency and severity following the medical malpractice crisis of the 1970s, Danzon reported that three studies reviewed suggest that caps on awards and collateral source offset had significantly reduced claim severity and that collateral source offset and shorter statute of repose have significantly reduced claim frequency.[73] Danzon also reported that arbitration statutes appeared to increase claim frequency and reduce severity, while reforms including screening panels and limits on contingency fees appeared to have no systemic impact on claim frequency and severity.[74]

Viscusi et al. researched the impact of tort reforms following the 1980s medical liability crisis and found that insurance regulation variables had little apparent effect on medical liability insurance prices.[75] The study also found that while reforms modifying joint and several liability, limits on liability, limits on non-economic damages and limits on punitive damages did not constrain costs or enhance profitability, the reforms appeared to dampen changes in premium.[76]

Viscusi and Born found that liability reforms on average, and in particular the damage cap provisions, contributed to a downward shift in the loss ratios, which implies a rise in the profitability of insurers.[77] They noted that the effect was not uniform across all insurers, but that insurers that had been the least profitable benefited the most from reforms.[78] They also discovered that liability reforms were more influential on reducing losses as opposed to raising the insurance prices that can be charged.[79] The authors conclude that medical malpractice reform consequently generated a variety of diverse effects that one would expect from a sound reform agenda.[80]

Damage Limitations, Caps

Payments made to individuals to compensate for damages because of medical error are generally divided in two categories. The first is economic damages. Economic damages usually consist of past and future medical expenses to provide care and rehabilitation and lost wages or earnings potential. These damages are measured in monetary terms, often using objective or third party standards such as wage receipts, medical bills, or expert estimates of degree of disability. The second major category is non-economic damages. Non-economic damages are not readily measurable and are subjective in nature. They consist of payments for such intangible damages as past and future pain and suffering, loss of consortium, mental anguish and in some cases, punitive damages.

Table 37 lists states that have enacted damage limitations. A few states enacted statutory limitations on total damages, but much less frequently than limitations on non-economic damages. It is important to note that when evaluating a total damage limitation, one must be aware of how it is applied. For

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[73] Patricia M Danzon, The Effects of Tort Reforms on the Frequency and Severity of Medical Malpractice Claims: A Summary of Research Results (Washington: U.S. Senate Committee on the Judiciary, March 26, 1986) 9.
[74] Danzon, The Effects of Tort Reforms.
[75] Viscusi, et al., Journal of Risk and Uncertainty, 1993.
[76] Viscusi, et al., Journal of Risk and Uncertainty, 1993.
[77] Kip W. Viscusi and Patricia Born, "Medical Malpractice Insurance in the Wake of Liability Reform," Journal of Legal Studies 24 (1995): 490.
[78] Viscusi and Born, Journal of Legal Studies, 490.
[79] Viscusi and Born, Journal of Legal Studies, 490.
[80] Viscusi and Born, Journal of Legal Studies, 491.

example, while Indiana's $1,250,000 is a cap on all damages regardless of cause or source, the $500,000 cap in Louisiana is for non-medical damages only. Further, there are other areas of tort law that affect the settlement outcome such as whether the cap applies on a per occurrence basis for each health care provider or health care institution individually or collectively.

A more common approach is for states to limit non-economic damages that an injured party can receive. There are many who believe that the limitation on non-economic damages is the most effective single reform that a state can enact. It should be noted this contention is still the subject of debate. Furthermore, unless the reform effectively changes physician behavior and reduces the probability of medical errors occurring, such a reform will not reduce the cost of the error, but shift it to the injured party. Doctors, hospitals and insurers tend to favor such limitations, while the plaintiffs' bar and many consumer advocates are opposed.

Studying the effect of non-economic damage limitations is very difficult, as there does not appear to be reliable data on which to base an effective evaluation. The Texas Department of Insurance issued a report that estimated a $250,000 cap on non-economic damages would result in an 8.5 percent to 11.5 percent savings in medical malpractice insurance costs for physicians.[81] Estimated savings for hospitals and nursing homes ranged from 22 percent to 26 percent and 14 percent to 18 percent respectively.[82] The GAO stated in its report to the U.S. Congress that, because of data limitations, "it is not possible to quantify the impact of a cap on non-economic damages on insurers' losses. Similarly, it is not possible to show exactly how much a cap would affect claim frequency or claims-handling costs."[83] First, courts do not routinely require that judgments distinguish between economic and non-economic damages. Further, if a settlement is negotiated out of court, the insurer and the parties to the agreement are not inclined to separate the economic and non-economic aspects of the settlement. The GAO reported "growth in malpractice premiums and claims payments was slower in states that enacted tort reform laws that include certain caps on noneconomic damages."[84] It is safe to say that enacting a non-economic damages limitation will have an impact on settlements or adjudicated claims with award values that reach levels exceeding the threshold of limitation. For most states, there is ample evidence that juries have awarded significant amounts; however, evaluating actual cost savings requires analysis on data that does not exist. At best a rudimentary estimate could be performed.

Damage caps or limitations provide insurers and the marketplace with information about the maximum dollar amount of loss any one claimant can be awarded. When insuring a physician, insurers will assess the probability that he/she will have a claim filed and estimate how much the claim will cost the insurer. With or without caps, insurers need to estimate what courts will, in the future, be expected to award a plaintiff in a medical liability case. With caps in place, loss estimates are likely more accurate because there is a known finite amount the insurer can expect to have to pay. Recent years have seen large variations in the amounts of damages awarded in some cases, making such predictions difficult and inaccurate. The implementation of caps allows insurers to more accurately predict their costs arising from claims and adds some stability to insurance prices in the market.

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[81] Texas, Texas Department of Insurance, Letter to Committee on Civil Practices, Texas House of Representatives in regard to expected savings on damage caps contained in HB4 (Austin, TX: TDI, 2003).
[82] Ibid.
[83] United States, General Accounting Office, Medical Malpractice: Multiple Factors Have Contributed to Increased Premium Rates. (Washington: GAO, June 2003).
[84] United States, General Accounting Office, Medical Malpractice: Implications of Rising Premiums On Access To Health Care. GAO-06-836. (Washington: GAO, August 2003).

Caps on damages have two major impacts on individuals who potentially have a medical malpractice claim. First, total caps—i.e., caps on economic, non-economic and punitive damages—may not generate enough money for medical care necessary to reverse damages caused by medical mistakes or for any ongoing or life-long treatments the injured party may need. Some argue that non-economic damage caps, in some cases, may be too limiting to appropriately compensate a claimant for the intangible effects of the injury that has occurred. Secondly, caps may create a case of adverse selection when it comes to pursuing a claim. Since the costs of researching and arguing a medical malpractice case can be very large, awards available once caps are introduced may not, in some cases, cover even the costs associated with pursuing a claim.

Caps on non-economic damages have been researched more than any of the tort reforms reviewed in this report. Several researchers have found caps an effective tool. Zuckerman, et al. found that non-economic caps had statistically significant effects on premium, frequency and severity.[85] Kessler and McClellan found that direct reforms, including caps on non-economic damages, reduced premiums by 8.4 percent compared to states without direct reforms.[86] Sloan, et al. found that non-economic caps reduced insurer payouts by 31 percent and reduced payouts plus expenses by 23 percent on average.[87] The Employment Policy Foundation argues that, "states without effective ceilings on non-economic damages experienced increases in medical malpractice premiums 3.7 times greater than states with ceilings."[88] In an analysis of the effect of tort reforms on premiums stemming from the 1970s crisis, Zuckerman et al. found that imposing a cap on the amount of physician liability significantly lowered medical malpractice premiums and that "other than imposing caps or reducing the time available to initiate claims, tort reforms are not observed individually to lower premium."[89]

Other researchers have found non-economic caps ineffective. Danzon's study of the use of caps to deter malpractice found that "caps directly constrain only a small percentage of cases, because roughly five percent of cases account for 50 percent of dollars paid."[90] Danzon goes on to say that limits "are unlikely to undermine deterrence, because very high awards are typically not used for rating individual (as opposed to class) liability premiums, being viewed as random bad luck."[91] Weiss, et al. found that while caps on non-economic damages did reduce insurer payout on claims, insurers continued to increase premiums, leading to the conclusion that more important factors such as medical inflation, the insurance business cycle, insufficient reserves, declining investment income, financial safety and supply and demand, drove the rise in medical malpractice premiums.[92] The Physician Insurers Association of

[85] Stephen Zuckerman, Randall R. Bovbjerg and Frank Sloan, "Effects of Tort Reform and Other Factors on Medical Malpractice Insurance Premiums," Inquiry 27 (1990): 167-182.
[86] Daniel P. Kessler and Mark McClellan, The Effects of Malpractice Pressure and Liability Reforms on Physicians' Perceptions of Medical Care, (National Bureau of Economic Research Working Paper, 1998): http://www.nber.org/papers/w6346.
[87] Frank Sloan, Paula M. Mergenhagen and Randall R. Bovbjerg, "Effects of Tort Reform on the Value of Closed Medical Malpractice Claims: A Microanalysis," Journal of Health Politics, Policy and Law 14:4 (1989): 663-689.
[88] Employment Policy Foundation, Medical Malpractice Litigation Raises Health Care Costs, Reduces Access and Lowers Quality of Care (Washington: Employment Policy Foundation, June 19, 2003).
[89] Zuckerman, et al., Inquiry, 1990.
[90] Patricia Danzon, Handbook of Heath Economics.
[91] Patricia Danzon, Handbook of Heath Economics.
[92] Martin D. Weiss, Melissa Gannon and Stephanie Eakins, Medical Malpractice Caps: The Impact of Non-Economic Damage Caps on Physician Premiums, Claims Payout Levels and Availability of Coverage (Palm Beach Gardens, FL: Weiss Ratings Inc., 2003.

America disputed their conclusions.[93] The National Practitioner Data Bank expressed reservations on Weiss's use of its data, "Arguing that the burden of payments on insurers is low because the median payment is $25,000 is misleading. The total amount paid cannot be determined through use of the median."[94] Medical Liability Monitor Editor Barbara Dillard also stated, "We believe it is misleading to use median annual premiums compiled with data from Medical Liability Monitor to demonstrate the effect of non-economic damage limits on liability rates." [95] Viscusi, et al. found that the liability reform variables examined (specifically, modified joint and several liability, limits on liability, non-economic damages, punitive damages, or other reforms) showed no statistically significant effects on losses.[96] Only one measure, limits on non-economic damages, significantly depresses losses, resulting in a 14.7 percent decrease in 1985 loss levels.[97] Yoon found that "the average relative recovery by Alabama plaintiffs decreased by roughly $20,000 after the Alabama legislature enacted [total] damage caps and increased roughly double that amount after the Alabama Supreme Court ruled them unconstitutional."[98] Sloan and Hoerger found that "more serious injuries were relatively under-compensated, and plaintiffs who incurred high losses in cases in which defendants appeared to be innocent of wrongdoing were paid no more than those in which plaintiffs incurred a relatively minor loss. This undercuts the rationale for ceilings on payments for non-economic loss or total loss."[99]

Collateral Source Rules

Collateral source rules are provisions that allow or require the introduction of evidence concerning the plaintiff's recovery of medical and disability expenses from "collateral sources" such as health insurance, workers' compensation, Social Security, auto insurance medical payments or no-fault coverage and disability insurance. This allows a jury to consider the other sources of compensation available to a plaintiff before setting an award amount. Some states also allow or require consideration of compensation received from multiple defendants as a collateral source of recovery. A number of other states, however, still observe the common-law collateral source rule that obligates a tortfeasor to pay the full amount of a plaintiff's damages without regard to whether other sources mitigated those losses. In these states, tort awards are not offset by compensation amounts received from other sources.

Collateral source rules recognize that double recovery for all or part of a plaintiff's damages unnecessarily adds to the expense of medical malpractice insurance. Changes to collateral source rules would be considered an effective tort reform for medical liability insurers if the changes provide just compensation while eliminating duplicative expenses. Limiting an insurer's right to invoke a

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[93] Physician Insurers Association of America, "The Weiss Ratings Report on Medical Malpractice Caps, Propagating the Myth That Non-Economic Damage Caps Don't Work," (July 8, 2003).
[94] U.S. Department of Health and Human Services; Statement of the Division of Practitioner Data Banks, Health Resources and Services Administration, *Concerning Use of Medians of Malpractice Payments* Reported to the National Practitioner Data Bank for Analysis of the Impact of Caps on Malpractice Payments (July 2, 2003) 1
[95] Barbara Dillard, ed, *Medical Liability Monitor,* e-mail to Senate Majority Leader William Frist, quoted in the *Congressional Record of the United States of America* (July 10, 2003) S.9237 and @.9239. ?
[96] Viscusi, et al., Journal of Risk and Uncertainty.
[97] Viscusi, et al., Journal of Risk and Uncertainty.
[98] Albert Yoon, "Damage Caps and Civil Litigation: An Empirical Study of Medical Malpractice Litigation in the South," American Law and Economics Review 3:2 (Fall 2001): 199-227.
[99] Frank A. Sloan and Thomas J. Hoerger, "Uncertainty, Information and Resolution of Medical Malpractice Disputes," Journal of Risk and Uncertainty 4 (1991): 403-423.

subrogation clause would provide that collateral sources do not seek to recover the monies they contributed if these contributions have already reduced the plaintiff's settlement amount.[100] However, most health and disability policies have provisions stating that the policyholder must refund policy benefit payments to the insurer that they have also collected through the tort system. This theoretically would eliminate most double recovery situations. The issue then becomes how the payments to the plaintiff are assigned, i.e., whether the plaintiff's health insurer, workers' compensation insurer or disability insurer should pay for a portion of the damages or whether the defendant is responsible for all of the damages. A drawback of this reform is that it does not provide a cost savings within the medical system; it would simply shift costs from medical liability insurers to the collateral source.

Research on collateral source rules is scarce even following the Secretary's Commission on Medical Malpractice recommendation in 1973 that an in-depth analysis be made to identify the cost of overlapping health insurance benefits and to identify methods of using resources to assure more complete coverage to all.[101] Danzon argued that "collateral sources offset undermines deterrence by shifting costs from the tort defendant to other insurance programs and by reducing the plaintiff's incentive to bring a claim because of the lower expected award."[102] Danzon found empirically that "collateral source offset rules have not only reduced claim severity, but also claim frequency, consistent with the prediction that lower awards reduce the incentive to file."[103] Zuckerman, et al. found that neither permissible nor mandatory collateral offset had statistically significant effects on premium, frequency or severity.[104] Sloan, et al. found that compensation from collateral sources reduced losses and expenses by 21 percent on average and decreased the proportion of claims in which compensation was awarded.[105] In testimony to the U.S. House of Representatives Committee on Energy and Commerce (February 27, 2003), the American Academy of Actuaries observed that California "experienced a more stable marketplace and lower premium increases than have other states" since enactment of MICRA in 1975. The academy specifically mentioned California's $250,000 ceiling on non-economic awards and an effective collateral source rule.[106]

[100] Subrogation is a contract provision that allows an insurer to place a lien on any judgment or damage award received by the plaintiff where a third party caused harm.
[101] United States, Department of Health, Education, and Welfare, Medical Malpractice: Report of the Secretary's Commission on Medical Malpractice (Washington: GPO, 1973).
[102] Danzon, Handbook of Heath Economics.
[103] Patricia M. Danzon, "The Frequency and Severity of Medical Malpractice Claims," Journal of Law and Economics 27 (1984): 115-48.
[104] Zuckerman, et al., Inquiry. The authors found that mandatory collateral offset was a significant at a 10 percent level of confidence when measured in the frequency and severity model.
[105] Frank A. Sloan, Paula M. Mergenhagen and Randall R. Bovbjerg, "Effects of Tort Reform on the Value of Closed Medical Malpractice Claims: A Microanalysis," Journal of Health Politics, Policy and Law 14:4 (1989): 678.
[106] United States, House of Representatives, Committee on Energy and Commerce, Testimony by the American Academy of Actuaries (Washington: GPO, Feb. 27, 2003). The key elements to an effective collateral source rule are that: it be mandatory (MICRA's allowance for introduction by the defendant, effectively, accomplishes this); the information on collateral source rule be introduced during the trial as part of evidence before a jury decision is rendered; and the collateral source may not recover collateral source amounts from the plaintiff or be subrogated to the rights of the plaintiff to recover them from the defendant.

Periodic Payment of Future Damages

Traditionally, medical liability insurers paid tort settlements as one lump-sum settlement equal to the expected value of future losses. Periodic payments allow for tort settlements to be paid over a course of many years, typically the expected lifetime of the plaintiff. Currently, several states mandate periodic payments, while several others provide an option to do so, either by request of the parties involved or the courts, depending on the state statute requirements. Periodic payments are typically funded by annuities purchased from insurance companies. These annuity arrangements are commonly called structured settlements.

A medical malpractice insurer can benefit by spreading the payments over a longer period, with any unused portion potentially being returned to the funding insurer. An insurer could also purchase an annuity where the present value of the future stream of payments is much less than a lump-sum indemnity payment of the damages. Periodic settlements thus allow insurers to more accurately predict their losses, which in turn allows them to set more consistent insurance rates for insureds. Periodic settlements may also be advantageous to the claimant because it guarantees a fund stream that will not be dissipated and will be available for the future needs of the claimant. Conversely, it can be argued that periodic settlements take away the claimant's right to be compensated fairly because the claimant may not outlive the term of the periodic payments, which would preclude the claimant from being "made whole". In the event that an insurer becomes insolvent and has periodic payments settlement obligations it cannot meet, the cost of that obligation then shifts to either the state guaranty fund or, in the event the insurer is not covered by such a fund, to the claimant in terms of lost payments.

Empirical evidence of the impact of periodic payments was scarce. Sloan, et al. found that periodic payment requirements, while reducing the time it took to close a claim, had no statistically significant effects on payment size.[107] Henderson argued that a "well designed periodic-installment judgment plan offers a number of opportunities to make significant improvements in the way tort victims are compensated."[108]

Legislative Strategy Regarding Bad Faith

Although every state's tort system is different, a common thread for insurers is the issue of bad faith. Insurers can be held liable for amounts that are in excess of the policy limit if the policyholder asks the insurer to settle with a claimant and the insurer proceeds to take the case to court and loses. Bad faith claims occur when the judgment against the policyholder exceeds the policy limit, and the insurer had forgone the opportunity to settle at the policy limit or less. At the extreme, bad faith claims have the potential to be larger than an insurer's surplus.

Perhaps more than any other element, the insurance industry maintains that the bad faith provisions of law, currently found in many insurance codes, are subject to abuse by those representing people allegedly injured due to malpractice. Although the evidence is generally anecdotal, the insurance

[107] Sloan, et al, Journal of Health Politics, Policy and Law, 678.
[108] Roger C. Henderson, "Designing A Responsible Periodic-Payment System for Tort Awards: Arizona Enacts A Prototype," Arizona Law Review 32 (1990): 21-76.

industry is united in its assertion that no medical malpractice reform would be effective without changing the ease with which bad faith allegations can be made. On the other hand, those representing claimants allege that insurers are prone to play games with records, witnesses, and availability to delay legal proceedings. Interestingly, insurers also make the same allegations relative to claimants and their representatives. Those representing claimants also expressed concern that the financial strength of insurers could allow them to "wait out" a claimant for purposes of an inequitable settlement.

At the time of this research, no empirical research on this issue was available. In describing the inability of the legal system to cope with bad faith issues, Sykes concluded that "courts seem to find tortuous conduct on the part of insurers who have bona fide disputes with their policyholders over the terms of the policy or over factual issues essential to the insured's right to recover. The ability of the courts to identify opportunistic behavior in such cases is very much in doubt, and the distinct possibility arises that bad faith doctrine here does little to police misconduct while doing much to cause uneconomic increases in the premiums that policyholders must pay."[109]

Alternative Dispute Resolution (ADR), Arbitration and Mediation

There are many ways to resolve disputes between two parties. The traditional method for medical liability claims is for the courts to hear from both sides and have either a judge or a jury decide what damages, if any, should be awarded. At the other end of the spectrum is a settlement offer. This is a very informal process where typically the insurer, with the health care provider's permission, makes an offer to the plaintiff to settle the case before a trial becomes necessary. There are other methods that fall somewhere between these two extremes. Taking advantage of them offers opportunities to save time and expenses that are associated with a full trial in a court of law.

Some argue that one of the significant cost drivers of medical liability insurance is the sympathy factor. In cases where there is an adverse medical outcome that is not the result of a medical error, it is argued that a compassionate jury would tend to sympathize with the plight of the claimant and find a way to compensate those who experienced a bad medical outcome. Care must be taken to strike a balance between the interests of the health care providers and those that have been subjects of true medical malpractice. Establishing a balanced pre-trial screening process offers the potential to save both parties expense dollars by sorting out those cases that are likely to lead to an award from those that are simply unfortunate medical outcomes.

Further, expert witness reforms may contain costs if high standards are maintained. One option may be to use medical experts to certify the validity of the claimant's case so that non-meritorious claims are eliminated before they reach a court. This process may also aid in settlement discussions, as many facts will come to light early in the process so that an offer of settlement can be tendered on cases with merit before going to trial.

Loss adjustment expenses are typically larger for medical liability insurance than for other liability lines of insurance. This offers the potential for some savings if efforts to constrain costs are successful. Possible loss adjustment expense controls include the use of mediation or other alternative dispute

[109] Alan O. Sykes, "Bad Faith Breach of Contract by First-Party Insurers," Journal of Legal Studies 25 (1996): 405.

resolution processes. Arbitration can be a successful loss adjustment expense control strategy. A state could consider adopting mediation or arbitration standards that treat all parties fairly. This would begin with a disclosure designed to alert the claimant that he/she is agreeing to arbitration in lieu of a jury trial if that is the case. The disclosure must be clear and concise and should be agreed to by all parties. Arbitration can be either binding or non-binding, and these conditions must be disclosed in advance. Rules regarding arbitration should consider whether each of the parties has appropriate bargaining strength and whether they can bind others to the arbitration result in the case of joint and several liability. It should be noted that in jurisdictions where either party can take an arbitrated case to court on the grounds of a discord surrounding the arbitrated dispute, it is possible that the arbitration might create an added layer of bureaucracy and actually add expenses to the system.

There has been some empirical research in this area. Sloan, et al. found that permitting pre-injury arbitration agreements resulted in somewhat faster dispute resolution (six months) and lower payments per claim, with much of the savings appearing in LAE expenses.[110] Farber and White concluded that while cases "initiated by patients through the complaint process are not resolved (dropped, settled, tried to a verdict) significantly different from cases initiated by lawsuits, controlling for observable case characteristics…patients involved in cases initiated through incident reports are less litigious ('more peaceful') than patients who initiated cases on their own either through a complaint or a lawsuit."[111] They also suggested that "the complaint process is a cost-effective 'front-end' for the litigation process that provides information to patients regarding the quality of their medical care and, hence, the likelihood of negligence."[112] Stevens argued that the "potential contributions of ADR in various dispute-management settings depend in important part on how its adjudication function fits in as an integral part of the larger alternative dispute management system with which it is associated. Arbitration of these disputes would greatly facilitate adopting contract (rather than tort) as the legal basis for claims. In turn, contract—coupled with grievance procedures and arbitration—would provide a superior dispute management system for malpractice disputes in health maintenance organizations (HMOs)."[113]

Other research found that the costs of ADR outweighed the benefits. Danzon argued that an "early binding offer system, combined with the English rule [the side that wins a suit is entitled to recover its expenses], creates incentives for each party to act on their true information, whereas bluff and strategic manipulation are penalized. By contrast, screening and mediation, without significant penalties for strategic post-screening behavior, simply increase delay and costs."[114] Nelson questions whether "statutorily mandated mediation panels achieve any useful purpose. These panels may merely add another costly level to an already expensive and cumbersome litigation process. On the other hand, legislative attempts to encourage settlement, such as H.R. 3084[115], may provide benefits to both health

[110] Sloan, et al., Journal of Health Politics, Policy and Law, 677.
[111] Henry S. Farber and Michelle J. White, "A Comparison of Formal and Informal Dispute Resolution in Medical Malpractice," Journal of Legal Studies 23 (1994): 777.
[112] Farber and White, 777.
[113] Carl M. Stevens, "The Benefits of ADR for Medical Malpractice: Adapting Contract Rather than Tort Law," Dispute Resolution Journal 50 (1995): 65.
[114] Danzon, Handbook of Heath Economics.
[115] United States, House of Representatives, A bill to amend part A of title XVIII to provide for an alternative liability system for medical malpractice in the case of injuries under medicare and other federal programs if States fail to provide for alternative liability systems (Washington: 99th Congress, 1985).

care consumers and providers."[116]

Other research suggests that ADR may not impact medical liability premium or losses. The U.S. Office of Technology Assessment noted that the reluctance to use ADR programs "when it is not mandatory, coupled with questions about its constitutionality when mandatory, suggests that binding ADR is unlikely to have much of an impact on direct malpractice costs."[117] Zuckerman, et al. found that allowing arbitration agreements did not have a statistically significant effect on premium, frequency or severity.[118]

Vidmar and Rice examined the results of several jury and mediated court decisions and found "no support to the widely held view that jurors are more generous than judges or arbitrators in awarding non-economic damages. Moreover, the data do not support the view that the reasoning of laypersons calculating the award is substantially different from that of legally trained persons."[119]

Contingency Fee Limitation

Another controversial reform involves limitations on attorney contingency fees. The lawyers for the plaintiffs in medical liability cases are generally compensated on a contingency fee basis. In lieu of an hourly charge for services rendered, the attorney agrees to accept a percentage of the damage award if the lawsuit is successful. These contingency fee arrangements can be as high as 50 percent of the award.

The arguments for contingency fee limitation are that it delivers more of the award to the person who sustained the injury and thus is fairer to malpractice claimants. Further, it helps weed out non-meritorious claims, as attorneys are less inclined to take a chance on a doubtful recovery if their stake in the claim would be smaller. There are some who oppose contingency fee limitations. They argue that these limitations deny innocent victims their day in court as plaintiff's attorneys would be less inclined to take on their cases with small potential dollar values regardless of validity. Further, they say that it is unfair to attorneys to limit their earnings potential. While there are states that have implemented restrictions on the use of contingency fees, limiting the income of plaintiff attorneys is often a tough battle in a state legislature.

Not only is the restriction of contingency fees difficult to get through the state legislature; there has also been a question of Constitutionality. Reames argued, "limitations on attorney fees proscribed by section 6146 [of the California Business and Professional Code] seriously abridge first amendment rights. By limiting contingency fees, the statute limits the number of qualified attorneys willing to petition on behalf of medical malpractice victims. Without a qualified attorney, a malpractice victim's right to petition for redress is a nullity."[120] The courts refuted this argument. In the Roa decision, the court

[116] Leonard J. Nelson, "Medical Malpractice and Alternative Dispute Resolution," American Journal of Trial Advocacy 10 (1986): 345-63.
[117] United States, Office of Technology Assessment, Impact of Legal Reforms on Medical Malpractice costs (Washington: GPO, 1993).
[118] Zuckerman, et al., Inquiry.
[119] Neil Vidmar and Jeffrey J. Rice, "Assessment of Noneconomic Damage Awards in Medical Negligence: A Comparison of Jurors with Legal Professionals," Iowa Law Review 78 (1993): 883.
[120] Jane E. Reames, " Contingency Fees: Victim or Contributing Cause of Medical Malpractice Reform Acts?" Chicago-Kent Law Review 62 (1985): 271.

upheld California's statute placing a limit on attorney contingency fees as constitutional because it is rationally related to the legitimate state purpose of reducing medical malpractice premiums.[121]

In a series of theoretical studies comparing a contingency fee with an hourly fee structure, Danzon found that "given certain assumptions about the nature of competition, the contingent fee system induces the amount of attorney effort that would be chosen by a fully-informed, risk-neutral plaintiff who was paying an attorney by the hour."[122] She also stated that if the "benchmark of optimal expenditures on litigation is that which would be chosen by fully informed, risk-neutral plaintiffs, then regulation or prohibition of contingent fees will, if effective, result in sub-optimal investment in pursuing claims."[123] Danzon later found that while the "objective of limits on contingent fees is unclear and effects of such limits on claims frequency and disposition… are uncertain…theoretical analysis predicts that the number of claims filed would be higher with a contingent fee, but appropriately so, because risk aversion would deter many plaintiffs from filing valid claims with an hourly fee."[124] The Employment Policy Foundation argued, "if a claim is dropped before any cash settlement is offered, the plaintiff's lawyer gets nothing. The result is an increasingly prolonged and costly process of discovery that consumes physician's time, distracts them from patient care and raises the effort and cost of claims adjusters and defense attorneys on behalf of malpractice insurers."[125]

Alternative Treatment of Trauma Centers and High Risk Specialties

Access to essential health care is becoming an issue in some states for certain high-risk specialties. Certain medical specialties experience higher frequency and/or severity of claims than others. Included in the high-risk specialties are child deliveries by obstetricians, performance of brain surgery by neurosurgeons and treatment of trauma cases. The high cost of medical liability insurance can drive health care providers from these needed skill areas. This is particularly true for trauma centers, as the health care providers in these centers do not have the same continuing doctor-patient relationship as they would have with a primary care patient.

One of the potential legislative remedies that a state might consider is developing a different tort framework for these high-risk areas. One way to implement a tort framework would be to cap losses for these high-risk specialties at a specified amount and provide a patient compensation fund for the amount in excess of the cap. Taxpayers, health care providers or the insurance industry could finance the fund. Such a framework could provide certainty in pricing since the maximum possible loss is known in advance, leaving only a frequency component as a variable. However, as with any tort reform measure, there is always a question about whether limiting a claimant's right to full compensation through the tort system is a fair and equitable public policy goal. Another option a state could pursue is the creation of a JUA serving only high-risk medical specialties.

[121] Roa v. Lodi Medical Group, Inc. 37 Cal. 3d 920 (1985).
[122] Patricia M. Danzon, "Contingent Fees for Personal Injury Litigation," Bell Journal of Economics 14:1. (1983): 213-24.
[123] Danzon, Bell Journal of Economics.
[124] Danzon, Handbook of Heath Economics.
[125] Employment Policy Foundation.

Special Courts

The establishment of special courts dedicated to hearing medical liability disputes offers an opportunity for improvement. A jury is often not well positioned to make an informed decision about whether a medical error has occurred or to decide on an appropriate level of compensation. Further, judges who only occasionally hear a medical liability case are in no better position to make an informed decision than are juries. A remedy for that deficiency is the creation of special courts that are designed to hear medical liability cases exclusively. The judges in these special courts will, over time, gain a familiarity with medical jargon and will have comparative experience from a variety of medical liability cases to serve as a common basis for evaluation of medical liability disputes. While this is not an immediate solution to a current crisis, establishment of a special court should prove beneficial. Kozak argued that "it is necessary for reform to focus on streamlining the [litigation] process by eliminating unnecessary or duplicative discovery, restricting the time to claims resolution, and screening claims before they have an opportunity to clog the court system."[126]

Advance Notice of Claims

Another potential legislative remedy is the introduction of a requirement that the plaintiff provide advance notice of a claim. A claimant could be required to give defendants advance notice of intent to file a suit. During the advance time period, both sides are expected to perform due diligence regarding the potential claim. There are many who believe that this advance notice period would often result in settlement of meritorious cases. Further it provides attorneys from both sides an opportunity to meet and exchange documents that may help them resolve the matter.

Other Types of Reforms

Options other than tort reform initiatives have been explored as solutions to medical liability crises. Poythress, Weiner and Schumacher argued that the "tort system's current punishment model should be revised in favor of an information-feedback model that clearly identifies the specific behaviors to be changed as the result of the finding of negligence. Fines for compensatory and/or punitive purposes will be much more effective in a framework in which the behaviors sanctioned are announced with sufficient precision that the defendant doctor and other members of the relevant profession can identify those practices that are unacceptable."[127]

[126] Christopher S. Kozak, "A Review of Federal Medical Malpractice Tort Reform Alternatives," Seton Hall Legislative Journal 19 (1995): 599.
[127] Norman G. Poythress, Richard G. Wienter and Joseph E. Schumacher, "Reframing the Medical Malpractice Tort Reform Debate: Social Science Research Implications for Non-Economic Reforms," Law and Psychology Review 16 (1992): 65-112.

Patient Compensation Funds

One reform adopted in some states is the use of patient compensation funds (PCF). As of 2003, nine states (Florida, Indiana, Kansas, Louisiana, Nebraska, New Mexico, Pennsylvania, South Carolina and Wisconsin) had established patient compensation funds (PCFs). States with PCFs cap health care provider claims at a specified monetary level. Further redress is available to injured parties through a PCF for amounts above the monetary cap. PCFs generally limit the dollar amount they will provide in compensation. Except for its cap, a PCF by itself does not necessarily alter a state's tort system.

PCFs offer certainty to health care providers and their insurers by establishing a limit on the magnitude of losses a health care provider must bear. The cap on loss amount adds predictability to pricing medical liability insurance coverage and increases the insurer's capacity to insure more providers because they are writing lower policy limits. If frequency does not rise, medical liability premiums should remain relatively stable. The challenge involved with establishing a PCF revolves around funding. The debate generally is whether funding should come from private or public sources. There are those who believe that PCFs are not a good solution, as they do not change the claiming dynamics.

In 1973, the Secretary's Commission on Medical Malpractice recommended federal funding for one or more demonstration projects in order to test and evaluate the feasibility of possible alternative medical injury compensation systems as well as a federal feasibility study of establishing a patient injury insurance program, similar to workers' compensation insurance, to provide designated compensation benefits for injuries arising from healthcare, whether caused by medical malpractice or not.[128] However, in 1977, a study sponsored jointly by the California Medical Association and the California Hospital Association investigated the feasibility of a patient compensation system based on scheduled benefits for patient injury rather than fault. Data from the study led observers to conclude such a no-fault compensation system would be very expensive.[129]

Statutory Risk Sharing Mechanisms

State legislatures are often called to address availability and affordability of essential insurance products when the private sector fails to provide adequate coverage at prices acceptable to those paying the premium. It is generally the preference of state governments to allow the private sector to provide insurance coverage if it is willing to do so. Auto, property and workers' compensation insurance are the three most widely known examples of essential insurance coverage. Auto and workers' compensation are compulsory in most states. Property insurance is necessary for an economy to function, as financial institutions will not lend money if a person or business cannot secure the financial institution's interest through property insurance.

Medical liability insurance may be considered an essential insurance coverage, as a medical care provider can lose hospital-attending privileges if insurance is unavailable. Thus, the health care system relies on the availability of affordable medical liability insurance. When coverage is unavailable or

[128] Department of Health, Education, and Welfare, 1973.
[129] California Medical Association, "Report on the Medical Insurance Feasibility Study," Don Harper Mills, ed. (1977).

believed to be too expensive, medical care providers may consider limiting their practice, changing to a lower-risk specialty, retiring or relocating to a location or state with more favorable medical liability insurance rates.

When legislators perceive medical liability coverage to be either unavailable or unaffordable, they may consider implementing a risk-sharing mechanism. These are often residual market mechanisms that serve as a market of last resort. A common risk-sharing mechanism is the Joint Underwriting Association (JUA). A JUA typically is a risk sharing mechanism where the state either authorizes or requires one or more servicing carriers to issue medical liability insurance policies to health care providers that are unable to obtain insurance from the voluntary market insurers. The premiums and losses associated with providing coverage through the JUA are shared by an association of the entire admitted market, or a significant portion of it. This is done through either assessment or a less common distribution of excess funds. The servicing carrier issues the policy, settles claims and provides other customary policyholder services. For that service, the servicing carrier is compensated at a fixed rate (usually a percentage of premium). A JUA is an effective means to provide coverage availability. JUA establishment by itself does not address the price or affordability of the insurance product. JUAs insureds are usually those rejected by the voluntary market and may tend toward higher claims costs.

JUAs are valuable to a market because they provide a mechanism in which anyone who needs to obtain insurance coverage can do so. Insurance coverage from JUAs is typically more expensive than coverage in the traditional insurance market; hence these entities are used when there are availability issues in the market. JUAs have limited benefits in markets where affordability of existing coverage is the most pressing problem.

Patient Safety Measures and Data Reporting Issues

The AMA supports a change to the existing culture of blame and punishment to one where patient safety is paramount. The current tort system does not encourage health care providers to report and evaluate health care errors. Rather, it discourages health care providers from sharing information for fear that the information could someday be used against them in a lawsuit. This culture means that mistakes in practice are not disclosed and others that could benefit and avoid repeating the error are not made aware that anything has occurred.

Some argue that such a system should be replaced with one in which health care providers are encouraged to report medical errors to a central source without fear of retribution. This would allow medical experts to evaluate alternative treatment methods and disseminate information to the medical profession to avoid the occurrence of similar mistakes in the future. This is the model for the federal Aviation Safety Risk Analysis Program, which has successfully reduced aviation accidents in the U.S. since 1958. However, some argue that such information should be made available to the legal systems because the tort system is designed to prevent future recurrences of medical malpractice.

In 1973, the Secretary's Commission on Medical Malpractice recommended that insurers: develop sophisticated loss-prevention programs based on both injury and claims prevention techniques; specifically identify and allocate a portion of the premium dollar for institutional medical malpractice insurance towards loss prevention; and provide analyses of incidents to institutional health-care

providers in order to aid the institutions' injury protection programs.[130] The commission also found that the unavailability of medical records without resort to litigation created needless expense and increased the incidence of unnecessary malpractice litigation.[131] It further recommended that states enact legislation enabling patients to obtain access to information contained in their medical records through their legal representatives, public or private, without having to file a suit.[132]

Chaing argued that the most important aspects of implementing a reporting system are "assuring reporters [of data] that incident reports will not be used against them in litigation and removing non-legal disincentives, such as access and cultural barriers, to reporting."[133] McClean argued "based on scientifically-derived clinical guidelines and mandatory reporting of adverse events for error analysis, risk managed care medicine will severely limit the autonomy of physicians. For medical malpractice attorneys, scientifically-derived clinical guidelines will create a presumptive standard of care, which, because of detailed statistical analysis, will be difficult to rebuke."[134]

Regulation of Investments

Historically, state laws regulating insurers' investments were relaxed over the years to allow insurers to take advantage of high-yield investments to support new products. The investment strategies of some insurers and the casualties that occurred when the junk bond and real estate markets declined in the early 1990s, led regulators to reconsider their oversight of insurers' investments. The NAIC, in 1990, adopted a model law restricting an insurer to no more than 20 percent of its admitted assets in non-investment grade bonds, with additional restrictions on the proportions of assets in the lower-rated categories. Several states adopted the model law or similar restrictions on junk bonds. This was accompanied by the refinement and strengthening of the process for assigning NAIC SVO credit designations or categorization of insurers' bonds and preferred stock.

In 1996, the NAIC adopted a comprehensive model law covering all insurer investments. The stated objectives of the model investment law are to: preserve principal; assure reasonable diversification; and require insurers to allocate investments prudently to meet obligations to insureds and maintain sufficient financial strength to cover reasonably foreseeable contingencies. In general, the model law sets certain limits on the amounts or relative proportions of different assets that insurers can hold to ensure adequate diversification and limit risk.

Controversy about the investment model law led the NAIC to adopt a second investment model law that utilizes what is known as the "prudent person" approach. Conceptually, this approach allows insurers greater discretion in terms of their allocation of investments if they can demonstrate that they have a sound investment plan and that they adhere to that plan. Regulators are authorized to intervene if an insurer fails to meet this general requirement.

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[130] Department of Health, Education, and Welfare, 1973.
[131] Department of Health, Education, and Welfare, 1973, 75.
[132] Department of Health, Education, and Welfare, 1973, 77.
[133] Melissa Chiang, "Promoting Patient Safety: Creating a Workable Reporting System," Yale Journal on Regulation 18 (2001): 383.
[134] Thomas R. McClean, "The Implications of Patient Safety Research and Risk Managed Care," Southern Illinois University Law Review 26 (2002): 227.

Insurance companies are required to maintain records and file annual and quarterly financial statements with regulators in accordance with statutory accounting principles (SAP) that differ from Generally Accepted Accounting Principles (GAAP). Statutory accounting seeks to determine an insurer's ability to satisfy its obligations at all times, whereas GAAP measures the earnings of a company on a going-concern basis from period to period. Under SAP, most assets and liabilities are valued conservatively and certain non-liquid assets, e.g., furniture and fixtures, are not admitted in the calculation of an insurer's surplus.

RECOMMENDATIONS FOR FUTURE STUDY

One of the underlying themes in nearly every piece of literature reviewed for this study, as well as the authors' own experiences with developing the report, was the fact that medical malpractice data was inconsistent, incomplete, difficult to obtain and even more difficult to interpret. The authors of this report agree with the conclusions and recommendations contained in the study released in 2003 by the GAO. In the section titled Matter for Congressional Consideration, the GAO in its report observed, "a lack of necessary data has hindered and continues to hinder the efforts of Congress, state regulators, and others to carefully analyze the problem and the effectiveness of the solutions that have been tried. Because of the potential for future crises, and in order to facilitate the evaluation of legislative remedies put in place by various levels of government, Congress may want to consider taking steps to ensure that additional and better data are collected. Specifically, Congress may want to consider encouraging the NAIC and state insurance regulators to identify the types of data that are necessary to properly evaluate the medical malpractice market—specifically, the frequency, severity and causes of losses—and begin collecting these data in a form that would allow appropriate analysis. Included in this process would be an analysis of the costs and benefits of collecting such data, as well as the extent to which some segments of this market are not captured by current data-gathering efforts. Such data could serve the interests of state and federal governments and allow both to better understand the causes of recurring crises in the medical malpractice insurance market and formulate the most appropriate and effective solutions."[135] The authors and researchers note that the current medical malpractice crisis is the third since the 1973 study by the Department of Health, Education and Welfare reached similar conclusions on the need for more and better data.[136]

The authors of this report did not study the effect of reinsurance pricing on primary medical liability providers, but note that there is some anecdotal evidence that reinsurance prices have increased. Further, evaluation of changes in insurer reserving practices was beyond the scope of the study.

[135] General Accounting Office, 2003, p.46.
[136] Department of Health, Education and Welfare.

Table 1—Definitions of Major Rating Laws

Prior Approval	Rates must be filed with and approved by the state insurance department before they can be used. Approval can be by means of a deemer provision, which indicates approval if rates are not denied within a specified number of days.
Modified Prior Approval	Rate revisions involving change in expense ratio or rate relativity require prior approval. Rate revisions based on experience only are subject to "file and use" laws.
Flex Rating	Prior approval of rates required only if they exceed a certain percentage above (and sometimes below) the previously filed rates.
File and Use	Rates must be filed with the state insurance department prior to their use. Specific approval is not required, but the department retains the right of subsequent disapproval.
Use and File	Rates must be filed with the state insurance department within a specified period after they have been placed in use.
No File	Rates are not required to be filed with or approved by the state insurance department. However, the company must maintain records of experience and other information used in developing the rates and makes these available to the commissioner upon request.

Source: National Association of Insurance Commissioners.

Table 2—Definition of Legal Insurance Ownership Types

Stock Insurance Company	An insurance operation owned by stockholders, as contrasted to a mutual insurance company owned by its policyholders. Many major life insurers are mutual companies. Whereas, many leading property/casualty and multi-line insurers are stock insurance companies.
Mutual Insurance Company	An insurer that is owned by its policyholders—no stock is available for purchase on the stock exchanges.
Reciprocal Exchange	An unincorporated association where each insured technically provides insurance to all other insureds with the association. (Thus, each participant in the pool is both an insurer and an insured.) An attorney-in-fact administers the exchange by paying losses experienced by the exchange, investing, underwriting renewal business, receiving premiums, and purchasing reinsurance. Members share profits and losses in proportion to the amount of insurance purchased from the exchange by that member.
Surplus Lines (Aka. Excess-Surplus Lines or Non-Admitted)	A property or liability insurer that provides coverage on a non-admitted basis. State laws generally specify when policyholders can access the non-admitted insurer. This typically occurs in instances where coverage is unavailable from insurers licensed by the state. Examples of surplus lines are coverage for some environmental liability risks, directors' and officers' liabilities, or medical liability insurance.
Risk Retention Groups	A liability insurer that operates as a licensed casualty insurer one state, but is permitted to sell insurance in other states by the terms of the Liability Risk Retention Act. Similar to an assessable mutual. A medical provider must be an owner of the company to secure coverage from it.
Self Insurance (Often known as Retention)	Protecting against loss by setting aside one's own money. This can be done on a mathematical basis by establishing a separate fund into which funds are deposited periodically. Self-insurance can protect against high frequency, low-severity losses. To do this through an insurance company would mean paying a premium that includes loadings for general expenses, cost of putting the policy on the books, acquisition expenses, premium taxes, and contingencies. Often not accepted as valid proof of security by hospitals.
State Insurance Fund (Risk Retention Mechanisms)	Accounts established and administered by a state agency to finance an insurance program that provides an alternative to the other markets or serves as a market of last resort.

Source: Dictionary of Insurance Terms—2nd Ed. with edits done by the authors.

Table 3—Direct Written Premiums, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Maximum
1991	120	5,682,630,494	47,355,254	70,170,368	23,918,287	493,037,944
1992	126	5,791,700,855	45,965,880	67,804,095	21,671,749	454,531,428
1993	125	5,674,856,600	45,398,853	72,709,511	20,746,379	510,734,015
1994	114	6,170,415,835	54,126,455	78,640,988	25,340,905	451,345,996
1995	113	5,950,519,576	52,659,465	75,435,471	24,002,564	408,509,288
1996	112	5,623,821,994	50,212,696	68,578,508	23,056,841	352,556,062
1997	108	5,259,208,598	48,696,376	65,707,301	23,309,386	369,535,567
1998	110	5,455,549,689	49,595,906	68,863,977	22,030,165	369,352,039
1999	116	5,316,103,356	45,828,477	66,840,805	19,521,779	403,190,447
2000	116	5,272,646,183	45,453,846	63,661,342	20,625,943	382,637,505
2001	107	6,084,358,830	56,863,167	82,179,280	24,129,414	470,761,851
2002	107	7,747,316,377	72,404,826	109,811,887	29,152,190	576,261,309

Source: National Association of Insurance Commissioners

Table 4—2002 Direct Written Premiums, By State

Insurers With Market Share > 2.0 Percent

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Maximum
AK	8	14,003,263	1,750,408	1,662,660	1,214,126	4,411,104
AL	5	108,415,609	21,683,122	32,967,040	6,227,425	79,921,800
AR	10	50,545,650	5,054,565	5,996,582	2,750,227	21,552,547
AZ	7	154,418,088	22,059,727	35,832,651	8,884,515	102,954,827
CA	12	610,922,559	50,910,213	46,219,811	27,804,555	162,656,320
CO	7	91,980,090	13,140,013	19,299,631	6,110,550	56,520,290
CT	11	131,170,931	11,924,630	12,502,538	6,348,836	40,513,743
DC	8	34,157,141	4,269,643	7,141,298	1,180,655	21,673,080
DE	9	19,407,735	2,156,415	1,374,701	1,775,689	4,492,834
FL	12	684,090,258	57,007,522	42,654,513	47,030,313	169,558,079
GA	9	240,312,218	26,701,358	34,487,912	12,631,557	114,091,319
HI	6	31,747,528	5,291,255	3,897,828	5,120,781	10,363,609
IA	10	59,384,710	5,938,471	6,779,399	3,167,682	23,618,915
ID	9	22,923,293	2,547,033	1,919,636	2,162,076	5,757,509
IL	8	417,477,885	52,184,736	84,647,606	24,030,995	260,756,810
IN	7	77,742,083	11,106,012	14,510,751	3,543,993	38,201,527
KS	12	57,593,561	4,799,463	4,629,431	3,661,520	18,927,451
KY	14	101,497,608	7,249,829	6,332,656	5,466,882	25,688,878
LA	9	78,808,171	8,756,463	13,034,203	3,831,407	42,848,037
MA	6	197,649,185	32,941,531	39,716,585	16,090,951	108,618,293
MD	8	174,774,050	21,846,756	22,214,816	13,579,547	70,337,845
ME	4	33,342,064	8,335,516	10,452,958	4,170,642	23,848,816
MI	7	180,880,142	25,840,020	20,115,814	13,843,644	50,034,037
MN	6	52,617,749	8,769,625	13,227,902	3,810,873	35,523,012
MO	12	158,462,655	13,205,221	8,110,794	11,852,026	30,751,977
MS	12	55,858,263	4,654,855	5,334,871	2,480,858	20,226,392

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Maximum
MT	9	25,911,939	2,879,104	1,893,294	2,447,129	6,996,580
NC	8	166,924,837	20,865,605	18,237,593	15,560,690	58,782,305
ND	7	15,773,888	2,253,413	3,347,177	1,151,720	9,726,301
NE	10	21,978,479	2,197,848	2,192,554	1,574,923	8,067,869
NH	9	30,907,252	3,434,139	2,665,872	2,844,017	9,807,879
NJ	6	354,604,582	59,100,764	73,976,882	24,311,216	202,205,541
NM	7	32,996,860	4,713,837	3,743,583	3,282,751	11,334,916
NV	13	72,490,699	5,576,208	3,316,371	4,594,670	11,551,776
NY	6	949,228,377	158,204,730	202,265,447	80,018,909	553,378,553
OH	10	375,988,980	37,598,898	35,317,313	21,506,846	92,401,161
OK	5	84,607,325	16,921,465	15,007,342	10,550,064	40,625,944
OR	8	72,051,557	9,006,445	8,628,887	5,577,907	23,286,219
PA	13	394,835,132	30,371,933	17,104,981	28,107,015	62,296,198
RI	8	28,736,079	3,592,010	4,716,937	1,445,098	13,929,010
SC	9	32,999,716	3,666,635	3,385,970	2,251,147	10,422,709
SD	6	13,622,920	2,270,487	3,779,181	601,951	9,918,472
TN	8	244,458,953	30,557,369	37,887,401	16,517,794	119,099,031
TX	11	457,606,457	41,600,587	33,139,625	27,760,325	111,224,733
UT	9	45,769,551	5,085,506	8,095,525	1,939,068	26,263,560
VA	15	146,114,107	9,740,940	3,429,878	9,362,103	14,858,688
VT	8	16,868,522	2,108,565	1,563,823	1,747,952	4,574,717
WA	9	160,606,709	17,845,190	18,726,959	12,048,237	65,992,394
WI	6	66,097,193	11,016,199	10,917,120	7,029,456	31,196,737
WV	6	79,709,666	13,284,944	9,836,194	7,866,448	29,549,566
WY	5	16,244,108	3,248,822	3,101,393	2,045,753	7,989,549

Source: National Association of Insurance Commissioners.

Table 5—Direct Earned Premiums, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Maximum
1991	120	5,590,218,825	46,585,157	68,832,310	24,942,638	451,863,042
1992	126	5,700,581,062	45,242,707	68,335,278	19,850,648	466,715,789
1993	125	5,443,845,044	43,550,760	66,491,753	18,649,680	438,453,874
1994	114	5,992,956,283	52,569,792	75,317,351	25,460,529	407,453,232
1995	113	5,946,680,010	52,625,487	74,928,909	23,354,835	397,206,350
1996	112	5,554,873,107	49,597,081	69,072,270	21,620,127	375,380,351
1997	108	5,253,203,916	48,640,777	67,310,576	22,449,048	363,829,843
1998	110	5,392,548,156	49,023,165	67,999,698	21,678,379	361,013,854
1999	116	5,260,597,430	45,349,978	66,822,854	19,484,689	392,173,433
2000	116	5,233,241,679	45,114,152	63,772,286	19,553,689	374,568,899
2001	107	5,588,454,863	52,228,550	76,647,014	22,944,014	457,699,256
2002	107	7,033,423,299	65,732,928	97,121,040	25,758,147	512,808,511

Source: National Association of Insurance Commissioners

Table 6—2002 Direct Earned Premiums, By State

Insurers With Market Share > 2.0 Percent

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Maximum
AK	8	13,040,393	1,630,049	1,656,293	1,040,450	4,298,710
AL	5	107,043,834	21,408,767	30,490,237	7,367,073	75,275,481
AR	10	46,609,986	4,660,999	5,604,976	2,174,869	15,954,803
AZ	7	135,635,482	19,376,497	28,987,369	8,343,733	84,175,460
CA	12	610,476,727	50,873,061	50,058,737	26,898,299	160,780,715
CO	7	84,720,063	12,102,866	17,890,050	4,364,568	52,215,863
CT	11	126,333,015	11,484,820	15,728,344	4,144,788	50,883,892
DC	8	31,226,094	3,903,262	6,241,193	1,891,072	19,194,003
DE	9	16,445,830	1,827,314	1,232,254	1,490,761	4,167,362
FL	12	603,303,696	50,275,308	40,399,873	35,758,683	152,449,954
GA	9	188,326,982	20,925,220	27,363,920	8,748,495	90,772,038
HI	6	29,419,653	4,903,276	3,660,526	4,914,940	10,226,420
IA	10	61,067,399	6,106,740	6,571,761	3,303,573	22,918,115
ID	9	22,954,468	2,550,496	1,854,818	2,170,072	5,709,922
IL	8	386,251,590	48,281,449	80,481,443	20,918,559	246,576,645
IN	7	65,469,419	9,352,774	11,889,840	2,833,916	29,931,175
KS	12	54,956,961	4,579,747	4,901,037	3,369,907	18,901,258
KY	14	90,606,614	6,471,901	6,222,604	4,433,191	24,051,204
LA	9	76,896,841	8,544,093	11,081,692	3,889,963	36,187,187
MA	6	191,072,406	31,845,401	40,962,213	13,685,266	109,810,508
MD	8	160,002,368	20,000,296	22,743,619	11,745,412	68,977,588
ME	4	30,706,715	7,676,679	9,818,425	3,829,481	22,218,894
MI	7	164,174,915	23,453,559	19,247,366	11,877,064	49,123,077
MN	6	54,532,821	9,088,804	12,603,952	3,753,317	34,066,928
MO	12	144,519,490	12,043,291	7,458,802	8,848,302	29,247,303
MS	12	51,346,966	4,278,914	5,049,200	1,788,583	17,619,727

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Maximum
MT	9	23,665,990	2,629,554	2,035,885	1,923,408	6,813,893
NC	8	160,713,715	20,089,214	16,019,654	21,886,544	53,318,682
ND	7	14,481,141	2,068,734	3,005,452	819,108	8,324,231
NE	10	22,253,168	2,225,317	2,478,432	1,423,097	7,418,121
NH	9	25,984,212	2,887,135	2,564,034	2,094,121	8,851,756
NJ	6	295,520,262	49,253,377	61,077,625	18,624,180	157,048,311
NM	7	29,117,847	4,159,692	3,902,925	1,787,863	10,761,184
NV	13	74,182,732	5,706,364	5,739,412	3,604,420	22,447,161
NY	6	875,147,752	145,857,959	179,027,628	80,883,061	494,142,309
OH	10	293,815,222	29,381,522	27,281,190	14,942,244	69,998,445
OK	5	78,295,765	15,659,153	14,940,596	9,509,132	40,625,944
OR	8	53,281,382	6,660,173	6,819,413	3,498,214	18,453,418
PA	13	347,541,753	26,733,981	16,997,246	19,140,463	68,550,552
RI	8	25,404,335	3,175,542	4,814,175	890,538	14,130,745
SC	9	27,799,717	3,088,857	2,526,529	1,536,700	6,818,317
SD	6	12,013,090	2,002,182	3,560,192	482,393	9,220,767
TN	8	231,805,158	28,975,645	35,262,670	19,264,543	112,002,164
TX	11	391,171,921	35,561,084	31,404,066	23,232,681	109,117,631
UT	9	44,005,214	4,889,468	8,156,456	1,656,357	26,265,699
VA	15	135,054,057	9,003,604	4,237,578	9,362,103	18,467,489
VT	8	15,124,870	1,890,609	1,455,846	1,519,185	3,861,773
WA	9	146,492,048	16,276,894	19,215,004	11,227,418	65,464,985
WI	6	60,561,634	10,093,606	9,690,354	6,585,020	27,443,544
WV	6	89,221,443	14,870,241	15,488,078	6,084,695	42,693,599
WY	5	13,628,143	2,725,629	2,938,805	940,998	6,656,775

Source: National Association of Insurance Commissioners.

Table 7—Direct Losses Incurred, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
1991	120	3,231,562,525	26,929,688	45,532,913	11,922,414	-68,799,050	210,823,522
1992	126	4,625,480,443	36,710,162	84,291,824	10,864,125	-3,689,602	684,039,543
1993	125	3,790,784,158	30,326,273	56,614,035	9,688,475	-46,954,110	397,703,575
1994	114	3,143,824,794	27,577,410	69,527,683	10,458,632	-440,416,247	281,395,021
1995	113	3,147,794,186	27,856,586	65,217,539	13,135,399	-426,128,097	285,844,365
1996	112	3,322,924,630	29,668,970	54,309,139	11,380,738	-188,689,238	265,663,325
1997	108	2,683,337,431	24,845,717	49,810,442	11,378,486	-214,585,011	197,473,977
1998	110	3,510,649,678	31,914,997	51,153,045	12,027,865	-101,973,520	202,179,837
1999	116	3,757,827,356	32,395,063	50,778,906	11,661,547	-9,177,793	241,039,791
2000	116	4,206,726,190	36,264,881	58,060,361	15,892,406	-11,967,765	395,166,285
2001	107	5,112,790,790	47,783,091	80,410,086	19,423,309	-11,547,846	529,579,627
2002	107	6,144,312,197	57,423,478	105,403,538	19,649,215	-6,953,455	812,170,922

Source: National Association of Insurance Commissioners.

Table 8—2002 Direct Losses Incurred, By State

Insurers With Market Share > 2.0 Percent

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
AK	8	9,688,367	1,211,046	776,126	1,217,162	109,997	2,085,402
AL	5	22,721,191	4,544,238	11,217,846	6,640,938	-12,812,027	18,138,926
AR	10	34,036,781	3,403,678	4,700,599	2,147,111	504,449	16,384,902
AZ	7	97,767,250	13,966,750	17,261,060	7,970,109	2,151,004	51,638,359
CA	12	326,527,222	27,210,602	22,180,922	18,571,952	5,087,879	70,957,478
CO	7	50,738,396	7,248,342	6,278,825	6,596,434	1,983,797	20,045,355
CT	11	139,201,507	12,654,682	21,432,589	1,771,772	-45,853	70,777,805
DC	8	29,340,251	3,667,531	4,317,291	1,270,849	-390,900	9,668,857
DE	9	11,977,135	1,330,793	1,908,006	1,060,781	-1,733,672	4,597,895
FL	12	490,792,352	40,899,363	28,157,938	30,337,850	8,775,981	94,069,722
GA	9	187,878,086	20,875,343	34,375,512	5,727,265	3,465,657	110,044,795
HI	6	15,292,360	2,548,727	1,889,740	2,368,584	145,576	5,778,568
IA	10	32,041,557	3,204,156	4,866,109	1,892,728	133	16,305,674
ID	9	19,789,206	2,198,801	1,581,658	1,942,886	239,938	5,550,183
IL	8	550,770,710	68,846,339	99,193,679	17,231,378	2,952,150	253,924,426
IN	7	37,547,762	5,363,966	6,296,920	1,497,498	-796,465	16,011,881
KS	12	28,698,189	2,391,516	2,517,598	2,239,829	-956,005	7,307,761
KY	14	67,387,923	4,813,423	6,326,071	2,575,390	-1,826,441	22,533,147
LA	9	14,111,944	1,567,994	10,229,079	2,801,781	-23,662,368	12,867,122
MA	6	203,850,530	33,975,088	44,812,272	12,492,687	2,749,754	116,229,237
MD	8	110,325,039	13,790,630	13,513,655	7,285,442	1,537,078	39,515,840
ME	4	25,656,414	6,414,104	8,308,978	2,647,330	1,540,980	18,820,774
MI	7	83,804,814	11,972,116	12,072,218	5,104,000	2,493,538	35,491,091
MN	6	30,018,203	5,003,034	10,443,827	1,498,806	-1,999,892	25,974,463
MO	12	148,608,347	12,384,029	10,219,261	10,770,674	0	32,121,202
MS	12	64,952,676	5,412,723	7,520,725	2,565,159	166,355	25,886,398

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
MT	9	25,901,265	2,877,918	2,723,552	2,762,752	0	7,973,987
NC	8	100,020,677	12,502,585	9,978,591	11,210,190	1,040,423	29,634,587
ND	7	10,958,002	1,565,429	3,393,754	136,839	-250,553	9,197,441
NE	10	18,064,819	1,806,482	1,721,757	1,186,814	-111,103	5,515,067
NH	9	11,568,856	1,285,428	1,515,035	1,254,138	-1,518,854	3,194,903
NJ	6	305,928,219	50,988,037	66,691,716	15,916,871	2,023,523	162,522,895
NM	7	21,661,486	3,094,498	2,876,898	2,701,533	-90,842	7,147,073
NV	13	98,897,593	7,607,507	11,486,299	3,804,298	362,311	43,888,646
NY	6	1,014,523,451	169,087,242	308,704,613	33,647,422	9,945,071	792,557,593
OH	10	306,085,894	30,608,589	31,767,784	13,656,653	1,094,018	100,302,134
OK	5	69,744,661	13,948,932	17,991,091	5,401,743	449,367	44,811,803
OR	8	49,691,883	6,211,485	7,682,619	2,817,051	126,910	20,373,027
PA	13	315,959,973	24,304,613	16,832,334	20,307,151	3,131,258	67,563,503
RI	8	25,363,865	3,170,483	4,826,189	380,684	-111,871	12,621,173
SC	9	19,794,163	2,199,351	2,864,039	863,630	-383,699	7,128,853
SD	6	7,565,842	1,260,974	2,150,078	369,979	257,300	5,639,567
TN	8	223,222,841	27,902,855	29,884,910	12,325,773	-357,170	83,416,976
TX	11	294,529,837	26,775,440	28,003,508	14,013,576	-566,997	84,715,898
UT	9	34,765,810	3,862,868	4,648,871	2,388,713	493,145	15,768,631
VA	15	95,220,055	6,348,004	3,863,274	5,833,203	1,718,000	15,341,571
VT	8	7,106,841	888,355	1,099,228	673,058	-424,653	2,839,071
WA	9	136,573,681	15,174,853	17,208,470	8,011,076	2,650,217	45,993,898
WI	6	29,080,061	4,846,677	7,274,842	5,835,216	-6,953,455	13,450,395
WV	6	79,544,101	13,257,350	12,722,422	9,289,766	2,738,902	34,047,063
WY	5	9,014,109	1,802,822	2,533,438	396,114	-33,368	5,887,279

Source: National Association of Insurance Commissioners.

Table 9—Direct Losses Paid, Countrywide
Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
1991	120	2,572,321,611	21,436,013	41,070,029	7,321,919	0	260,977,609
1992	126	3,130,728,947	24,847,055	49,076,688	6,979,094	0	356,848,985
1993	125	3,035,300,757	24,282,406	47,667,555	6,949,254	-1,678	339,198,087
1994	114	3,392,956,835	29,762,779	48,011,074	13,283,262	0	290,449,596
1995	113	3,237,979,216	28,654,683	45,033,057	11,140,640	-82,441	253,013,173
1996	112	3,297,577,158	29,442,653	47,524,006	10,353,754	0	276,124,446
1997	108	3,111,803,361	28,812,994	47,602,042	7,906,936	0	287,665,963
1998	110	3,292,012,335	29,927,385	50,464,843	8,663,023	0	331,181,009
1999	116	3,565,867,656	30,740,238	52,058,820	8,260,316	-11,057	344,070,347
2000	116	3,889,473,115	33,529,941	58,705,002	13,021,536	0	344,142,438
2001	107	4,082,005,829	38,149,587	61,745,511	15,669,137	0	367,400,655
2002	107	4,086,225,316	38,189,022	71,149,311	11,626,503	-767,450	474,710,535

Source: National Association of Insurance Commissioners.

Table 10—2002 Direct Losses Paid, By State

Insurers With Market Share > 2.0 Percent

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
AK	8	6,663,128	832,891	765,921	883,568	285	2,054,427
AL	5	39,248,192	7,849,638	5,626,438	9,235,645	1,013,388	15,579,784
AR	10	23,892,634	2,389,263	5,039,979	726,206	0	16,518,721
AZ	7	90,166,745	12,880,964	19,378,227	1,982,116	792,800	54,142,976
CA	12	256,206,589	21,350,549	27,255,852	6,744,895	1,096,175	80,305,026
CO	7	41,408,502	5,915,500	9,231,951	2,210,120	0	25,972,589
CT	11	63,824,625	5,802,239	12,612,930	251,334	0	40,718,232
DC	8	26,214,876	3,276,860	4,652,891	385,500	0	10,976,650
DE	9	3,245,843	360,649	1,001,407	4,312	0	3,027,681
FL	12	315,156,922	26,263,077	23,139,440	19,128,787	1,770,921	86,560,075
GA	9	96,216,394	10,690,710	15,936,376	2,789,610	0	50,906,795
HI	6	13,147,192	2,191,199	2,889,417	861,561	0	6,790,903
IA	10	33,870,572	3,387,057	6,492,656	482,776	0	19,438,228
ID	9	13,660,772	1,517,864	2,234,190	928,521	0	6,981,905
IL	8	348,920,540	43,615,068	73,664,200	6,650,988	-6,899,285	167,963,222
IN	7	9,268,815	1,324,116	1,793,671	441,113	0	4,212,343
KS	12	12,424,273	1,035,356	1,592,638	179,500	0	4,878,555
KY	14	42,703,919	3,050,280	5,405,455	1,010,055	-35,519	19,453,108
LA	9	17,833,547	1,981,505	2,826,786	536,370	0	7,411,416
MA	6	117,883,993	19,647,332	31,646,161	1,918,139	3,500	77,497,468
MD	8	97,634,777	12,204,347	15,420,901	4,180,000	51,884	39,643,512
ME	4	10,756,855	2,689,214	4,319,437	850,457	0	9,055,942
MI	7	73,660,041	10,522,863	10,647,292	3,469,909	1,338,212	26,313,081
MN	6	31,775,374	5,295,896	7,971,538	671,778	988	18,638,037
MO	12	82,966,355	6,913,863	6,367,596	6,603,533	0	16,330,158
MS	12	56,739,607	4,728,301	12,608,991	153,000	-767,450	43,795,733

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
MT	9	10,775,277	1,197,253	1,659,588	415,730	0	4,579,506
NC	8	99,205,815	12,400,727	16,488,177	4,215,015	2,627	45,700,674
ND	7	5,555,214	793,602	1,133,728	337,500	0	2,752,732
NE	10	7,346,427	734,643	940,748	337,750	0	2,599,381
NH	9	6,440,505	715,612	1,795,035	0	0	5,477,114
NJ	6	232,317,898	38,719,650	58,575,259	2,135,187	0	122,307,556
NM	7	12,650,767	1,807,252	2,147,625	557,570	0	5,210,517
NV	13	48,682,340	3,744,795	8,525,523	597,500	0	31,113,457
NY	6	747,760,697	124,626,783	139,213,681	81,319,218	6,789,264	400,222,158
OH	10	150,260,526	15,026,053	19,665,307	7,100,652	0	53,543,524
OK	5	45,031,519	9,006,304	14,096,247	2,898,743	319,222	33,972,196
OR	8	29,569,190	3,696,149	6,104,347	497,513	0	14,305,437
PA	13	164,616,456	12,662,804	16,286,312	5,938,523	0	48,263,503
RI	8	6,663,481	832,935	1,180,864	303,507	0	3,041,218
SC	9	24,095,869	2,677,319	5,182,026	84,000	0	14,511,985
SD	6	2,332,581	388,764	599,432	26,328	0	1,365,752
TN	8	158,335,346	19,791,918	28,133,214	3,368,039	101,937	68,471,182
TX	11	161,511,651	14,682,877	18,811,146	4,308,720	0	48,010,589
UT	9	30,408,393	3,378,710	5,522,734	1,547,074	0	17,159,151
VA	15	55,803,202	3,720,213	4,077,791	2,029,086	0	15,051,465
VT	8	2,743,129	342,891	774,731	0	0	2,202,129
WA	9	81,838,489	9,093,165	13,247,876	4,108,675	0	40,157,273
WI	6	23,311,084	3,885,181	4,075,071	3,210,819	67,561	9,926,050
WV	6	44,540,986	7,423,498	9,331,028	3,408,381	0	21,587,639
WY	5	8,937,392	1,787,478	2,711,698	60,000	0	6,168,000

Source: National Association of Insurance Commissioners.

Table 11—Defense and Cost Containment (DCC) Expenses Incurred, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
1991	120	1,374,421,657	11,453,514	22,765,127	4,057,501	-22,876,182	130,752,629
1992	126	1,515,176,192	12,025,208	24,812,170	3,922,547	-46,207,536	184,021,278
1993	125	1,294,909,696	10,359,278	18,881,627	3,785,748	-25,171,142	93,763,397
1994	114	1,282,023,469	11,245,820	19,343,674	4,739,988	-42,539,760	96,221,497
1995	113	1,475,403,560	13,056,669	22,132,971	4,913,440	-20,407,584	113,123,182
1996	112	1,325,302,542	11,833,058	18,677,771	4,702,737	-12,010,297	85,838,646
1997	108	1,343,489,374	12,439,716	22,812,594	5,160,347	-40,048,676	121,242,277
1998	110	1,325,082,286	12,046,203	19,195,712	5,146,894	-20,993,426	106,436,015
1999	116	1,517,502,648	13,081,919	20,439,860	4,732,417	-4,172,419	103,644,837
2000	116	1,317,793,329	11,360,287	18,109,971	4,667,458	-18,839,432	111,361,434
2001	107	1,539,025,413	14,383,415	23,592,157	5,097,889	-12,696,097	154,804,786
2002	107	1,882,049,986	17,589,252	28,071,771	6,037,598	-19,743,290	166,562,503

Source: National Association of Insurance Commissioners.

Table 12—2002 Defense and Cost Containment (DCC) Expenses Incurred, By State
Insurers With Market Share > 2.0 Percent

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
AK	8	3,559,603	444,950	483,647	197,713	50,151	1,336,453
AL	5	51,606,653	10,321,331	18,707,708	2,064,943	1,647,130	43,784,219
AR	10	13,945,786	1,394,579	1,888,516	633,408	104,034	5,495,562
AZ	7	39,849,131	5,692,733	9,584,263	1,869,461	429,858	27,264,495
CA	12	211,972,279	17,664,357	18,788,152	9,516,662	1,546,604	62,425,291
CO	7	22,005,553	3,143,650	6,150,476	780,334	395,791	17,065,901
CT	11	25,329,363	2,302,669	3,949,706	342,031	4,792	13,284,455
DC	8	10,570,677	1,321,335	2,934,766	220,979	-254,698	8,515,470
DE	9	3,245,336	360,593	481,155	288,505	-404,135	1,132,216
FL	12	142,024,774	11,835,398	9,309,468	10,182,970	3,123,521	33,291,504
GA	9	38,955,168	4,328,352	7,097,639	1,787,016	711,240	23,134,788
HI	6	8,730,707	1,455,118	1,975,802	646,937	-238,310	4,803,803
IA	10	9,264,102	926,410	993,623	883,387	0	3,287,346
ID	9	6,728,195	747,577	745,036	393,896	42,125	1,922,142
IL	8	106,883,525	13,360,441	25,314,966	3,869,475	1,782,596	75,593,535
IN	7	36,006,703	5,143,815	10,706,704	276,187	-27,432	29,229,849
KS	12	16,615,851	1,384,654	1,335,906	1,121,812	13,922	5,140,295
KY	14	14,805,833	1,057,560	1,123,097	835,460	-1,150,103	2,919,014
LA	9	38,052,062	4,228,007	7,081,203	1,527,059	177,268	22,574,801
MA	6	44,588,619	7,431,437	10,890,407	3,475,087	1,252,012	29,388,176
MD	8	23,031,416	2,878,927	2,340,117	1,777,504	999,880	7,509,628
ME	4	4,584,709	1,146,177	1,311,068	558,485	365,555	3,102,185
MI	7	34,653,525	4,950,504	3,768,178	4,653,544	658,485	11,881,401
MN	6	3,679,988	613,331	2,027,776	-47,862	-682,289	4,636,843
MO	12	39,606,667	3,300,556	2,664,127	3,819,635	-91,546	8,542,865

State	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
MS	12	17,095,600	1,424,633	1,534,961	775,928	58,275	4,846,081
MT	9	7,401,071	822,341	712,869	763,199	0	1,933,125
NC	8	42,737,736	5,342,217	7,795,030	3,110,197	384,322	23,886,091
ND	7	2,440,925	348,704	532,364	46,779	-90,842	1,169,244
NE	10	5,984,951	598,495	601,865	419,528	-46,991	2,008,574
NH	9	4,587,471	509,719	660,419	339,354	-284,574	1,961,436
NJ	6	69,457,174	11,576,196	14,067,014	4,821,402	490,170	32,874,724
NM	7	7,193,142	1,027,592	1,754,398	116,248	13,837	4,846,447
NV	13	24,013,871	1,847,221	2,131,340	1,121,483	120,897	7,315,845
NY	6	247,858,841	41,309,807	65,559,353	17,165,493	-20,040,860	160,400,139
OH	10	75,568,368	7,556,837	10,878,123	2,465,130	-104,334	34,970,755
OK	5	30,248,190	6,049,638	6,743,111	5,266,804	266,181	16,996,508
OR	8	13,186,820	1,648,353	2,321,039	587,067	-31,687	6,005,167
PA	13	105,484,986	8,114,230	7,217,918	5,936,675	1,683,521	29,201,813
RI	8	7,021,071	877,634	1,425,473	90,100	3,087	4,078,449
SC	9	3,855,502	428,389	947,008	115,965	-271,376	2,862,110
SD	6	1,091,279	181,880	377,387	119,985	-281,302	860,854
TN	8	54,023,390	6,752,924	11,644,693	1,512,317	51,689	33,614,040
TX	11	91,944,306	8,358,573	10,731,472	5,494,407	-371,832	37,762,860
UT	9	13,821,573	1,535,730	2,934,811	608,240	831	9,215,377
VA	15	34,229,489	2,281,966	1,815,114	1,638,356	444,830	6,428,217
VT	8	2,486,385	310,798	418,755	117,789	-24,640	1,029,763
WA	9	37,172,037	4,130,226	4,647,837	2,030,871	144,567	15,028,190
WI	6	8,292,482	1,382,080	5,138,428	810,912	-6,980,645	8,143,210
WV	6	19,609,667	3,268,278	4,804,118	1,118,591	500,813	12,895,333
WY	5	4,947,434	989,487	1,764,971	76,423	37,710	4,108,633

Source: National Association of Insurance Commissioners.

Table 13—2002 Loss Ratios, By State

Insurers With Market Share > 2.0 Percent

State	Number of Insurers[137]	Direct Loss Incurred	Direct Defense and Cost Containment Expense Incurred	Direct Premium Earned	Loss Ratio
AK	8	9,688,367	3,559,603	13,040,393	101.59%
AL	5	22,721,191	51,606,653	107,043,834	69.44%
AR	10	34,036,781	13,945,786	46,609,986	102.94%
AZ	7	97,767,250	39,849,131	135,635,482	101.46%
CA	12	326,527,222	211,972,279	610,476,727	88.21%
CO	7	50,738,396	22,005,553	84,720,063	85.86%
CT	11	139,201,507	25,329,363	126,333,015	130.24%
DC	8	29,340,251	10,570,677	31,226,094	127.81%
DE	9	11,977,135	3,245,336	16,445,830	92.56%
FL	12	490,792,352	142,024,774	603,303,696	104.89%
GA	9	187,878,086	38,955,168	188,326,982	120.45%
HI	6	15,292,360	8,730,707	29,419,653	81.66%
IA	10	32,041,557	9,264,102	61,067,399	67.64%
ID	9	19,789,206	6,728,195	22,954,468	115.52%
IL	8	550,770,710	106,883,525	386,251,590	170.27%
IN	7	37,547,762	36,006,703	65,469,419	112.35%
KS	12	28,698,189	16,615,851	54,956,961	82.45%
KY	14	67,387,923	14,805,833	90,606,614	90.71%
LA	9	14,111,944	38,052,062	76,896,841	67.84%
MA	6	203,850,530	44,588,619	191,072,406	130.02%
MD	8	110,325,039	23,031,416	160,002,368	83.35%
ME	4	25,656,414	4,584,709	30,706,715	98.48%
MI	7	83,804,814	34,653,525	164,174,915	72.15%

[137] This number includes all insurers that report to the NAIC that have reported earned premiums that show a greater than 2 percent market share. It might include some insurers that no longer actively write new medical liability business.

MN	6	30,018,203	3,679,988	54,532,821	61.79%
MO	12	148,608,347	39,606,667	144,519,490	130.24%
MS	12	64,952,676	17,095,600	51,346,966	159.79%
MT	9	25,901,265	7,401,071	23,665,990	140.72%
NC	8	100,020,677	42,737,736	160,713,715	88.83%
ND	7	10,958,002	2,440,925	14,481,141	92.53%
NE	10	18,064,819	5,984,951	22,253,168	108.07%
NH	9	11,568,856	4,587,471	25,984,212	62.18%
NJ	6	305,928,219	69,457,174	295,520,262	127.03%
NM	7	21,661,486	7,193,142	29,117,847	99.10%
NV	13	98,897,593	24,013,871	74,182,732	165.69%
NY	6	1,014,523,451	247,858,841	875,147,752	144.25%
OH	10	306,085,894	75,568,368	293,815,222	129.90%
OK	5	69,744,661	30,248,190	78,295,765	127.71%
OR	8	49,691,883	13,186,820	53,281,382	118.01%
PA	13	315,959,973	105,484,986	347,541,753	121.26%
RI	8	25,363,865	7,021,071	25,404,335	127.48%
SC	9	19,794,163	3,855,502	27,799,717	85.07%
SD	6	7,565,842	1,091,279	12,013,090	72.06%
TN	8	223,222,841	54,023,390	231,805,158	119.60%
TX	11	294,529,837	91,944,306	391,171,921	98.80%
UT	9	34,765,810	13,821,573	44,005,214	110.41%
VA	15	95,220,055	34,229,489	135,054,057	95.85%
VT	8	7,106,841	2,486,385	15,124,870	63.43%
WA	9	136,573,681	37,172,037	146,492,048	118.60%
WI	6	29,080,061	8,292,482	60,561,634	61.71%
WV	6	79,544,101	19,609,667	89,221,443	111.13%
WY	5	9,014,109	4,947,434	13,628,143	102.45%

Source: National Association of Insurance Commissioners.

Table 14—Mean Medical Liability Insurer Expenses, Countrywide

Insurers With Market Share > 2.0% In Any State
(In 2002 $USD)

Year	Number of Insurers	Direct Premium Earned	General Expenses	Taxes, Licenses & Fees	Commission and Brokerage Expense
1992	126	49,701,936	2,967,152	1,043,220	2,573,562
1993	125	50,024,321	3,083,752	1,158,850	2,501,708
1994	114	57,128,869	3,760,147	1,341,950	2,635,248
1995	113	60,014,804	3,919,823	1,208,464	2,849,064
1996	112	57,654,438	3,753,854	1,239,640	2,850,465
1997	108	56,753,873	3,745,063	1,207,854	2,794,459
1998	110	57,381,628	4,399,483	1,405,437	3,104,725
1999	116	53,464,248	4,251,094	1,221,467	2,926,456
2000	116	53,485,043	3,960,998	1,232,010	2,795,304
2001	107	62,155,284	4,811,175	1,482,709	4,091,818
2002	107	77,287,755	4,300,585	1,659,594	4,780,236

Source: National Association of Insurance Commissioners

Table 15—Medical Liability Insurer Expenses to Premium, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Mean Premium Earned	General Expenses	Taxes, Licenses & Fees	Commission and Brokerage Expense
1992	126	49,701,936	5.97%	2.10%	5.18%
1993	125	50,024,321	6.16%	2.32%	5.00%
1994	114	57,128,869	6.58%	2.35%	4.61%
1995	113	60,014,804	6.53%	2.01%	4.75%
1996	112	57,654,438	6.51%	2.15%	4.94%
1997	108	56,753,873	6.60%	2.13%	4.92%
1998	110	57,381,628	7.67%	2.45%	5.41%
1999	116	53,464,248	7.95%	2.28%	5.47%
2000	116	53,485,043	7.41%	2.30%	5.23%
2001	107	62,155,284	7.74%	2.39%	6.58%
2002	107	77,287,755	5.56%	2.15%	6.18%

Source: National Association of Insurance Commissioners.

Table 16—Medical Liability Profitability, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
(In 2002 $USD)

Year	Number of Insurers	Premium Earned Net of Reinsurance	Underwriting Profit (Loss)	Pretax Profit (Loss)	Total Profit (Loss)
1992	126	4,965,288,726	-1,349,866,763	-1,045,006,146	1,443,248,071
1993	125	4,910,601,444	-717,749,956	-745,885,320	1,708,935,462
1994	114	5,297,069,313	53,070,500	54,655,854	1,784,953,962
1995	113	5,186,788,503	5,081,821	-193,424,372	2,084,316,206
1996	112	4,945,135,688	-305,359,898	-378,052,569	1,798,189,361
1997	108	4,891,710,779	-347,517,482	-544,756,255	1,809,570,946
1998	110	5,026,887,205	-897,394,177	-1,048,074,223	1,325,448,016
1999	116	4,900,906,853	-1,362,191,786	-1,591,699,265	546,559,092
2000	116	5,195,743,927	-1,651,550,951	-1,649,007,069	599,185,053
2001	107	5,083,453,905	-2,924,502,549	-3,011,385,818	-1,352,807,368
2002	107	5,924,734,000	-2,514,723,000	-2,586,064,000	-1,439,968,000

Source: National Association of Insurance Commissioners

Table 17—Medical Liability Profitability, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Mean Premium Earned Net of Reinsurance	Loss Ratio	Expense Ratio	Combined Ratio	Underwriting Profit (Loss)	Pretax Profit (Loss)	Total Profit (Loss)
1992	126	4,965,288,726	106.15%	20.65%	126.81%	(27.19%)	(21.05%)	29.07%
1993	125	4,910,601,444	94.06%	19.80%	113.86%	(14.62%)	(15.19%)	34.80%
1994	114	5,297,069,313	79.52%	18.95%	98.46%	1.00%	1.03%	33.70%
1995	113	5,186,788,503	79.67%	20.21%	99.88%	0.10%	(3.73%)	40.19%
1996	112	4,945,135,688	84.94%	21.07%	106.01%	(6.17%)	(7.64%)	36.36%
1997	108	4,891,710,779	82.76%	24.41%	107.17%	(7.10%)	(11.14%)	36.99%
1998	110	5,026,887,205	94.01%	23.84%	117.85%	(17.85%)	(20.85%)	26.37%
1999	116	4,900,906,853	103.96%	24.34%	128.30%	(27.79%)	(32.48%)	11.15%
2000	116	5,195,743,927	108.76%	22.70%	131.45%	(31.79%)	(31.74%)	11.53%
2001	107	5,083,453,905	134.33%	21.53%	155.87%	(57.53%)	(59.24%)	(26.61%)
2002	107	5,924,734,000	123.64%	17.56%	141.19%	(42.44%)	(43.65%)	(24.30%)

Source: National Association of Insurance Commissioners

Table 18—Total Invested Asset Value by Type of Asset, Countrywide

Insurers With 50 Percent of Premium Written in Medical Malpractice
And Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Total Invested Assets	Bonds	Cash & Short-Term Investments	Common & Preferred Stock	Other Invested Assets
1992	99	25,522,292,405	21,283,802,392	2,174,977,909	1,914,267,309	149,244,795
1993	94	25,775,421,762	21,060,332,916	2,311,829,830	2,085,741,669	317,517,347
1994	89	28,220,699,681	22,952,734,872	2,317,892,720	2,611,234,305	338,837,785
1995	85	30,580,806,962	24,693,977,607	2,320,381,582	3,193,212,938	373,234,835
1996	83	28,860,496,823	23,087,511,684	1,291,691,134	3,717,558,962	763,735,044
1997	79	28,853,425,753	22,614,684,683	1,684,922,714	3,587,409,555	966,408,800
1998	76	29,563,083,018	23,212,938,606	1,554,626,111	3,731,678,829	1,063,839,471
1999	76	28,818,143,909	22,265,447,001	1,432,066,876	4,148,847,139	971,782,892
2000	75	26,710,262,166	21,011,321,512	1,680,258,841	3,750,028,123	268,653,690
2001	69	25,495,502,844	20,052,842,442	1,934,907,260	3,183,067,027	324,686,114
2002	76	25,741,827,308	19,695,930,578	2,504,736,884	2,929,902,811	611,257,035

Source: National Association of Insurance Commissioners.

Table 19—Invested Assets as a Percent of Total, Countrywide

Insurers With 50 Percent of Premium Written in Medical Malpractice
And Insurers With Market Share > 2.0 Percent In Any State

Year	Number of Insurers	Total Invested Assets	Bonds	Cash and Short-Term Investments	Common & Preferred Stock	Other Invested Assets
1992	99	25,522,292,405	83.39%	8.52%	7.50%	0.58%
1993	94	25,775,421,762	81.71%	8.97%	8.09%	1.23%
1994	89	28,220,699,681	81.33%	8.21%	9.25%	1.20%
1995	85	30,580,806,962	80.75%	7.59%	10.44%	1.22%
1996	83	28,860,496,823	80.00%	4.48%	12.88%	2.65%
1997	79	28,853,425,753	78.38%	5.84%	12.43%	3.35%
1998	76	29,563,083,018	78.52%	5.26%	12.62%	3.60%
1999	76	28,818,143,909	77.26%	4.97%	14.40%	3.37%
2000	75	26,710,262,166	78.66%	6.29%	14.04%	1.01%
2001	69	25,495,502,844	78.65%	7.59%	12.48%	1.27%
2002	76	25,741,827,308	76.51%	9.73%	11.38%	2.37%

Source: National Association of Insurance Commissioners.

Table 20—Investment Income Analysis

Insurers With Market Share > 2.0 Percent In Any State And Book of Business > 50 Percent in Medical Liability
In 2002 $USD

Year	Number of Insurers	Direct Premium Earned	Net Underwriting Gain	Net Investment Income	Investment Yield
1992	99	3,555,545,726	-1,232,309,240	1,317,890,069	6.84%
1993	94	3,287,590,578	-682,134,403	1,227,322,774	6.10%
1994	89	3,780,214,701	245,638,815	1,333,451,944	5.84%
1995	85	4,094,673,099	183,811,302	1,504,414,253	5.96%
1996	83	3,783,298,231	-42,675,818	1,427,223,047	5.78%
1997	79	3,731,520,701	230,576,857	1,388,344,385	5.51%
1998	76	3,939,571,156	-277,806,998	1,404,009,043	5.34%
1999	76	4,022,423,378	-689,168,955	1,354,060,348	5.05%
2000	75	4,569,747,457	-1,149,659,764	1,352,684,925	5.23%
2001	69	4,445,432,263	-1,800,448,854	1,244,103,610	5.02%
2002	76	5,478,750,817	-2,147,594,111	1,100,127,961	4.33%

Source: National Association of Insurance Commissioners.

Table 21—Policyholder Surplus Analysis, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
1991	116	22,802,627,564	196,574,376	663,176,926	27,851,440	84,227	5,188,299,957
1992	122	21,993,205,239	180,272,174	560,101,703	31,587,069	846,047	4,021,047,103
1993	119	26,124,027,237	219,529,641	648,822,396	36,851,464	71,528	4,479,273,634
1994	110	21,988,405,029	199,894,591	604,422,892	48,105,222	980,047	4,239,981,055
1995	111	26,052,814,061	234,710,037	680,102,558	58,392,274	476,075	4,780,149,945
1996	110	31,064,134,891	282,401,226	787,557,375	64,018,898	427,380	5,318,375,924
1997	107	31,697,678,271	296,239,984	849,983,832	66,767,837	1,376,431	6,032,830,513
1998	109	33,787,296,178	309,975,194	912,170,529	78,262,577	1,422,685	6,560,802,739
1999	115	40,671,963,785	353,669,250	1,059,311,518	80,035,609	1,503,482	7,245,126,610
2000	115	44,185,403,068	384,220,896	1,084,889,371	78,033,468	1,290,803	6,625,919,717
2001	107	37,393,574,017	349,472,654	951,437,253	66,524,330	807,383	6,512,067,415
2002	104	34,128,911,335	328,162,609	954,969,636	55,810,496	859,640	5,885,056,669

Source: National Association of Insurance Commissioners.

Table 22—Total Insurer Assets Analysis, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Total	Mean	Standard Deviation	Median	Minimum	Maximum
1991	120	104,146,028,132	867,883,568	2,722,353,912	161,452,175	2,415,999	22,143,854,011
1992	126	108,947,586,581	864,663,386	2,745,821,901	155,461,407	1,347,354	22,747,266,874
1993	125	120,977,077,084	967,816,617	2,958,440,444	166,224,586	1,505,498	23,795,621,375
1994	114	104,424,410,936	916,003,605	2,867,538,374	177,832,750	1,473,983	23,684,969,523
1995	113	108,222,122,248	957,717,896	2,948,707,998	197,088,158	1,834,916	24,240,960,808
1996	112	111,654,461,126	996,914,831	2,920,711,369	183,155,312	2,049,955	21,729,123,082
1997	108	104,061,845,441	963,535,606	2,892,088,889	187,871,261	2,535,721	21,984,942,127
1998	110	103,348,631,675	939,533,015	2,844,101,626	174,374,535	3,207,236	21,927,435,821
1999	116	114,467,327,476	986,787,306	2,870,907,580	167,469,009	3,501,115	20,378,259,989
2000	116	125,838,691,561	1,084,816,307	2,956,238,647	201,282,508	2,889,325	20,249,260,074
2001	107	139,030,901,172	1,299,354,217	3,546,526,171	232,946,240	3,066,545	22,927,090,634
2002	107	143,060,884,611	1,337,017,613	3,893,881,802	201,898,347	3,407,728	26,591,806,457

Source: National Association of Insurance Commissioners.

Table 23—Aggregate Reserve Adequacy ($000) for Medical Malpractice, Countrywide
1993-2002 Accident Years

Loss Development Method	Adequacy Using Case Incurred Data	Adequacy Using Paid Data	Average
Occurrence			
3-Year Average	-1,888,594	-1,681,135	-1,784,865
3-Year Weighted Average	-1,848,412	-1,505,288	-1,676,850
5-Year Average	-1,410,714	- 764,712	-1,087,713
5-Year Weighted Average	-1,430,230	- 861,640	-1,145,935
All Year Average	-1,258,706	- 826,297	-1,042,501
All Year Minus High/Low	-1,405,902	- 715,794	-1,060,848
Claims-Made			
3-Year Average	-2,665,273	-4,215,267	-3,440,270
3-Year Weighted Average	-2,759,174	-4,287,532	-3,523,353
5-Year Average	-1,434,946	-2,942,251	-2,188,599
5-Year Weighted Average	-1,615,383	-3,094,634	-2,355,008
All Year Average	- 900,640	-2,778,395	-1,839,518
All Year Minus High/Low	- 605,431	-2,628,910	-1,617,170
Total			
3-Year Average	-4,553,867	-5,896,402	-5,225,135
3-Year Weighted Average	-4,607,586	-5,792,820	-5,200,203
5-Year Average	-2,845,660	-3,706,963	-3,276,312
5-Year Weighted Average	-3,045,613	-3,956,274	-3,500,943
All Year Average	-2,159,346	-3,604,692	-2,882,019
All Year Minus High/Low	-2,011,333	-3,344,704	-2,678,018

Source: National Association of Insurance Commissioners.

Table 24—Mean Insurer Reinsured Premium By Direct Insurers

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Direct	Assumed	Ceded	Net	Pct. of Premium Ceded
1991	118	53,727,339	421,449	8,559,756	45,589,031	15.81%
1992	125	52,104,054	574,001	8,679,569	43,998,486	16.48%
1993	123	52,053,685	501,728	8,643,747	43,911,666	16.45%
1994	111	61,505,415	490,959	9,288,959	52,707,414	14.98%
1995	110	60,581,203	529,051	11,373,233	49,737,021	18.61%
1996	110	58,497,087	831,252	11,303,011	48,025,329	19.05%
1997	106	56,752,843	991,331	8,975,980	48,768,193	15.54%
1998	108	58,183,644	1,354,843	8,737,080	50,801,407	14.67%
1999	114	54,291,867	1,432,943	9,658,400	46,066,409	17.33%
2000	111	51,752,306	1,401,591	11,059,793	42,094,103	20.81%
2001	105	67,890,791	1,096,213	12,146,249	56,840,755	17.61%
2002	106	83,958,040	1,004,157	15,728,168	69,234,029	18.51%

Source: National Association of Insurance Commissioners.

Table 25—Mean Paid Losses Recovered

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Direct	Assumed	Recovered	Net	Pct. of Paid Losses Recovered
1991	120	23,964,719	2,130,485	8,402,787	17,692,417	32.20%
1992	126	27,585,318	2,257,404	8,203,762	21,638,960	27.49%
1993	125	27,298,480	1,983,591	8,422,618	20,859,452	28.76%
1994	114	32,941,018	2,624,219	10,215,365	25,349,873	28.72%
1995	113	32,123,713	3,056,437	10,385,277	24,794,873	29.52%
1996	112	33,669,632	4,379,019	11,650,065	26,398,586	30.62%
1997	108	33,886,278	4,125,432	12,736,892	25,274,817	33.51%
1998	110	36,752,873	5,646,526	13,043,922	29,355,476	30.76%
1999	116	37,382,560	5,665,251	14,263,397	28,784,415	33.13%
2000	116	42,012,855	5,330,919	13,557,400	33,786,374	28.64%
2001	107	48,624,012	10,455,650	23,433,575	35,646,087	39.66%
2002	107	51,338,623	9,931,054	22,765,208	38,504,469	37.16%

Source: National Association of Insurance Commissioners.

Table 26—Mean Incurred Losses Ceded

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Direct	Assumed	Ceded	Net	Pct. of Incurred Loss Ceded
1991	120	184,307,490	14,529,987	46,694,308	152,143,170	23.48%
1992	126	186,163,168	16,617,815	52,113,751	150,667,233	25.70%
1993	125	188,904,588	18,439,141	55,491,771	151,851,958	26.76%
1994	114	204,860,091	20,570,137	58,464,474	166,965,754	25.93%
1995	113	202,494,948	18,973,747	61,166,427	160,302,268	27.62%
1996	112	197,241,482	19,345,451	64,083,482	152,503,451	29.59%
1997	108	190,520,893	20,207,753	60,519,972	150,208,673	28.72%
1998	110	188,385,987	18,516,510	62,272,164	144,630,333	30.10%
1999	116	175,112,061	19,094,765	62,682,642	131,524,184	32.28%
2000	116	169,271,020	25,862,235	68,352,976	126,780,279	35.03%
2001	107	179,147,004	31,498,282	73,868,330	136,776,955	35.07%
2002	107	190,576,955	29,033,868	77,589,469	142,021,355	35.33%

Source: National Association of Insurance Commissioners.

Table 27—Market Concentration Ratios, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Number of Insurers	Mkt. Share of 4 Largest Insurers	Mkt. Share Of 8 Largest Insurers	Mkt. Share Of 20 Largest Insurers	Herfindahl-Hirschman Index
1991	120	23.24%	34.90%	59.20%	264.78
1992	126	21.81%	34.54%	58.01%	250.69
1993	125	24.38%	37.52%	60.46%	283.56
1994	114	22.88%	37.18%	62.09%	271.27
1995	113	23.06%	36.91%	62.66%	268.49
1996	112	20.93%	34.93%	63.05%	254.34
1997	108	21.65%	35.66%	62.33%	259.61
1998	110	21.07%	36.22%	63.51%	264.58
1999	116	22.21%	36.48%	62.38%	268.01
2000	116	21.79%	34.48%	60.49%	253.85
2001	107	24.43%	37.39%	64.24%	286.83
2002	107	26.19%	39.52%	65.08%	306.42

Source: National Association of Insurance Commissioners.

Table 28—2002 Market Concentration Ratios, By State

Insurers With Market Share > 2.0 Percent In Any State

State	Number of Insurers	Mkt. Share of 4 Largest Insurers	Mkt. Share Of 8 Largest Insurers	Herfindahl-Hirschman Index
AK	8	81.32%	100.0%	2,236.84
AL	5	97.49%	100.0%	5,698.59
AR	10	72.50%	93.24%	2,266.73
AZ	7	88.86%	100.0%	4,659.39
CA	12	67.51%	86.69%	1,462.95
CO	7	88.11%	100.0%	4,070.14
CT	11	73.33%	91.08%	1,817.58
DC	8	89.06%	100.0%	4,309.77
DE	9	70.65%	96.73%	1,512.49
FL	12	58.20%	85.08%	1,260.99
GA	9	78.37%	97.29%	2,758.79
HI	6	91.15%	100.0%	2,420.36
IA	10	75.37%	93.78%	2,172.94
ID	9	74.34%	97.36%	1,672.13
IL	8	84.32%	100.0%	4,127.80
IN	7	90.88%	100.0%	3,518.92
KS	12	59.63%	85.20%	1,544.06
KY	14	57.85%	81.19%	1,220.35
LA	9	81.54%	96.99%	3,299.46
MA	6	93.83%	100.0%	3,685.61
MD	8	79.51%	100.0%	2,380.91
ME	4	100.0%	100.0%	5,448.59
MI	7	85.49%	100.0%	2,170.64
MN	6	93.78%	100.0%	4,826.67
MO	12	55.33%	85.06%	1,121.51
MS	12	69.32%	87.32%	1,836.71
MT	9	68.44%	95.69%	1,538.21
NC	8	82.92%	100.0%	2,085.59
ND	7	90.62%	100.0%	4,130.23

State	Number of Insurers	Mkt. Share of 4 Largest Insurers	Mkt. Share Of 8 Largest Insurers	Herfindahl-Hirschman Index
NE	10	69.57%	93.74%	1,895.67
NH	9	70.58%	95.63%	1,706.29
NJ	6	92.14%	100.0%	3,842.74
NM	7	84.00%	100.0%	2,200.86
NV	13	53.59%	82.70%	1,020.39
NY	6	94.68%	100.0%	3,936.91
OH	10	77.86%	94.92%	1,794.09
OK	5	93.89%	100.0%	3,258.50
OR	8	85.26%	100.0%	2,253.97
PA	13	52.74%	80.66%	994.44
RI	8	89.34%	100.0%	3,136.09
SC	9	80.17%	97.00%	1,953.35
SD	6	94.19%	100.0%	5,514.58
TN	8	86.50%	100.0%	2,931.42
TX	11	64.48%	88.06%	1,433.55
UT	9	83.94%	97.61%	3,613.91
VA	15	38.19%	68.39%	743.81
VT	8	81.18%	100.0%	1,851.62
WA	9	73.99%	96.81%	2,198.78
WI	6	91.54%	100.0%	3,030.68
WV	6	83.75%	100.0%	2,428.05
WY	5	97.40%	100.0%	3,458.08

Source: National Association of Insurance Commissioners.

*Texas' largest medical liability insurer, the Texas Medical Liability Trust, is a statutorily created entity not reporting to the NAIC. If it is included into the Herfindahl-Hirschman Index calculations for Texas, the index increases to 1502.

Table 29—Entries and Exits, Countrywide

Insurers With Market Share > 2.0 Percent In Any State

Year	Number of Insurers	Entries	Pct of Insurers	Exits	Pct of Insurers	Net Change	Pct of Insurers
1992	126	10	7.94%	4	3.17%	6	4.76%
1993	125	8	6.40%	9	7.20%	-1	(0.80%)
1994	114	8	7.02%	19	16.67%	-11	(9.65%)
1995	113	10	8.85%	11	9.73%	-1	(0.88%)
1996	112	11	9.82%	12	10.71%	-1	(0.89%)
1997	108	9	8.33%	13	12.04%	-4	(3.70%)
1998	110	10	9.09%	8	7.27%	2	1.82%
1999	116	15	12.93%	9	7.76%	6	5.17%
2000	116	11	9.48%	11	9.48%	0	0.00%
2001	107	8	7.48%	17	15.89%	-9	(8.41%)
2002	107	17	15.89%	17	15.89%	0	0.00%

Source: National Association of Insurance Commissioners.

Table 30—2002 Insurer Entries and Exits, By State

Insurers With Market Share > 2.0 Percent In Any State

State	Number of Insurers	Entries	Pct. of Insurers	Exits	Pct. of Insurers	Net Change	Pct. Of Insurers
AK	8	0	0.00%	1	12.50%	-1	(12.50%)
AL	5	1	20.00%	1	20.00%	0	0.00%
AR	10	5	50.00%	2	20.00%	3	30.00%
AZ	7	1	14.29%	4	57.14%	-3	(42.86%)
CA	12	4	33.33%	0	0.00%	4	33.33%
CO	7	2	28.57%	1	14.29%	1	14.29%
CT	11	5	45.45%	3	27.27%	2	18.18%
DC	8	2	25.00%	2	25.00%	0	0.00%
DE	9	1	11.11%	1	11.11%	0	0.00%
FL	12	3	25.00%	4	33.33%	-1	(8.33%)
GA	9	3	33.33%	5	55.56%	-2	(22.22%)
HI	6	1	16.67%	0	0.00%	1	16.67%
IA	10	3	30.00%	2	20.00%	1	10.00%
ID	9	2	22.22%	1	11.11%	1	11.11%
IL	8	2	25.00%	4	50.00%	-2	(25.00%)
IN	7	1	14.29%	4	57.14%	-3	(42.86%)
KS	12	3	25.00%	3	25.00%	0	0.00%
KY	14	7	50.00%	4	28.57%	3	21.43%
LA	9	3	33.33%	4	44.44%	-1	(11.11%)
MA	6	1	16.67%	0	0.00%	1	16.67%
MD	8	3	37.50%	1	12.50%	2	25.00%
ME	4	1	25.00%	1	25.00%	0	0.00%
MI	7	1	14.29%	1	14.29%	0	0.00%
MN	6	2	33.33%	2	33.33%	0	0.00%
MO	12	4	33.33%	4	33.33%	0	0.00%

State	Number of Insurers	Entries	Pct. of Insurers	Exits	Pct. of Insurers	Net Change	Pct. Of Insurers
MS	12	6	50.00%	1	8.33%	5	41.67%
MT	9	3	33.33%	4	44.44%	-1	(11.11%)
NC	8	1	12.50%	2	25.00%	-1	(12.50%)
ND	7	2	28.57%	3	42.86%	-1	(14.29%)
NE	10	3	30.00%	2	20.00%	1	10.00%
NH	9	2	22.22%	3	33.33%	-1	(11.11%)
NJ	6	1	16.67%	1	16.67%	0	0.00%
NM	7	2	28.57%	1	14.29%	1	14.29%
NV	13	5	38.46%	3	23.08%	2	15.38%
NY	6	1	16.67%	0	0.00%	1	16.67%
OH	10	4	40.00%	4	40.00%	0	0.00%
OK	5	1	20.00%	1	20.00%	0	0.00%
OR	8	1	12.50%	3	37.50%	-2	(25.00%)
PA	13	3	23.08%	2	15.38%	1	7.69%
RI	8	3	37.50%	3	37.50%	0	0.00%
SC	9	1	11.11%	0	0.00%	1	11.11%
SD	6	3	50.00%	2	33.33%	1	16.67%
TN	8	3	37.50%	2	25.00%	1	12.50%
TX	11	3	27.27%	5	45.45%	-2	(18.18%)
UT	9	3	33.33%	0	0.00%	3	33.33%
VA	15	4	26.67%	3	20.00%	1	6.67%
VT	8	1	12.50%	3	37.50%	-2	(25.00%)
WA	9	3	33.33%	1	11.11%	2	22.22%
WI	6	0	0.00%	4	66.67%	-4	(66.67%)
WV	6	2	33.33%	2	33.33%	0	0.00%
WY	5	1	20.00%	2	40.00%	-1	(20.00%)

Source: National Association of Insurance Commissioners.

Table 31—Aggregate Premium by Company Type, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Total	Stock	Mutual	Reciprocal	Surplus & Excess	Risk Retention Groups	Residual Market Mechanisms / State Insurance Funds
1991	5,682,630,494	2,767,286,877	1,408,959,695	1,216,593,431	48,550,716	42,985,470	198,254,305
1992	5,791,700,855	2,750,144,007	1,386,257,021	1,143,363,071	73,224,624	53,112,949	385,599,183
1993	5,674,856,600	2,852,952,302	1,401,207,866	1,152,729,940	92,515,350	30,010,206	145,440,934
1994	6,170,415,835	2,917,712,470	1,582,619,191	1,235,793,484	71,349,261	20,881,770	342,059,658
1995	5,950,519,576	2,860,458,175	1,564,465,666	1,215,403,983	144,341,743	75,216,183	90,633,825
1996	5,623,821,994	2,729,079,480	1,505,409,381	1,237,358,549	21,743,848	68,931,848	61,298,888
1997	5,259,208,598	2,795,161,195	1,284,800,006	989,793,492	26,773,150	114,238,227	48,442,528
1998	5,455,549,689	2,906,474,398	1,279,281,329	1,103,731,520	29,152,458	93,807,688	43,102,295
1999	5,316,103,356	3,002,218,898	1,342,114,590	797,584,945	12,863,282	124,552,977	36,768,664
2000	5,272,646,183	2,917,215,325	1,367,091,845	818,543,487	9,543,325	158,505,737	1,746,463
2001	6,084,358,830	3,229,019,505	1,543,244,434	1,089,155,769	19,434,852	201,959,645	1,544,626
2002	7,747,316,377	3,826,380,577	1,975,333,213	1,372,252,301	140,414,423	344,734,715	88,201,148

Source: National Association of Insurance Commissioners.

Table 32—Percent of Market Share by Company Type, Countrywide

Insurers With Market Share > 2.0 Percent In Any State
In 2002 $USD

Year	Total	Stock	Mutual	Reciprocal	Surplus and Excess Lines	Risk Retention Groups	Residual Mkt. Mechanisms/ State Funds
1991	5,682,630,494	48.70%	24.79%	21.41%	0.85%	0.76%	3.49%
1992	5,791,700,855	47.48%	23.94%	19.74%	1.26%	0.92%	6.66%
1993	5,674,856,600	50.27%	24.69%	20.31%	1.63%	0.53%	2.56%
1994	6,170,415,835	47.29%	25.65%	20.03%	1.16%	0.34%	5.54%
1995	5,950,519,576	48.07%	26.29%	20.43%	2.43%	1.26%	1.52%
1996	5,623,821,994	48.53%	26.77%	22.00%	0.39%	1.23%	1.09%
1997	5,259,208,598	53.15%	24.43%	18.82%	0.51%	2.17%	0.92%
1998	5,455,549,689	53.28%	23.45%	20.23%	0.53%	1.72%	0.79%
1999	5,316,103,356	56.47%	25.25%	15.00%	0.24%	2.34%	0.69%
2000	5,272,646,183	55.33%	25.93%	15.52%	0.18%	3.01%	0.03%
2001	6,084,358,830	53.07%	25.36%	17.90%	0.32%	3.32%	0.03%
2002	7,747,316,377	49.39%	25.50%	17.71%	1.81%	4.45%	1.14%

Source: National Association of Insurance Commissioners.

Table 33—2002 Aggregate Premiums By Company Type, By State

Insurers With Market Share > 2.0 Percent In Any State

State	Total	Stock	Mutual	Reciprocal	Surplus & Excess	Risk Retention Groups	Residual Market Mechanisms / State Insurance Funds
AK	14,003,263	4,121,941	4,980,560	4,411,104	489,658	.	.
AL	108,415,609	6,435,453	86,149,225	15,830,931	.	.	.
AR	50,545,650	15,322,950	25,977,743	6,827,493	2,417,464	.	.
AZ	154,418,088	34,263,603	102,954,827	12,870,730	4,328,928	.	.
CA	610,922,559	227,668,908	162,656,320	178,836,528	18,849,370	22,911,433	.
CO	91,980,090	79,489,046	.	12,491,044	.	.	.
CT	131,170,931	41,343,760	40,513,743	10,524,149	8,435,897	30,353,382	.
DC	34,157,141	10,576,186	.	21,673,080	1,907,875	.	.
DE	19,407,735	18,675,852	731,883	.	.	.	.
FL	684,090,258	318,750,042	52,976,737	259,403,764	36,189,511	16,770,204	.
GA	240,312,218	109,020,643	114,091,319	10,695,060	6,505,196	.	.
HI	31,747,528	11,142,565	.	19,287,945	1,317,018	.	.
IA	59,384,710	52,775,796	2,915,393	2,007,019	1,686,502	.	.
ID	22,923,293	11,755,878	2,162,076	9,005,339	.	.	.
IL	417,477,885	156,721,075	.	260,756,810	.	.	.
IN	77,742,083	34,267,703	38,201,527	2,782,231	2,490,622	.	.
KS	57,593,561	27,950,675	21,518,274	8,124,612	.	.	.
KY	101,497,608	71,767,489	10,705,276	9,798,339	6,012,169	3,214,335	.
LA	78,808,171	33,591,063	42,848,037	.	2,369,071	.	.
MA	197,649,185	20,673,210	127,197,733	.	.	49,778,242	.
MD	174,774,050	57,808,906	70,337,845	7,468,398	.	39,158,901	.
ME	33,342,064	8,341,283	23,848,816	1,151,965	.	.	.
MI	180,880,142	162,394,990	.	12,374,803	6,110,349	.	.
MN	52,617,749	51,237,109	1,380,640	.	.	.	.
MO	158,462,655	73,929,070	23,786,400	60,747,185	.	.	.
MS	55,858,263	20,339,068	1,577,664	23,144,339	10,797,192	.	.
MT	25,911,939	20,747,915	1,704,135	3,459,889	.	.	.
NC	166,924,837	62,795,084	90,300,551	7,288,200	6,541,002	.	.

State	Total	Stock	Mutual	Reciprocal	Surplus & Excess	Risk Retention Groups	Residual Market Mechanisms / State Insurance Funds
ND	15,773,888	13,879,191	.	544,052	1,350,645	.	.
NE	21,978,479	20,673,798	.	1,304,681	.	.	.
NH	30,907,252	15,867,086	13,402,276	.	1,637,890	.	.
NJ	354,604,582	354,604,582	.	.	.	.	.
NM	32,996,860	20,092,376	3,282,751	8,153,001	.	1,468,732	.
NV	72,490,699	53,541,177	9,235,670	7,768,657	1,945,195	.	.
NY	949,228,377	125,009,229	553,378,553	185,332,369	.	85,508,226	.
OH	375,988,980	258,196,578	87,546,211	30,246,191	.	.	.
OK	84,607,325	79,439,217	.	.	5,168,108	.	.
OR	72,051,557	33,174,624	25,244,059	9,492,157	4,140,717	.	.
PA	394,835,132	268,096,107	.	14,109,358	.	76,180,083	36,449,584
RI	28,736,079	12,613,827	13,929,010	.	1,482,732	710,510	.
SC	32,999,716	29,694,604	1,128,437	1,095,727	1,080,948	.	.
SD	13,622,920	12,968,377	.	654,543	.	.	.
TN	244,458,953	89,543,550	119,099,031	35,816,372	.	.	.
TX	457,606,457	338,332,361	.	69,569,700	.	.	49,704,396
UT	45,769,551	42,216,159	.	2,082,013	1,471,379	.	.
VA	146,114,107	77,971,788	28,497,039	22,703,284	4,883,985	12,058,011	.
VT	16,868,522	10,391,699	5,081,058	590,765	805,000	.	.
WA	160,606,709	71,255,796	65,992,394	16,735,863	.	6,622,656	.
WI	66,097,193	64,050,025	.	.	.	.	2,047,168
WV	79,709,666	79,709,666	.	.	.	.	.
WY	16,244,108	11,151,497	.	5,092,611	.	.	.

Source: National Association of Insurance Commissioners.

Table 34—2002 Percent of Market Share By Company Type, By State

Insurers With Market Share > 2.0 Percent In Any State

State	Total	Stock	Mutual	Reciprocal	Surplus and Excess Lines	Risk Retention Groups	Residual Mkt Mechanisms/ State Funds
AK	14,003,263	29.44%	35.57%	31.50%	3.50%	.	.
AL	108,415,609	5.94%	79.46%	14.60%	.	.	.
AR	50,545,650	30.32%	51.39%	13.51%	4.78%	.	.
AZ	154,418,088	22.19%	66.67%	8.33%	2.80%	.	.
CA	610,922,559	37.27%	26.62%	29.27%	3.09%	3.75%	.
CO	91,980,090	86.42%	.	13.58%	.	.	.
CT	131,170,931	31.52%	30.89%	8.02%	6.43%	23.14%	.
DC	34,157,141	30.96%	.	63.45%	5.59%	.	.
DE	19,407,735	96.23%	3.77%	.	.	.	.
FL	684,090,258	46.59%	7.74%	37.92%	5.29%	2.45%	.
GA	240,312,218	45.37%	47.48%	4.45%	2.71%	.	.
HI	31,747,528	35.10%	.	60.75%	4.15%	.	.
IA	59,384,710	88.87%	4.91%	3.38%	2.84%	.	.
ID	22,923,293	51.28%	9.43%	39.28%	.	.	.
IL	417,477,885	37.54%	.	62.46%	.	.	.
IN	77,742,083	44.08%	49.14%	3.58%	3.20%	.	.
KS	57,593,561	48.53%	37.36%	14.11%	.	.	.
KY	101,497,608	70.71%	10.55%	9.65%	5.92%	3.17%	.
LA	78,808,171	42.62%	54.37%	.	3.01%	.	.
MA	197,649,185	10.46%	64.36%	.	.	25.19%	.
MD	174,774,050	33.08%	40.25%	4.27%	.	22.41%	.
ME	33,342,064	25.02%	71.53%	3.45%	.	.	.
MI	180,880,142	89.78%	.	6.84%	3.38%	.	.
MN	52,617,749	97.38%	2.62%	.	.	.	.
MO	158,462,655	46.65%	15.01%	38.34%	.	.	.
MS	55,858,263	36.41%	2.82%	41.43%	19.33%	.	.
MT	25,911,939	80.07%	6.58%	13.35%	.	.	.
NC	166,924,837	37.62%	54.10%	4.37%	3.92%	.	.
ND	15,773,888	87.99%	.	3.45%	8.56%	.	.

State	Total	Stock	Mutual	Reciprocal	Surplus and Excess Lines	Risk Retention Groups	Residual Mkt Mechanisms/ State Funds
NE	21,978,479	94.06%	.	5.94%	.	.	.
NH	30,907,252	51.34%	43.36%	.	5.30%	.	.
NJ	354,604,582	100.00%	.	.	.	.	.
NM	32,996,860	60.89%	9.95%	24.71%	.	4.45%	.
NV	72,490,699	73.86%	12.74%	10.72%	2.68%	.	.
NY	949,228,377	13.17%	58.30%	19.52%	.	9.01%	.
OH	375,988,980	68.67%	23.28%	8.04%	.	.	.
OK	84,607,325	93.89%	.	.	6.11%	.	.
OR	72,051,557	46.04%	35.04%	13.17%	5.75%	.	.
PA	394,835,132	67.90%	.	3.57%	.	19.29%	9.23%
RI	28,736,079	43.90%	48.47%	.	5.16%	2.47%	.
SC	32,999,716	89.98%	3.42%	3.32%	3.28%	.	.
SD	13,622,920	95.20%	.	4.80%	.	.	.
TN	244,458,953	36.63%	48.72%	14.65%	.	.	.
TX	457,606,457	73.94%	.	15.20%	.	.	10.86%
UT	45,769,551	92.24%	.	4.55%	3.21%	.	.
VA	146,114,107	53.36%	19.50%	15.54%	3.34%	8.25%	.
VT	16,868,522	61.60%	30.12%	3.50%	4.77%	.	.
WA	160,606,709	44.37%	41.09%	10.42%	.	4.12%	.
WI	66,097,193	96.90%	.	.	.	.	3.10%
WV	79,709,666	100.00%	.	.	.	.	.
WY	16,244,108	68.65%	.	31.35%	.	.	.

Source: National Association of Insurance Commissioners.

Table 35—2002 Number of Insurers by Company Type, By State

Insurers With Market Share > 2.0 Percent In Any State

State	Total	Stock	Mutual	Reciprocal	Surplus & Excess	Risk Retention Groups	Residual Market Mechanisms/ State Insurance Funds
AK	8	4	2	1	1	0	0
AL	5	2	2	1	0	0	0
AR	10	6	2	1	1	0	0
AZ	7	3	1	2	1	0	0
CA	12	6	1	3	1	1	0
CO	7	5	0	2	0	0	0
CT	11	5	1	2	2	1	0
DC	8	5	0	1	2	0	0
DE	9	8	1	0	0	0	0
FL	12	6	1	3	1	1	0
GA	9	6	1	1	1	0	0
HI	6	2	0	3	1	0	0
IA	10	7	1	1	1	0	0
ID	9	6	1	2	0	0	0
IL	8	7	0	1	0	0	0
IN	7	4	1	1	1	0	0
KS	12	8	2	2	0	0	0
KY	14	8	1	2	2	1	0
LA	9	7	1	0	1	0	0
MA	6	2	2	0	0	2	0
MD	8	5	1	1	0	1	0
ME	4	2	1	1	0	0	0
MI	7	5	0	1	1	0	0
MN	6	5	1	0	0	0	0
MO	12	7	1	4	0	0	0

State	Total	Stock	Mutual	Reciprocal	Surplus & Excess	Risk Retention Groups	Residual Market Mechanisms/ State Insurance Funds
MS	12	7	1	2	2	0	0
MT	9	7	1	1	0	0	0
NC	8	4	2	1	1	0	0
ND	7	5	0	1	1	0	0
NE	10	9	0	1	0	0	0
NH	9	6	2	0	1	0	0
NJ	6	6	0	0	0	0	0
NM	7	4	1	1	0	1	0
NV	13	10	1	1	1	0	0
NY	6	3	1	1	0	1	0
OH	10	7	1	2	0	0	0
OK	5	4	0	0	1	0	0
OR	8	3	2	2	1	0	0
PA	13	8	0	1	0	3	1
RI	8	4	1	0	2	1	0
SC	9	6	1	1	1	0	0
SD	6	5	0	1	0	0	0
TN	8	5	1	2	0	0	0
TX	11	7	0	3	0	0	1
UT	9	7	0	1	1	0	0
VA	15	8	3	2	1	1	0
VT	8	4	2	1	1	0	0
WA	9	6	1	1	0	1	0
WI	6	5	0	0	0	0	1
WV	6	6	0	0	0	0	0
WY	5	3	0	2	0	0	0

Source: National Association of Insurance Commissioners.

Table 36—Analysis of Risk-Based Capital Action Levels, Countrywide

Insurers With Market Share > 2.0 Percent In Any State

Year	No Action Taken	Company Action Level	Regulatory Action Level	Authorized Control Level	Mandatory Control Level
1994	90	7	3	.	6
1995	95	3	3	.	5
1996	94	4	3	1	4
1997	98	3	1	.	3
1998	93	2	1	1	4
1999	93	2	.	2	3
2000	94	5	1	1	4
2001	91	2	4	1	5
2002	86	3	4	2	7

Source: National Association of Insurance Commissioners.

Table 37—Non-Economic Damage Caps, By State

State	Citation	Description	Judicial Decision
AL	§ 6-5-544	In 1987, Alabama enacted a statewide medical malpractice cap. The statute, which has never been repealed, provides that a medical malpractice plaintiff's recovery for non-economic losses, including punitive damages, cannot exceed $400,000.	The Alabama Supreme Court declared this statute to be unconstitutional in Moore v. Mobile Infirmity Ass'n, 592 So. 2d 156 (Ala. 1991).
AK	§ 09.17.010	Damages awarded by a court, arising out of a single injury or death cannot exceed $400,000 or the injured person's life expectancy in years multiplied by $8,000, whichever is greater. The upper-tier cap for severe disfigurement or physical impairment, the greater of $1,000,000 or the plaintiff's life expectancy, in years, multiplied by $25,000 The amended statute also clarifies that multiple injuries arising out of one incident invoke only one cap, and that consortium claims do not open up a second cap.	
AZ	None	Arizona does not place a cap on the amount of damages recoverable in a medical malpractice action. Article 2, § 31 of the Arizona constitution prohibits the enactment of any law limiting the damages one may recover for personal injury or death.	
AR	None	No medical malpractice caps.	
CA	Civ § 3333.2	The amount of damages for non-economic losses cannot exceed $250,000.	The cap on non-economic damages was held to be constitutional in Fein v. Permanente Medical Group, 38 Cal. 3d 137, 695 P.2d 665, 211 Cal. Rptr. 368 (1985). See also Yates v. Pollock, 194 Cal. App. 3d 195, 239 Cal. Rptr. 383 (1987) and Atkins v. Strayhorn, 223 Cal. App. 3d 1380, 273 Cal. Rptr. 231 (1990)
CO	§ 13-64-302	Damages for medical malpractice against a hospital or physician may not exceed $1,000,000 per patient, including any derivative claim by any other claimant. Of that $1,000,000, not more than $250,000 may be attributable to non-economic loss or injury. However, if the court finds that the future economic damages exceed this cap, it may award damages in excess of the limit.	This damage cap was held to be constitutional in Scholz v. Metropolitan Pathologists, P.C., 851 P.2d 901 (Colo. 1993).
CT	None	No medical malpractice caps.	
DE	None	No medical malpractice caps.	
DC	None	No medical malpractice caps.	
FL	§§ 766.207, 766.209	There is no cap unless voluntary binding arbitration is used to make a determination of damages. If a defendant refuses to accept the claimant's offer to arbitrate, the claimant, if successful at trial, is entitled to pre-judgment interest and up to 25% of the award in attorneys' fees. If a claimant refuses to accept a defendant's offer to arbitrate, his recovery will be limited to economic damages (but only 80 percent of lost wages) plus no more than $350,000 in non-economic damages. If the claimant does accept, his recovery will be limited to economic damage (but only 80 percent of lost wages) plus no more than $250,000 in non-economic damages, plus attorneys' fees of fifteen percent.	This damage cap was held to be constitutional in University of Miami v. Echarte, 618 So. 2d 189 (Fla.), cert. denied, 510 U.S. 915 (1993).
GA	§ 51-12-5.1	Georgia does not place a cap on the amount of compensatory damages that may be awarded. However, punitive damages are capped at $250,000, unless the claimant can successfully demonstrate that the defendant had an intent to harm	
HI	§§ 663-8.5, 663-8.7, 671-15	Non-economic damages that are recoverable in tort actions include damages for pain and suffering, mental anguish, loss of enjoyment of life, loss of consortium, and all other non-pecuniary losses or claims. The amount of damages recoverable for pain and suffering cannot exceed $375,000.	

ID	§ 6-1603	Non-economic damages for personal injury or wrongful death cannot exceed $400,000. The $400,000 cap has been adjusted on July 1 of each year since 1988 by the rate of increase in average wages in Idaho. The limitation on non-economic damage awards is inapplicable to causes of action arising out of willful or reckless conduct and to causes of action arising out of acts constituting a felony under state or federal law.	
IL	735 Ill. Comp. Stat. Ann. § 5/2-1115.1	In 1995, the Illinois legislature passed a $500,000 limit on non-economic damages in medical malpractice cases.	The medical malpractice cap was declared unconstitutional in Best v. Taylor Machine Works, 179 Ill. 2d 367, 689 N.E.2d 1057 (1997
IN	§ 34-18-14-3	A health care provider is not liable for an amount in excess of $250,000 for an occurrence of malpractice. Damages for all providers cannot exceed $1,250,000 per occurrence of malpractice.	The cap was held to be constitutional in Johnson v. St. Vincent Hospital, 273 Ind. 374, 394-401, 404 N.E.2d 585, 598-602 (1980).
IA	None	No medical malpractice caps.	
KS	None	In 1986, Kansas enacted a statewide medical malpractice cap.	The medical malpractice cap was declared unconstitutional in Kansas Malpractice Victims Coalition v. Bell, 243 Kan. 333, 757 P.2d 251 (1988).
KY	None	No medical malpractice caps.	
LA	§§ 40:1299:42, 40:1299:44	The Louisiana Medical Malpractice Act established a Patient's Compensation Fund. State health care providers are automatically entitled to be covered by the fund. Private health care providers may join the fund if they file proof that they are covered by a policy of malpractice liability insurance in an amount of at least $100,000 per claim and pay the surcharge assessed by the Louisiana Insurance Rating Commission. The liability of each qualified health care provider is limited to $100,000 plus interest per patient per incident. Judgments, settlements, or binding arbitration orders in excess of $100,000 per provider are paid out of the fund. The claimant's total recovery is limited to $500,000 plus future medical costs.	The Louisiana Supreme Court has held that the limit on damages of $500,000 plus future medical costs is constitutional. Butler v. Flint Goodrich Hospital of Dillard University, 607 So. 2d 517 (La. 1992), cert. denied, 508 U.S. 909 (1993).
ME	None	No medical malpractice caps.	
MD	Cts. & Jud. Proc. § 11-108	The limit on recoverable non-economic damages for any personal injury cause of action for medical malpractice cannot exceed $500,000. Beginning Oct. 1, 1995, and every Oct. 1 thereafter, the limit on non-economic damages is increased by $15,000.	
MA	§ 231: 60H	In any action for malpractice, the court may not award the plaintiff more than $500,000 for pain and suffering, loss of companionship, embarrassment and other items of general damages.	
MI	§§ 600.1483, 600.6304	The total amount of damages for non-economic loss recoverable by all plaintiffs cannot exceed $280,000. Exceptions allow the court, in some circumstances, to maximize damages to no more than $500,000. The court will reduce a jury award in excess of this amount.	
MN	None	No medical malpractice caps.	
MS	§ 85-5-7	The limit for non-economic damages cannot exceed $500,000 if the claim was filed after passage of House Bill No. 2, but before 07/01/2011. Any claim filed on or after 07/01/2011, but before 07/01/2017, the amount of non-economic damages cannot exceed $750,000. For claims on or after 07/01/2017, the amount of non-economic damages cannot exceed $1,000,000.	
MO	§ 538.210 See also Missouri HB 273	In 1986, the Missouri General Assembly enacted a $350,000 per occurrence limit for non-economic damages. This limit is subject to annual adjustments by the Director of the Division of Insurance to reflect increases in the consumer price index. In 2003, the Director of Insurance set the limit for non-economic damages at $557,000.	The medical malpractice cap was declared constitutional in Adams v. Children's Mercy Hospital, 832 S.W.2d 898 (Mo.), cert. denied, 506 U.S. 991 (1992).

MT	§ 25-9-411	In a malpractice claim or claim against one or more health care providers based on a single incident of malpractice, an award for past and future damages for non-economic loss cannot exceed $250,000.	
NE	§ 44-2825	A health care provider is not liable to any patient or his or her representative for an amount in excess of $200,000. The total amount recoverable under the Nebraska Hospital-Medical Liability Act from any and all health care providers cannot exceed $1.25 million, for any occurrence after 12/31/92. No specific cap for non-economic damages.	
NV	§ 41A.031	The non-economic damages awarded for medical malpractice or dental malpractice cannot exceed $350,000. This amount can vary with an exemption for certain conditions. Exemptions to the stated limit must not exceed the amount of money remaining under a professional liability insurance policy limit covering the defendant after subtracting the economic damages awarded to that plaintiff. This limitation does not apply to damages for medical malpractice unless the defendant was covered by professional liability insurance at the time of the occurrence and on the date the insurer receives notice of the claim.	
NH	§§ 507-C:7, 508:4-d	In 1986, New Hampshire enacted a medical malpractice cap that limited total damages to $875,000.	On two occasions, the New Hampshire Supreme Court declared the medical malpractice cap unconstitutional in Carson v. Maurer, 120 N.H. 925, 424 A.2d 825 (1980) and Brannigan v. Usitalso, 134 N.H. 50, 587 A.2d 1232 (1991).
NJ	New Jersey Medical Malpractice Bills A3080 A2931 S2035	A $250,000 cap would limit non-economic damages, unless the plaintiff is "hemiplegic, paraplegic, or quadriplegic, the plaintiff has permanently impaired cognitive capacity rendering him incapable of independent daily living, or there has been a permanent loss of or damage to a reproductive organ resulting in the inability to procreate." In those cases the cap would be $500,000.	
NM	§ 41-5-6	Except for punitive damages and medical care and related benefits, the amount recoverable from any injury or death as a result of malpractice cannot exceed $600,000 per occurrence.	
NY	None	No medical malpractice cap.	
NC	None	No medical malpractice cap.	
ND	§ 32-42-02	For claims arising after April 1, 1995, there is a $500,000 cap on non-economic damages in medical malpractice cases. This applies regardless of the number of defendants, the number of theories, or the number of family members who sue.	
OH	Ohio Senate Bill 281 Effective 04/11/03	The cap on non-economic damages is limited to the greater of $250,000 or three times the plaintiff's economic loss to a maximum of $350,000 for each plaintiff, or $500,000 each occurrence; $500,000 for each plaintiff, or $1,000,000 each occurrence for injuries for permanent and substantial physical deformity, loss of limb or bodily organ system, or permanent physical functional injury that deprives the person of independently caring for oneself.	
OK	None	No medical malpractice cap.	
OR	§ 18.560	In 1987, the Oregon legislature established a $500,000 cap on damages for non-economic loss in bodily injury and death cases.	The Oregon Supreme Court ruled it to be unconstitutional under most circumstances. It held that the damage cap violates the right to a jury trial provided by the state constitution whenever the cap is applied to a claim. Lakin v. Senco Products, Inc., 329 Or. 62, 987 P.2 463, 1999 WL 498088 (July 15, 1999).

PA	Act 13 - HB 1802 Approved by Gov. 03/20/02	The liability limit of the Medical Liability Catastrophe Loss Fund for each healthcare provider that conducts more than 50% of its healthcare business in Pennsylvania and for each hospital cannot exceed $700,000 per occurrence and $2.1 million per aggregate. For each participating healthcare provider, the limit of liability cannot exceed $500,000 per occurrence and $1.5 million per aggregate.	
RI	None	No medical malpractice cap.	
SC	None	No medical malpractice cap.	
SD	§ 21-3-11	In any medical malpractice action in South Dakota, the total general damages cannot exceed $500,000.	This statute formerly provided for a cap of $1,000,000 on all damages, whether economic or non-economic. The cap on all damages, however, was found to violate the state constitution. Knowles v. U.S., 544 N.W.2d 183 (S.D. 1996). The Knowles decision automatically revived the form of the statute, as it existed prior to being amended in 1985, at which time it provided for a $500,000 cap on general damages.
TN	None	No medical malpractice cap.	
TX	Tex. Rev. Civ. Stat. Ann. art. 4590i, §§ 11.02, 11.04	Texas law limits damages in a medical malpractice action for wrongful death to $500,000 (in 1977 dollars). This amount is adjusted annually for inflation, and is now approximately $1,300,000.	The statute was intended to apply to all medical malpractice cases, but has been held to be unconstitutional except with respect to wrongful death. Rose v. Doctors Hospital, 801 S.W.2d 841 (Tex. 1990).
UT	§ 78-14-7.1	In a medical malpractice action, non-economic damages cannot exceed $250,000. When indexed for inflation, the limit is $400,000.	
VT	None	No medical malpractice cap.	
VA	§ 8.01-581.15	Virginia imposes a $1,500,000 damage cap on recoveries for bodily injury or death in medical malpractice cases occurring after August 1999. Each year the cap is increased by $50,000 annually.	
WA	§ 4.56.250	In 1986, Washington enacted a statewide medical malpractice cap.	The Supreme Court of Washington held that the statutory cap on non-economic damages is an unconstitutional infringement of the right to trial by jury. Sofie v. Fireboard Corp., 112 Wash. 2d 636, 771 P.2d 711 (1989).
WV	§ 55-7B-8	In 1986, West Virginia enacted a statewide medical malpractice cap. In West Virginia the jury is instructed that the maximum it may award against a health care provider for non-economic loss is $1,000,000.	The medical malpractice cap was declared to be constitutional in Robinson v. Charleston Area Medical Center, 186 W. Va. 720, 414 S.E.2d 877 (1991).
WI	§ 893.55	Except in death cases, for any medical malpractice occurrence on or after May 25, 1995, the total limit on non-economic damages from all health care providers is $350,000. This limit is adjusted annually for inflation.	
WY	None	No medical malpractice cap.	

Source: National Association of Insurance Commissioners.

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APPENDIX A

MINIMUM INSURER CAPITAL AND SURPLUS

REQUIREMENTS—BY STATE

ALABAMA §§ 27-3-7 to 27-3-9

		CAPITAL	SURPLUS
1.	Life	$800,000	150% / 100%
2.	Disability	500,000	150% / 100%
3.	Life and Disability	800,000	150% / 100%
4.	New Domestic Stock Life Insurers	1,000,000	1,000,000
5.	Property	300,000	150% / 100%
6.	Casualty	400,000	150% / 100%
7.	Marine	300,000	150% / 100%
8.	Surety	350,000	150% / 100%
9.	Title	200,000	150% / 100%
10.	Multiple Lines	500,000	150% / 100%

Alabama has a 5 year seasoning requirement; if an insurer has not transacted business for 5 years, is required to maintain surplus of 150% of capital; otherwise, 100% of capital is to be maintained as surplus. Insurers are also subject to risk-based capital requirements.

ALASKA §§ 21.09.070

		BASIC CAPITAL OR BASIC SURPLUS	ADD'L SURPLUS WHEN FIRST AUTHORIZED	ADDITIONAL MAINTAINED SURPLUS
1.	Life	$1,000,000	$1,000,000	$750,000
2.	Health	1,000,000	1,000,000	750,000
3.	Life and Health	1,250,000	1,250,000	1,000,000
4.	Property	1,000,000	1,000,000	750,000
5.	Casualty, excluding vehicle	1,000,000	1,000,000	750,000
6.	Marine and Transportation	1,000,000	1,000,000	750,000
7.	Surety	1,000,000	1,000,000	750,000
8.	Title	500,000	500,000	250,000
9.	Vehicle	1,000,000	1,000,000	750,000
10.	Any three or more of numbers 2, 4-7, and 9	3,000,000	3,000,000	2,250,000
11.	Legal Expenses	1,000,000	1,000,000	750,000
12.	Mortgage Guarantee	1,000,000	1,000,000	750,000

Insurers are also subject to risk-based capital requirements.

ARIZONA §§ 20-210 to 20-212; 20-1085

		CAPITAL	SURPLUS
1.	Life+	$300,000	$150,000
2.	Disability	300,000	150,000
3.	Life and Disability+	400,000	200,000
4.	Property	600,000	300,000
5.	Casualty	600,000	300,000
6.	Marine and Transportation	600,000	300,000
7.	Surety	1,000,000	500,000

		CAPITAL	SURPLUS
8.	Title*+	500,000	250,000
9.	Vehicle	600,000	300,000
10.	Multiple Lines (any two or more numbers 4 through 7	1,000,000	500,000
11.	Life and disability reinsurer	100,000	50,000
12.	Credit life and disability reinsurer	75,000	

* Does not apply to mutual insurers + Does not apply to reciprocal insurers
Director may require additional capital based on type, volume and nature of business conducted. Insurers are also subject to risk-based capital requirements.

Except for life and disability combination and title, any insurer may be authorized to transact lawful combination with additional capital of $200,000 per kind over the largest amount required.

ARKANSAS §§ 23-63-205, 23-63-207, 23-63-1301 to 23-63-1316

		COMPANIES APPLYING AFTER 12/31/01 MUST MAINTAIN THE FOLLOWING CAPITAL OR SURPLUS	COMPANIES AUTHORIZED PRIOR TO 1/1/02 MAY MAINTAIN CAPITAL OR SURPLUS PREVIOUSLY AUTHORIZED	MAINTAIN MINIMUM SURPLUS
1.	Life	$750,000	$500,000	15% of capital or surplus
2.	Accident and Health	750,000	500,000	15% of capital or surplus
3.	Life and Accident and Health	750,000	500,000	15% of capital or surplus
4.	Property	500,000	250,000	15% of capital or surplus
5.	Casualty	750,000	500,000	15% of capital or surplus
6.	Surety	750,000	500,000	15% of capital or surplus
7.	Marine	500,000	250,000	15% of capital or surplus
8.	Title	250,000	100,000	15% of capital or surplus
9.	Property, Casualty, Surety & Marine	750,000	750,000	15% of capital or surplus
10.	Combination of Other Lines		750,000	

Commissioner may require insurer to possess and maintain additional capital and surplus in addition to that required above based on the types, volume or nature of the business transacted by the insurer plus insurers shall maintain a special surplus of 15% of the capital or surplus reported in last annual statement required in addition to the above. Insurers also are subject to risk-based capital requirements.

CALIFORNIA §§ 700.01 to 700.05, 10510, 15011, 12359

		CAPITAL	SURPLUS
1.	Life	$2,250,000	100% of capital
2.	Life and Disability	2,500,000	100% of capital
3.	Title	250,000	100% of capital
4.	Fire	350,000	100% of capital
5.	Marine	350,000	100% of capital
6.	Surety	350,000	100% of capital
7.	Disability	250,000	100% of capital
8.	Plate Glass	100,000	100% of capital
9. 10. 11. 12.	Liability Workers' Compensation Common Carrier Liability Life and any of above 3 lines	For any or all of these $300,000 $2,550,000 for any or all of them	100% of capital 100% of capital
13.	Boiler and Machinery	100,000	100% of capital
14.	Burglary	100,000	100% of capital
15.	Credit	100,000	100% of capital
16.	Sprinkler	100,000	100% of capital
17.	Team and Vehicle	100,000	100% of capital
18.	Automobile	200,000	100% of capital plus $200,000
19.	Aircraft	100,000	100% of capital
20.	Miscellaneous	100,000	100% of capital
21.	Mortgage	250,000	100% of capital
22.	Mortgage Guaranty	1,000,000	100% of capital

Insurers transacting multiple lines shall have $2,600,000 or the aggregate as set forth above, whichever is lower.
Incorporated insurers not transacting life lines, fire, marine or surety shall have excess capital of $300,000 over the aggregate amount set forth above.
For admission, no incorporated insurer shall have less than $1,000,000 nor more than $2,600,000 capital.
Insurers also are subject to risk-based capital requirements.

COLORADO § 10-3-201, Reg. 3-1-11

	LINE	CAPITAL AND SURPLUS
1.	Life	$1,500,000
2.	Fire	1,500,000
3.	Casualty	1,500,000
4.	Multiple Line	2,000,000
5.	Title Insurance	750,000

Insurers also are subject to risk-based capital requirements.

CONNECTICUT § 38a-72, Reg. 38a-72-1 to 38a-72-13

		CAPITAL	SURPLUS	MUTUAL SURPLUS
1.	Life	$1,000,000	$2,000,000	$3,000,000
2.	Mortgage Guaranty	2,000,000	2,000,000	4,000,000
3.	Health	500,000	500,000	1,000,000
4.	Marine	500,000	250,000	750,000
5.	Fidelity and Surety	500,000	500,000	1,000,000
6.	Title	500,000	500,000	1,000,000
7.	Worker's Compensation	500,000	500,000	1,000,000
8.	Liability	500,000	500,000	1,000,000
9.	Property	500,000	250,000	750,000
10.	Financial Guaranty	15,000,000	60,000,000	75,000,000
11.	Life & Health	1,000,000	2,000,000	3,000,000
12.	Residual Value	2,000,000	1,000,000	3,000,000
13.	Reinsurance (P&C)	2,000,000	2,000,000	4,000,000
14.	Reinsurance (Life)	1,000,000	2,000,000	3,000,000
15.	All Lines-Max. Required.	2,000,000	2,000,000	4,000,000

Insurers also are subject to risk-based capital requirements.

DELAWARE tit. 18 § 511

		CAPITAL	SURPLUS
1.	Life	$300,000	$150,000
2.	Health	300,000	150,000
3.	Life and Health	350,000	200,000
4.	Property	300,000	150,000
5.	Casualty	400,000	200,000
6.	Marine & Transportation	350,000	175,000
7.	Surety	300,000	150,000
8.	Title	250,000	125,000
9.	Multiple	500,000	250,000

Insurers also are subject to risk-based capital requirements.

DISTRICT OF COLUMBIA §§ 31-4408, 31-4501, 31-2502.13

		CAPITAL	SURPLUS
LIFE COMPANIES	Capital Stock Company	$1,000,000	50% of capital stock
	Mutual Company	N/A	1,500,000
FIRE AND CASUALTY COMPANIES	Capital Stock Company	300,000	300,000
	Domestic Mutual Company	N/A	300,000
	Foreign and Alien Mutual Company	N/A	400,000

Insurers are also subject to risk-based capital requirements.

FLORIDA §§ 624.407, 624.408, 628.161, 626.918

STOCK COMPANIES	INITIAL SURPLUS	MAINTENANCE LEVEL SURPLUS
P/C insurer	$5,000,000	$4,000,000
Any other insurer	2,500,000	1,500,000
or alternative calculations based on liabilities.		
MUTUALS		
1. Health	$300,000	$200,000
2. Property	200,000	150,000
3. Casualty	300,000	200,000
4. Any Combination 1,2,3	400,000	250,000
5. Life	2,500,000	1,500,000

For any property and casualty insurer holding a certificate of authority on December 1, 1993, the following amounts apply instead of the $4,000,000 required above:

	DATES	MAINTENANCE LEVEL SURPLUS
1.	On December 31, 2000, and until December 30, 2001	2,750,000
2.	On December 31, 2001, and until December 30, 2002	3,000,000
3.	On December 31, 2002, and until December 30, 2003	3,250,000
4.	On December 31, 2003, and until December 30, 2004	3,600,000
5.	On December 31, 2004, and thereafter	4,000,000

Insurers are also subject to risk-based capital requirements.

GEORGIA §§ 33-3-6 and 33-3-7

	INITIAL CAPITAL OR MINIMUM SURPLUS	MAINTAIN CAPITAL OR SURPLUS
All insurers	$1,500,000	$1,500,000

Maintain larger of paid-in capital or 50% paid in capital stock or surplus.
Insurers are also subject to risk-based capital requirements.

HAWAII §§ 431:3-205 to 431:3-208

		CAPITAL (STOCK) OR UNIMPAIRED SURPLUS (MUTUAL)	SURPLUS ADDITIONAL AMOUNT REQUIRED OF ALL INSURERS THAT HAVE BEEN INSURERS LESS THAN FIVE YEARS
1.	Life	$600,000	50% capital
2.	Accident and Health	450,000	50% capital
3.	Property	750,000	50% capital
4.	Marine and Transportation	1,000,000	50% capital

		CAPITAL (STOCK) OR UNIMPAIRED SURPLUS (MUTUAL)	SURPLUS ADDITIONAL AMOUNT REQUIRED OF ALL INSURERS THAT HAVE BEEN INSURERS LESS THAN FIVE YEARS
5.	Vehicle	1,000,000	50% capital
6.	General Casualty	1,500,000	50% capital
7.	Surety	1,000,000	50% capital
8.	Title	400,000	50% capital
9.	Combination of Classes: Amount equal to the sum required of each individual class of insurance, total not to exceed $2.5 million.		

Insurers also are subject to risk-based capital requirements.

IDAHO §§ 41-313; 41-3613

	REQUIREMENTS FOR COMPANIES	PAID-UP CAPITAL STOCK OR BASIC SURPLUS	ADDITIONAL SURPLUS
1.	Life	1,000,000	1,000,000
2.	Disability	1,000,000	1,000,000
3.	Life and disability	1,000,000	1,000,000
4.	Property	1,000,000	1,000,000
5.	General casualty	1,000,000	1,000,000
6.	Marine and transportation	1,000,000	1,000,000
7.	Vehicle	1,000,000	1,000,000
8.	Surety	1,000,000	1,000,000
9.	Any two of the following kinds of insurance: property, marine and transportation, general casualty, vehicle, surety, disability	1,000,000	1,000,000
10.	Title	500,000	500,000
11.	Multiple lines (all insurance except life and title insurance	1,000,000	1,000,000
12.	Mortgage guaranty insurance	1,500,000	1,500,000

An insurance company holding a valid certificate of authority to transact insurance in this state immediately prior to 1/1/95 shall have a period of three years from and after that date within which to comply with the increase in capital and surplus requirements. Insurers are also subject to risk-based capital requirements.

ILLINOIS 215 ILCS 5/4, 5/13, 5/43

CLASS 1: LIFE, ACCIDENT AND HEALTH	CLASS 2: CASUALTY, FIDELITY AND SURETY	CLASS 3: FIRE AND MARINE, ETC.
a. Life	a. Accident and Health	a. Fire
b. Accident and Health	b. Vehicle	b. Elements
c. Legal Expense	c. Liability	c. War, Riot and Explosion

CLASS 1: LIFE, ACCIDENT AND HEALTH	CLASS 2: CASUALTY, FIDELITY AND SURETY	CLASS 3: FIRE AND MARINE, ETC.
	d. Workers' Compensation	d. Marine and Transportation
	e. Burglary and Forgery	e. Vehicle
	f. Glass	f. Property Damage, Sprinkler Leakage and Crop
	g. Fidelity and Surety	g. Other Fire and Marine Risks
	h. Miscellaneous	h. Contingent Losses
	i. Other Casualty Risks	i. Legal Expense
	j. Contingent Losses	
	k. Livestock and Domestic Animals	
	l. Legal Expense	

	STOCK INSURERS	CAPITAL	INITIAL SURPLUS	SURPLUS TO BE MAINTAINED*
1.	Class 1a, b and/or c	$1,000,000	$1,000,000	$500,000
2.	Class 2a, b, c, d, g, h, i, and/or j	1,000,000	1,000,000	500,000
3.	Class 2e, f, k, l and/or Class 3 (any, all of or combination of)	400,000	600,000	300,000
4.	Class 2 - any and all clauses except e, f, k, l and Class 3 - any and all clauses	1,000,000	1,000,000	500,000
5.	Class 2 - f or k only**	100,000	150,000	50,000

	MUTUAL INSURERS	INITIAL SURPLUS	SURPLUS TO BE MAINTAINED*
1.	Class 1a, b and/or c	$2,000,000	$1,500,000
2.	Class 2a, b, c, d, g, h, i, and/or j	2,000,000	1,500,000
3.	Class 2e, f, k, l and/or Class 3 (any, all of or combination of)	1,000,000	700,000
4.	Class 2 - any and all clauses except e, f, k, l and Class 3 - any and all clauses	2,000,000	1,500,000
5.	Class 2 - f or k only	250,000	150,000

*In addition to minimum original capital.
** Provided company shall not expose itself to any loss on any one risk in an amount exceeding $5,000.
Insurers also are subject to risk-based capital requirements.

INDIANA §§ 27-1-5-1, 27-1-6-14, 27-1-6-15

CLASS 1:	CLASS 2:		CLASS 3:
a. Life and Annuities	a. Accident, Health and Disability	h. Liability	a. Fire, Wind, Hail, Loot, Riot
b. Accident and Health	b. Employers Liability, Workers' Comp.	i.. Credit	b. Crop
c. Variable Life and Annuities	c. Burglary and Theft	j. Title	c. Water and Fire Extinguisher Damage

CLASS 1:	CLASS 2:		CLASS 3:
	d. Glass	k. Fidelity and Surety	d. Marine and Transportation
	e. Boiler and Machinery	k(1)Fidelity and Surety without bail bonds	
	f. Motor Vehicle Liability	l. Other Casualty	
	g. Water Damage	m. Legal Expense	

	STOCK INSURERS:	PAID-IN CAPITAL	SURPLUS
	Organized Prior to 3/7/67:		
1.	One or More Kind of Class 1	$200,000	$1,000,000/250,000#
2.	One or More of Class 2 except k	200,000	1,000,000/250,000#
3.	Any 2 Kinds of Class 2 except k	300,000	1,000,000/250,000#
4.	3 or More Kinds of Class 2 except k	400,000	1,000,000/250,000#
5.	One or More Kind Class 3	400,000	1,000,000/250,000#
6.	One or More Kinds under Class 2 and Class 3	750,000	1,000,000/250,000#
7.	One or more Kinds of Class 2 including k	750,000	1,000,000/250,000#
	Organized after 3/6/67 and prior to 7/1/77:		
1.	One or More Kind of Class 1	400,000	1,000,000/250,000#
2.	Any One Kind of Class 2 except k	400,000	1,000,000/250,000#
3.	One or More Kind Class 3	400,000	1,000,000/250,000#
4.	One or More Kinds under Class 2 and Class 3	750,000	1,000,000/250,000#
5.	One or more Kinds of Class 2 including k	750,000	1,000,000/250,000#
	Organized after 6/30/77:	1,000,000	1,000,000/250,000#

	MUTUAL INSURERS:	MINIMUM SURPLUS	
	Organized prior to 7/1/77:	250,000	
1.	One or More Kinds under Class 2 and Class 3, excluding 2k	750,000	
2.	One or More Kinds of Class 2 including k	1,000,000	
3.	One or More Kinds under Class 2 and Class 3, including 2k	1,000,000	
	Organized after 6/30/77:		2,000,000/1,250,000#

First amount is initial requirement/second amount is that to be constantly maintained. The commissioner may require additional capital and surplus based on type, volume and nature of business transacted. Insurers are also subject to risk-based capital requirements.

IOWA §§ 508.5, 515.8

		CAPITAL	SURPLUS
1.	Life	$5,000,000	$5,000,000
2.	Other Than Life	5,000,000	5,000,000

Commissioner has discretion to require greater amount when risk-based circumstances require it.
Insurers are also subject to risk-based capital requirements.

KANSAS §§ 40-401, 40-402, 40-901, 40-1102, 40-1103, 40-1104, 40-3503, 40-1519, 40-1027, 40-1001, 40-1001a

		CAPITAL	SURPLUS
1.	Life	$600,000	$600,000
2.	Single Line (Property or Casualty)	450,000	300,000
3.	Multiple Line (Property or Casualty)	900,000	600,000
4.	Mutual Life		1,200,000
5.	Mutual Single Line (Property or Casualty)		750,000
6.	Mutual Multiple Line		1,500,000
7.	Mutual Fire		400,000
8.	Mutual Fire and Tornado		450,000
9.	Stock Mortgage Guaranty	1,000,000	1,000,000
10.	Mutual Mortgage Guaranty		2,000,000
11.	Title	300,000	200,000

Insurers also are subject to risk-based capital requirements.

KENTUCKY § 304.3-120

		CAPITAL	SURPLUS
1.	Stock Insurers	$1,000,000	$2,000,000
2.	Foreign Mutual, Reciprocal and Lloyd's Insurers	1,000,000	2,000,000

Insurers are also subject to risk-based capital requirements.

LOUISIANA §§ 22:71 to 22:71.2, 22:121.2

Paid-In capital and surplus requirements for companies admitted prior to 9/1/89:

		CAPITAL	SURPLUS
1.	Life	$100,000	$200,000
2.	Health and Accident	100,000	200,000

		CAPITAL	SURPLUS
3.	Life, Accident and Health	100,000	200,000
4.	Vehicle Physical Damage	100,000	150,000
5.	Title - licensed prior to 9/1/85 - licensed on or after 9/1/85	 50,000 100,000	 25,000 200,000
6.	Industrial Fire	200,000	100,000
7.	Workers' Comp. Only (licensed as of 7/27/66)	100,000	50,000
8.	Crop and Livestock Only (licensed as of 7/27/66)	100,000	150,000
9.	Vehicle	650,000	350,000
10.	Liability	650,000	350,000
11.	Burglary and Forgery	650,000	350,000
12.	Workers' Compensation	650,000	350,000
13.	Glass	650,000	350,000
14.	Fidelity and Surety	650,000	350,000
15.	Fire and Extended Coverage	650,000	350,000
16.	Steam Boiler and Sprinkler Leakage	650,000	350,000
17.	Crop and Livestock	650,000	350,000
18.	Marine and Transportation	650,000	350,000
19.	Miscellaneous	650,000	350,000
20.	All Lines, except Life and Title	1,000,000	

Capital and surplus requirements for companies admitted on or after 9/1/89:

		PAID-IN CAPITAL	MINIMUM SURPLUS	OPERATING SURPLUS
1.	Life	$100,000	$1,900,000	$1,000,000
2.	Health and Accident	100,000	1,900,000	1,000,000
3.	Life, Accident and Health	100,000	1,900,000	1,000,000
4.	Vehicle Physical Damage	100,000	1,150,000	1,000,000
5.	Title	100,000	400,000	500,000
6.	Industrial Fire	200,000	800,000	1,000,000
7.	Vehicle	650,000	1,350,000	1,000,000
8.	Liability	650,000	1,350,000	1,000,000
9.	Workers' Compensation	650,000	1,350,000	1,000,000
10.	Burglary and Forgery	650,000	1,350,000	1,000,000
11.	Glass	650,000	1,350,000	1,000,000
12.	Fidelity and Surety	650,000	1,350,000	1,000,000
13.	Fire and Extended Coverage	650,000	1,350,000	1,000,000
14.	Steam Boiler and Sprinkler	650,000	1,350,000	1,000,000
15.	Crop and Livestock	650,000	1,350,000	1,000,000
16.	Marine and Transportation	650,000	1,350,000	1,000,000
17.	Miscellaneous	650,000	1,350,000	1,000,000
18.	All Lines, except Life and Title	650,000	1,350,000	1,000,000

Insurers also are subject to risk-based capital requirements.

MAINE 24-A §§ 410, 411

		PAID-IN CAPITAL (STOCK) OR BASIC SURPLUS (MUTUAL)	INITIAL FREE SURPLUS
1.	Life*	$1,500,000	$1,500,000
2.	Health	1,000,000	1,000,000
3.	Life and Health*	2,500,000	2,500,000
4.	Casualty	1,500,000	1,500,000
5.	Marine and Transportation	1,500,000	1,500,000
6.	Property	1,000,000	1,000,000
7.	Surety	1,500,000	1,500,000
8.	Title	500,000	500,000
9.	Multiple Line	2,500,000	2,500,000
10.	All lines (life and one or more lines except health)	5,000,000	5,000,000
11.	Legal services (in addition to above)	500,000	
12.	Financial Guaranty (monoline)	2,500,000	47,500,000

*Does not apply to reciprocal insurers.

A domestic mutual insurer holding a certificate of authority prior to January 1, 1989 may continue to write a business if it maintains the following basic surplus:

1.	Life	$1,000,000
2.	Health	500,000
3.	Life and Health	1,250,000
4.	Casualty	750,000
5.	Marine and Transportation	1,000,000
6.	Property	500,000
7.	Surety	1,000,000
8.	Title	350,000
9.	Multiple Line	2,500,000

Life insurers also are subject to risk-based capital requirements.

MARYLAND Ins. §§ 4-103 to 4-105, 4-301 to 4-314

	COMMENCING BUSINESS PRIOR TO 7/1/65:	CAPITAL	SURPLUS
1.	Life, including annuities and health	$200,000	#
2.	Health	100,000	#
3.	Property and Marine, excluding #5	250,000	#
4.	Title	250,000	#
5.	Wet Marine and Transportation	250,000	#
6.	Casualty, excluding #7 and #8	250,000	#
7.	Vehicle Liability	250,000	#*
8.	Workers' Compensation	250,000	#
9.	Surety	250,000	#

	COMMENCING BUSINESS PRIOR TO 7/1/65:	CAPITAL	SURPLUS
10.	2 or more of these listed lines	Lesser of $500,000 or sum total	
	COMMENCING BUSINESS ON OR AFTER 7/1/65 AND BEFORE 7/1/91:		
1.	Life, including annuities and health	500,000	#
2.	Health	250,000	#
3.	Property and Marine, excluding #5	250,000	#
4.	Title	250,000	#
5.	Wet Marine and Transportation	250,000	#
6.	Casualty, excluding #7 and #8	250,000	#
7.	Vehicle Liability	250,000	#
8.	Workers' Compensation	250,000	#
9.	Surety	250,000	#
10.	2 or more of these listed lines	500,000	#

#Minimum Surplus Required: (1) new insurers need minimum surplus of 150% of minimum capital stock; (2) insurer which commenced business on or after 7/1/66 shall maintain surplus in an amount not less than 100% of minimum capital required; (3) an insurer which commenced business before 7/1/66 shall maintain surplus in an amount not less than 50% of minimum capital required.

*Vehicle Liability insurers that commenced business prior to 7/1/66 must also maintain $300,000 additional surplus.

	COMMENCING BUSINESS ON OR AFTER 7/1/91:	CAPITAL	SURPLUS
1.	Life, including annuities	$1,500,000	#
2.	Health	750,000	#
3.	Property and Marine, excluding #5	750,000	#
4.	Title	750,000	#
5.	Wet Marine and Transportation	750,000	#
6.	Casualty, excluding #7 and #8	750,000	#
7.	Vehicle Liability	750,000	#
8.	Workers' Compensation	750,000	#
9.	Surety	750,000	#
10.	2 or more of these listed lines	1,500,000	#

#Minimum Surplus Required: (1) new insurers need minimum surplus of 150% of minimum capital stock; (2) insurer which commenced business on or after 7/1/66 shall maintain surplus in an amount not less than 100% of minimum capital required; (3) an insurer which commenced business before 7/1/66 shall maintain surplus in an amount not less than 50% of minimum capital required.

*Vehicle Liability insurers which commenced business prior to 7/1/66 must also maintain $300,000 additional surplus.

On or after 7/1/2001 any insurer which qualified to engage in business before 7/1/91 shall possess and maintain paid-in capital in an amount not less than 150% of that required of insurers commencing business on 6/30/91.

Insurers also are subject to risk-based capital requirements.

MASSACHUSETTS 175 §§ 47 to 48, 51

		PAID-UP CAPITAL	PAID-SURPLUS	MUTUAL IN SURPLUS
1.	Fire	$200,000	$400,000	$600,000
2.	Ocean Marine, Inland Navigation a. 1 + ocean marine b. 1 - ocean marine	300,000 400,000 300,000	600,000 800,000 600,000	900,000 1,200,000 900,000
3.	Surety and Fidelity	200,000	400,000	600,000
4.	Boiler and Machinery	200,000	400,000	600,000
5.	Accident and Health, Liability and Property Damage, Automobile Workers' Compensation - Accident and Health Only	400,000 100,000	800,000 200,000	1,200,000 300,000
6.	Glass	100,000	200,000	300,000
7.	Water Damage and Sprinkler Leakage	200,000		
8.	Elevator and Aircraft Property Damage	200,000	400,000	600,000
9.	Credit Insurance	200,000	400,000	600,000
10.	Title	100,000	200,000	300,000
11.	Mortgage	200,000	400,000	600,000
12.	Burglary, Forgery and Larceny	200,000	400,000	600,000
13.	Livestock	100,000	200,000	300,000
15.	Reinsurance	500,000	1,000,000	1,500,000
16.	Life	400,000	800,000	1,200,000
17.	Repair and Replacement (when combined with one or more of classes 1, 2 and 8)	400,000	800,000	1,200,000
19.	Legal Services	100,000	200,000	300,000
	Classes 6 & 16	800,000	800,000	
	Classes 1 & 8	200,000		
	Classes 1 & 2 except ocean marine	300,000		
	Classes 1 & 2	400,000		
	Classes 1 & 17	400,000		
	Classes 1, 2, 8, 17	400,000		

Any 2 or more in Classes 4, 5, 6, 7, 8, 9, 10, 12, 13 - Largest amount plus 1/2 requirement for each additional line. Surplus is twice that amount.

Commissioner may require additional capital and surplus based on type, volume and nature of business transacted. Insurers are also subject to risk-based capital requirements.

MICHIGAN § 500.410

	Applies to insurers admitted before 7/1/65	Domestic, foreign stock insurers CAPITAL	Domestic, foreign mutual life insurers SURPLUS	Domestic, foreign mutual insurers other than life ASSETS	Alien insurers U.S. ASSETS
1.	Life	$200,000	$200,000		$200,000
2.	Life and Disability	300,000	300,000		300,000
3.	Disability	200,000		$50,000	200,000
4.	Property and Marine	200,000		50,000	200,000
5.	Automobile	200,000		50,000	200,000
6.	Casualty	200,000		50,000	200,000
7.	Surety and Fidelity	250,000		250,000	250,000
8.	Surety and Fidelity, Casualty	450,000		250,000	450,000
9.	Multiple Lines	500,000		500,000	500,000

Insurers admitted after 7/1/65 must have $7,000,000 unimpaired capital and surplus as of 1/1/99. Once insurers listed above meet this requirement, they must maintain it. Commissioner shall take into account the risk-based capital requirements developed by NAIC.

MINNESOTA §§ 60A.06, 60A.07

	STOCK INSURERS	CAPITAL	SURPLUS#
1.	Fire	$350,000	$350,000/175,000
2.	Marine and Transportation	350,000	350,000/175,000
3.	Boiler and Machinery	200,000	200,000/100,000
4.	Life	1,000,000	2,000,000/100,000,000
5.	Accident and Sickness [Mutual Insurers]	500,000	1,000,000/500,000 [1,500,000/1,000,000]
6.	Workers' Compensation	500,000	1,000,000/500,000
7.	Fidelity and Surety	500,000	500,000/250,000
8.	Title	500,000	500,000/250,000
9.	Glass	200,000	200,000/100,000
10.	Burglary, Theft and Forgery	200,000	200,000/100,000
11.	Livestock	200,000	200,000/100,000
12.	Credit	350,000	700,000/350,000
13.	Vehicle	500,000	1,000,000/500,000
14.	Liability	500,000	1,000,000/500,000
15.	Elevator	200,000	200,000/100,000
16.	Legal Expense	350,000	350,000/175,000
17.	Multiple Lines [Mutual Insurers]	1,000,000	1,000,000/500,000 [2,000,000/1,500,000]

#First amount is initial requirement/second amount is that to be constantly maintained. Mutual insurers must meet same surplus requirements except where otherwise specified. Insurers are also subject to risk-based capital requirements.

MISSISSIPPI § 83-19-31

		CAPITAL	SURPLUS
1.	Single Lines	$400,000	$600,000
2.	Fidelity, Casualty, Surety or Guaranty	400,000	600,000
3.	Life or Accident and Health	400,000	600,000
4.	Life, Accident and Health	400,000	600,000
5.	Industrial Life	100,000	50,000
6.	Multiple Lines	600,000	900,000
7.	Title	150,000	75,000

Insurers also are subject to risk-based capital requirements. All mutual and reciprocal companies shall meet capital and surplus requirements of a stock company writing similar lines of business.

MISSOURI §§ 376.280, 379.010, 379.525, 381.062

	STOCK INSURERS:	CAPITAL	SURPLUS
	Life and Accident	$600,000	$600,000
	Property or Liability or Fidelity and Surety or Accident and Health	800,000	800,000
	Title	400,000	400,000
	More than one of above P/C classes	1,200,000	1,200,000
	MUTUAL INSURERS:		
	More than one line		2,400,000
	Single line mutuals		1,600,000

Insurers also are subject to risk-based capital requirements.

MONTANA §§ 33-2-109, 33-2-307, 33-3-204

		CAPITAL OR SURPLUS	
		Insurers Licensed Prior to 10/1/99	Insurers Licensed on or After 10/1/99
1.	Life	$200,000	$600,000
2.	Disability	200,000	500,000
3.	Life and Disability	300,000	750,000
4.	Credit Life and Disability	50,000	150,000
5.	Property	400,000	500,000
6.	Marine	400,000	500,000
7a.	Casualty, except Workers' Compensation	400,000	500,000
7b.	Casualty with Workers' Compensation	600,000	750,000
8.	Surety	500,000	500,000
9.	Title	200,000	500,000
10.	Multiple Lines (two or more of property, marine, casualty, surety)	800,000	1,000,000

Insurers also are subject to risk-based capital requirements.

NEBRASKA §§ 44-201, 44-214, 44-219, 44-243

	INITIAL CAPITAL AND SURPLUS (STOCK) OR SURPLUS (MUTUAL)	MAINTAINED SURPLUS
Life or Property Life includes lines (1)-(4); Property includes lines (4)-(20), as identified in § 44-201	$2,000,000	$1,000,000
Life and Property	4,000,000	2,000,000

Insurers also are subject to risk-based capital requirements.

NEVADA § 680A.120

	PAID-IN CAPITAL (STOCK) OR BASIC SURPLUS (MUTUAL)	INITIAL FREE SURPLUS
Life, health, property, casualty, surety, marine and transportation, and multiple line	$500,000	$1,000,000
Title	500,000	750,000
Financial Guarantee	10,000,000	40,000,000

Insurers also are subject to risk-based capital requirements.

NEW HAMPSHIRE §§ 401:4, 402:13, 402:14, 404-F:1 to 404-F:11, 405:2, 405:4, 411:1, 416-A:5

		CAPITAL	PAID-IN CAPITAL	SURPLUS
1.	All Stock Insurers	$800,000	$200,000	$1,000,000
2.	All Mutual Insurers	500,000		800,000
3.	Multiple Lines		400,000	400,000
4.	Life Stock Insurers	600,000	150,000	750,000
5.	Title Insurers	200,000	100,000	300,000

Insurers also are subject to risk-based capital requirements.

NEW JERSEY §§ 17:17-1, 17:17-6, 17:17-7, 17B:18-68 to 17B:18-70, 17:46B-7

		STOCK INSURERS CAPITAL	STOCK INSURERS SURPLUS	MUTUALS NET CASH ASSETS
a.	Fire and Casualty	#	50% capital	*
b.	Marine and Transportation	#	50% capital	*
d.	Liability			
e.	Workers' Compensation	$1,000,000	$1,000,000	$200,000
f.	Boiler and Machinery	#	50% capital	*
g.	Fidelity and Surety	500,000	750,000	1,250,000
h.	Title	500,000	250,000	

		STOCK INSURERS CAPITAL	STOCK INSURERS SURPLUS	MUTUALS NET CASH ASSETS
i.	Credit	#	50% capital	*
j.	Burglary and Theft	#	50% capital	*
k.	Glass	#	50% capital	*
l.	Water Damage and Sprinkler Leakage	#	50% capital	*
m.	Livestock	#	50% capital	*
n.	Smoke and Smudge	#	50% capital	*
o.	All Lines but Life and Health	#	50% capital	*
p.	Life and/or Annuity	1,000,000	4,000,000	4,000,000
q.	Life, Health, Annuity	1,530,000	6,120,000	6,300,000
r.	Health	700,000	2,850,000	3,000,000

minimum capital greater of $500,000 or $200,000 for each line more than one.
* 50% capital and surplus required of a stock company.
Insurers also are subject to risk-based capital requirements.

NEW MEXICO §§ 59A-5-16, 59A-5A-1 to 59A-5A-13

		CAPITAL	SURPLUS
1.	Life and/or Health	$600,000	$400,000
2.	General Casualty and/or Surety	500,000	500,000
3.	Property and/or Marine and Transportation	500,000	500,000
4.	Vehicle	500,000	500,000
5.	Title	500,000	500,000
6.	Multiple Lines, except life and/or health and title, per each additional line transacted	100,000	100,000

Aggregate Requirements Related to Premium Volume (earned or received):

		$5 TO $10 MILLION	$10 TO $25 MILLION	OVER $25 MILLION
1.	Life and/or Health	$700,000	$800,000	$900,000
2.	General Casualty and/or Surety	800,000	900,000	1,000,000
3.	Property and/or Marine and Transportation	800,000	900,000	1,000,000
4.	Vehicle	800,000	900,000	1,000,000
5.	Title	800,000	900,000	1,000,000

Insurers also are subject to risk-based capital requirements.

NEW YORK §§ 1113, 4103, 4202, 4208, 4107

TABLE ONE DOMESTIC STOCK COMPANIES			
GROUP A:		**CAPITAL**	**SURPLUS**
1.	Life	$2,000,000	$4,000,000
2.	Annuities (initial surplus)	150,000	100,000
3i.	Accident and Sickness	100,000	50,000
3ii.	Disability	100,000	50,000

TABLE ONE DOMESTIC STOCK COMPANIES			
GROUP A:		**CAPITAL**	**SURPLUS**
5.	Miscellaneous Property[a]		
6.	Water Damage[a,c]	100,000	50,000
*7.	Burglary and Theft	300,000	150,000
*8.	Glass	100,000	50,000
*9.	Boiler and Machinery	100,000	50,000
*10.	Elevator	100,000	50,000
*11.	Animal	100,000	50,000
12.	Collision[b,c,d]	100,000	50,000
*13.	Personal Injury Liability	500,000	250,000
*14.	Property Damage Liability	100,000	50,000
*15.	Workers' Compensation/Employer Liability	500,000	250,000
*16.	Fidelity and Surety	900,000	450,000
*17.	Credit	400,000	200,000
18.	Title		
19.	Motor Vehicle and Aircraft Physical Damage[c,d]		
21.	Marine Protection and Indemnity[d]		
22.	Residual Value	2,000,000	1,000,000
23.	Mortgage Guaranty		
24.	Credit Unemployment * Basic Additional Amount Required to Write Any One or More of These Lines	400,000 100,000	200,000 50,000
26A.	Motor Vehicle Lessor	600,000	300,000
26B.	Motor Vehicle Lender	200,000	100,000
26C.	Non-Motor Vehicle Lessor	600,000	300,000
26D.	Non-Motor Vehicle Lender	600,000	300,000
27.	Prize Indemnification	300,000	150,000
28.	Service Contract Reimbursement Insurance	2,000,000	1,000,000
Group B:		**CAPITAL**	**SURPLUS**
4.	Fire[c]	500,000	500,000
20.	Marine and Inland Marine[d]	500,000	500,000

Multiple Lines: Domestic Stock Property/Casualty Insurers

If licensed to write one or more of the lines in Group A and having minimum capital of $1,000,000 may be licensed to write any other kind of insurance in Group A upon having an initial surplus equal to the aggregate of capital and surplus specified and shall maintain a surplus of the greater of $1,000,000 or aggregate capital specified.

If licensed to write any kind of insurance in Group A, must have minimum capital of $1,000,000 and an initial surplus equal to the aggregate of capital and surplus specified before being additionally authorized to transact any insurance of Group B. Insurer shall maintain a surplus of the greater of $1,000,000 or aggregate capital specified.

Insurers reinsuring lines of business and transacting business outside the U.S. for which they are not licensed to write directly, must maintain a minimum surplus to policyholders of $35,000,000 and a deposit of $3,000,000 (included in surplus of policyholders).

a. if licensed to write fire (4), additional capital and surplus is not required

b. if licensed to write fire (4) or marine and inland marine (20), additional capital and surplus is not required

c. if licensed to write fire (4), no additional capital and surplus is required to write miscellaneous property (5), water damage (6), collision (12), motor vehicle and aircraft physical damage (19) or inland marine only (20)

d. if licensed to write marine and inland marine (20), no additional capital and surplus is required to write collision (12), motor vehicle and aircraft physical damage (19) or marine protection and indemnity (21)

TABLE TWO			
		INITIAL SURPLUS	**MINIMUM SURPLUS TO BE MAINTAINED**
Fire	4 [also 5,6,12,19 and 20 inland][a,b,e]	$300,000	$200,000
Burglary	7	300,000	200,000
Glass	8	150,000	100,000
Boiler	9	300,000	200,000
Elevator	10	150,000	100,000
Animal	11	150,000	100,000
Liab. – P.I	13 [also 6,12 and 14][c,e]	500,000	400,000
Workers' Comp.	15[f]	500,000	400,000
Fidelity/Surety	16	1,500,000	1,000,000
Credit	17	750,000	500,000
Marine	20 [also 12,19 and 21][b,d,e]	1,000,000	500,000
Marine P&I.	21[b]	500,000	500,000

If licensed to write any kind of insurance specified in TABLE TWO, a mutual property/casualty company may write any one or more of the kinds of insurance specified in TABLE THREE—Group A and Group B.

If licensed to write any kind of insurance specified in TABLE THREE—Group A, it may write any one or more of the kinds of insurance specified in TABLE THREE—Group C.

TABLE THREE			
	GROUP A	**INITIAL SURPLUS**	**MINIMUM SURPLUS TO BE MAINTAINED**
Burglary	7	$100,000	$100,000
Glass	8	50,000	50,000
Boiler	9	100,000	100,000
Elevator	10	50,000	50,000
Animal	11	50,000	50,000
Liab. - P.I.	13[c,e]	300,000	300,000
Workers' Comp.	15	300,000	300,000
Fidelity/Surety	16	900,000	900,000
Credit	17	300,000	300,000
	GROUP B	**INITIAL SURPLUS**	**MINIMUM SURPLUS TO BE MAINTAINED**
Fire	4 [also 5,6,12,19 and 20 inland]	300,000	200,000
Marine	20 [also 12,19 and 21][b,d,e]	1,000,000	500,000

TABLE THREE			
	GROUP C	**INITIAL SURPLUS**	**MINIMUM SURPLUS TO BE MAINTAINED**
Accident & Health	3(i)	100,000	100,000
Accident & Health	3(ii)	100,000	100,000
Water Damage	6a,c,g	50,000	50,000
Collision	12a,c,h	50,000	50,000
Liab. P.D.	14c,e	50,000	50,000
Residual Value	22	3,000,000	2,000,000
Credit Unemployment	24	300,000	300,000
Motor Vehicle Lessor	26A	900,000	600,000
Motor Vehicle Lender	26B	300,000	200,000
Non-Motor Vehicle Lessor	26C	900,000	600,000
Non-Motor Vehicle Lender	26D	900,000	600,000
Prize Indemnification	27	300,000	150,000
Service Contract Reimbursement Insurance	28	3,000,000	2,000,000

A mutual property/casualty insurance company may be licensed to write any one kind of insurance as specified in TABLE TWO [except as provided for in b], subject to the following:

a. If licensed to write paragraph 4, no additional surplus required for 5,6,12,19 and 20 (inland marine).
b. If organized to write paragraphs 4, 20 or 21, the initial and minimum surplus required for paragraphs 7, 8, 9, 10, 11, 13, 15, 16, or 17 to be taken from TABLE TWO for the line with the highest initial surplus.
c. If licensed to write paragraph 13, no additional surplus required for paragraphs, 6, 12 and 14.
d. If licensed to write paragraph 20, no additional surplus required for paragraphs, 12, 19 and 21.
e. If licensed to write paragraphs 13, 14 and 19, must maintain a surplus of $600,000.
f. If licensed to write paragraph 15, no additional surplus required for paragraph 3(i) if licensed for the purpose of Article 9 of the workers' compensation law.
g. If licensed to write paragraph 4 or 13, no additional surplus required.
h. If licensed to write paragraphs 4, 13 or 20, no additional surplus required.

Life insurers also are subject to risk-based capital requirements.

NORTH CAROLINA §§ 58-7-75, 58-7-15

	STOCK INSURERS:	PAID-IN CAPITAL	SURPLUS
1.	Life	$600,000	$900,000/150,000#
2.	Accident and Health (cancelable)	400,000	600,000/100,000
3.	Accident and Health (cancelable and noncancellable)	600,000	900,000/150,000
4.	One or more of the following lines: Fire, Misc. Property, Water Damage, Burglary and Theft, Animal, Collision, Motor Vehicle and Aircraft, Marine, Marine Protection and Indemnity or Miscellaneous	800,000	1,200,000/200,000
5.	One or more of the following lines: Accident and Health, Water Damage, Burglary and Theft, Glass Boiler and Machinery, Elevator, Animal, Collision, Personal Injury Liability, Property Damage Liability, Workers' Compensation and Employers Liability, Fidelity and Surety, Credit, Title, Motor Vehicle and Aircraft, Marine, Marine Protection and Indemnity or Miscellaneous.	1,000,000	1,500,000/250,000

#First amount is initial requirement/second amount is that to be constantly maintained

	MUTUAL INSURERS:	INITIAL SURPLUS	CONSTANTLY MAINTAINED SURPLUS
1.	Limited Assessable:		
	Fire, Misc. Property, Water Damage, Burglary and Theft, Glass, Boiler and Machinery, Animal, Collision, Motor Vehicle and Aircraft, Marine, Marine Protection and Indemnity and/or Miscellaneous lines	$300,000	$300,000
2.	Assessable:		
2a.	Fire, Misc. Property and/or Water Damage	Twice the net retained liability under the largest policy of insurance; never less than $60,000	
2b.	Burglary and Theft, Glass, Animal, Collision, Motor Vehicle and Aircraft, Marine, Marine Protection and Indemnity and/or Miscellaneous lines		60,000 constantly maintained
2c.	Multiple Lines		400,000 constantly maintained
3.	Non-assessable:		
3a.	Fire, Misc. Property, Water Damage, Burglary and Theft, Glass, Boiler and Machinery, Animal, Collision, Motor Vehicle and Aircraft, Marine, Marine Protection and Indemnity and/or Miscellaneous lines		800,000 constantly maintained

	MUTUAL INSURERS:	INITIAL SURPLUS	CONSTANTLY MAINTAINED SURPLUS
3b.	Accident and Health, Water Damage, Burglary and Theft, Glass, Boiler and Machinery, Elevator, Animal, Collision, Personal Injury Liability, Property Damage Liability, Workers' Compensation and Employers Liability, Fidelity and Surety, Credit, Title, Motor Vehicle and Aircraft, Marine, Marine Protection and Indemnity, and/or Miscellaneous		1,000,000 constantly maintained
3c.	Multiple Lines (a and b above)		1,800,000 constantly maintained
3d.	Life	200,000	100,000
3e.	Accidental Death and Personal Injury	200,000	100,000
3f.	Life, Accidental Death and Personal Injury	400,000	200,000
3g.	Disability	500,000	300,000
3h.	Multiple Lines		1,000,000 constantly maintained

Insurers also are subject to risk-based capital requirements.

NORTH DAKOTA §§ 26.1-03.1-01 to 26.1-03.1-13, 26.1-05-04, 26.1-12-08, 26.1-12-10

		CAPITAL	SURPLUS
1.	All Stock Insurers	$500,000	$500,000
2.	All Mutual Companies		1,000,000

Above amounts must be maintained as minimum at all times. Insurers also are subject to risk-based capital requirements.

OHIO §§ 3907.05, 3909.02, 3925.12, 3929.011

List A: Fire, allied lines, farmowners multiple peril, homeowners multiple peril, ocean marine, inland marine, earthquake, group accident and health, credit accident and health, auto liability, auto physical damage, aircraft, glass, burglary and theft, boiler and machinery, and credit.
List B: Commercial multiple peril, financial guaranty, medical malpractice, workers compensation, other liability, fidelity, surety, any other risk other than life insurance.
List C Reinsurance only.

Stock insurers other than life or title:
For a new or renewal certificate of authority issued after 8/8/91, domestic and foreign insurers writing the lines in each list must have:

		TOTAL MAINTAINED CAPITAL AND SURPLUS	AT LEAST CAPITAL	AT LEAST CONTRIBUTED SURPLUS
1.	List A	$2,500,000	$1,000,000	$1,000,000
2.	List B	5,000,000	1,000,000	1,000,000

		TOTAL MAINTAINED CAPITAL AND SURPLUS	AT LEAST CAPITAL	AT LEAST CONTRIBUTED SURPLUS
3.	List C	10,000,000	1,000,000	1,000,000
4.	Assumes reinsurance and writes from List A or B	10,000,000	1,000,000	1,000,000

Mutual insurers other than life or title:
For a new or renewal certificate of authority issued after 8/8/91, insurers writing any of the lines listed in each list shall have:

		TOTAL MAINTAINED SURPLUS
1.	List A	$2,500,000
2.	List B	5,000,000
3.	List C	10,000,000
4.	Assumes reinsurance and writes from List A or B	10,000,000

Title insurers: $120,000 capital and $180,000 surplus.
Life insurers: Stock: $2,500,000 capital and surplus with at least $1,000,000 each in capital and contributed surplus.
Mutual: $2,500,000 surplus.
Insurers are also subject to risk-based capital requirements.

OKLAHOMA tit. 36 §§ 610 to 612.2

Capital and Surplus (if a stock insurer)	$1,500,000
Surplus (if a mutual insurer)	$1,500,000

Insurers are also subject to risk-based capital requirements.

OREGON §§ 731.554, 731.558, 731.562, 750.045

		CAPITAL AND SURPLUS
1.	All insurers not defined below:	$1,000,000 Eff. 1/1/02, $2,500,000 An insurer authorized to do business on 1/1/02 shall possess and maintain at lease the following amounts: $1,600,000 no later than 12/31/03 $1,900,000 no later than 12/31/04 $2,200,000 no later than 12/31/05 $2,500,000 no later than 12/31/06
	Additional for domestic insurer when first authorized for Certificate of Authority:	$500,000

		CAPITAL AND SURPLUS
2.	Workers' Compensation	$3,000,000 Effective 1/1/02, $5,000,000 An insurer authorized to do business on 1/1/02 shall possess and maintain at least the following amounts: $3,800,000 no later than 12/31/03 $4,200,000 no later than 12/31/04 $4,600,000 no later than 12/31/05 $5,000,000 no later than 12/31/06
3.	Mortgage	$4,000,000
4.	Home Protection Additional for domestic insurer when first authorized for Certificate of Authority:	10% aggregate premiums, not less than $250,000 nor more than $1,000,000 $500,000
5.	Title	$500,000 Effective 1/1/02, $2,500,000 An insurer authorized to do business on 1/1/02 shall possess and maintain at lease the following amounts: $1,600,000 no later than 12/31/03 $1,900,000 no later than 12/31/04 $2,200,000 no later than 12/31/05 $2,500,000 no later than 12/31/06
6.	Health Care Service Contractors	Health care service contractor applying for licensure shall have capital and surplus of $250,000 minimum or 50% of average claims, but no more than $500,000. As of 1/1/02, the amount of capital and surplus shall equal $2,500,000. A health care service contractor already doing business shall have: $800,000 minimum, $1,600,000 maximum by 12/31/03 $950,000 minimum, $1,900,000 maximum by 12/31/04 $1,100,000 minimum, $2,200,000 maximum by 12/31/05 $2,500,000 by 12/31/06 A health care service contractor furnishing only dental or optometric service shall have capital and surplus of not less than $50,000 or 50% of average claims but not more than $500,000. As of 1/1/02, the amount of capital or surplus shall be $1,000,000. A health care service contractor already doing business shall have: $350,000 minimum, $700,000 maximum by 12/31/03 $400,000 minimum, $800,000 maximum by 12/31/04 $450,000 minimum, $900,000 maximum by 12/31/05 $1,000,000 by 12/31/06

Director may require amounts in excess of these numbers due to type, volume and nature of business transacted. Insurers are also subject to risk-based capital requirements.

PENNSYLVANIA §§ 40-5-106 to 40-5-106.2

		CAPITAL	SURPLUS	TOTAL
I.	**Property/Casualty Companies**			
(a)	Class of Business			
	(1) Life, Variable Life, Variable Annuities	$1,000,000	50% of capital	$1,500,000
	(2) Life, Variable Life, Variable Annuities, Health and Disability	1,100,000	50% of capital	1,650,000
	Total (a) Authority	2,100,000	$1,050,000	3,150,000
(b)	Class of Business			
	(1) Fire, Allied Lines	100,000	50,000	150,000
	(2) Inland Marine, Auto Physical Damage	100,000	50,000	150,000
	(3) Ocean Marine	200,000	100,000	300,000
	Total (b) Authority	400,000	200,000	600,000
(c)	Class of Business			
	(1) Fidelity & Surety	200,000	100,000	300,000
	(2) Accident and Health	50,000	25,000	75,000
	(3) Glass	50,000	25,000	75,000
	(4) Other Liability including professional liability, medical malpractice, etc.	50,000	25,000	75,000
	(5) Boiler & Machinery	50,000	25,000	75,000
	(6) Burglary & Theft	50,000	25,000	75,000
	(7) Credit	100,000	50,000	150,000
	(8) Water Damage	50,000	25,000	75,000
	(9) Elevator	50,000	25,000	75,000
	(10) Livestock	50,000	25,000	75,000
	(11) Auto Liability	500,000	250,000	750,000
	(12) Mine	50,000	25,000	75,000
	(13) Personal Property Floater	50,000	25,000	75,000
	(14) Workers' Compensation	750,000	375,000	1,125,000
	Total (c) Authority	1,950,000	975,000	2,925,000
	Total (a), (b) & (c) Authority	4,450,000	2,225,000	6,675,000
II.	**Title Companies must possess capital of at least $500,000 and paid-in surplus of at least $250,000.**			
III.	**Life Insurers**	**CAPITAL**	**SURPLUS**	**TOTAL**
	Life and Annuities	$1,000,000	$500,000	$1,500,000
	Accident and Health	100,000	50,000	150,000
	Total	1,100,000	550,000	1,650,000

Minimum capital and surplus for any one (c) authority is at least $750,000 and $375,000, respectively. For any two or more classes of insurance, the capital must equal the greater of $750,000 or the sum of total required for each class; surplus must equal or exceed 50% of the minimum required capital.

Mutual insurers issuing non-assessable policies must possess surplus equal to the capital required for stock insurers.

Mutual life insurers must have a guarantee capital, before commencing business, of not less than $2,000,000, and shall maintain unimpaired a policyholder surplus of $1,000,000 out of guarantee capital, surplus, or any combination thereof. Mutual life insurers authorized to issue variable annuity contracts, in addition to life and annuity contracts, must have a policyholder surplus of not less than $1,500,000.

No additional amounts are required by stock life insurers for variable life and variable annuity authority; however, separate authorization must be sought for variable authority. Insurers are also subject to risk-based capital requirements.

The above capital and surplus amounts are statutory minimums. The commissioner of insurance has the discretion to require additional amounts based on type, nature and volume of business conducted. Because Section 503 of the Insurance Department Act requires insurers to maintain the minimum required capital and surplus unimpaired at all times, the Insurance Commissioner will require newly-incorporated insurers to demonstrate possession of surplus over the statutory minimum amount. The exact amount of additional surplus will be dependent upon the financial forecasts included in the insurer's business plan.

RHODE ISLAND §§ 27-2-5, 27-1-37

		STOCK		MUTUALS
		CAPITAL	**CONTRIBUTED SURPLUS**	**ASSETS OVER LIABILITIES**
1.	Domestic Insurers	$1,000,000	$2,000,000	$3,000,000
2.	Foreign Insurers	1,000,000	2,000,000	3,000,000
3.	Monoline Companies	2,000,000 capital and surplus		

Insurers also are subject to risk-based capital requirements.

SOUTH CAROLINA §§ 38-9-10, 38-9-20, 38-6-30

	STOCK INSURERS:	**CAPITAL**	**INITIAL SURPLUS**	**MAINTAINED SURPLUS**
1.	Life	$600,000	$600,000	25% initial amount
2.	Accident and Health	600,000	600,000	25% initial amount
3.	Life, Accident and Health	1,200,000	1,200,000	25% initial amount
4.	Property	1,200,000	1,200,000	25% initial amount
5.	Casualty	1,200,000	1,200,000	25% initial amount
6.	Surety	1,200,000	1,200,000	25% initial amount
7.	Marine	1,200,000	1,200,000	25% initial amount
8.	Title	600,000	600,000	25% initial amount
9.	Multiple Lines	1,500,000	1,500,000	25% initial amount

The director may require additional initial capital and surplus based on the type or nature of business transacted. Insurers are also subject to risk-based capital requirements.

Insurers licensed prior to 7/1/91 which do not meet the minimum requirements shown, must maintain at least the capital shown on 1990 annual statement and surplus in an amount of at least 25% of that amount.

	MUTUAL INSURERS:	**INITIAL SURPLUS**
1.	Life	$1,200,000
2.	Accident and Health	1,200,000
3.	Life, Accident and Health	2,400,000
4.	Property	2,400,000
5.	Casualty	2,400,000
6.	Surety	2,400,000

	MUTUAL INSURERS:	INITIAL SURPLUS
7.	Marine	2,400,000
8.	Title	1,200,000
9.	Multiple Lines	3,000,000

Mutual Insurers:

Mutual insurers maintained surplus must be equal to the sum of capital and maintained surplus of a licensed stock insurer.

The director may require additional initial surplus based on the type or nature of business transacted.

Insurers licensed prior to 7/1/91 which do not meet the minimum requirements shown, must maintain at least the capital shown on 1990 annual statement and surplus in an amount of at least 25% of that amount.

SOUTH DAKOTA §§ 58-6-23, 58-6-25

		CAPITAL	SURPLUS
1.	Life		
	Domestic	$200,000	$300,000
	Foreign	300,000	350,000
2.	Health		
	Domestic	200,000	300,000
	Foreign	300,000	350,000
3.	Life and Health		
	Domestic	400,000	400,000
	Foreign	400,000	425,000
4.	Property	200,000	300,000
5.	Casualty with Workers' Compensation	300,000	350,000
	without Workers' Compensation	200,000	300,000
6.	Marine and Transportation	200,000	300,000
7.	Surety	200,000	300,000
8.	Title	200,000	300,000
9.	Multiple Lines	400,000	400,000

If within 3 years after initial certificate of authority is issued, the insurer applies to transact additional line(s), it must possess capital and surplus in the aggregate as shown above. Division may require insurer to increase capital and surplus based on type and amount of risk, NAIC produced ratios or any other factor. Insurers are also subject to risk-based capital requirements.

TENNESSEE §§ 56-2-114, 56-2-115

		CAPITAL	SURPLUS
1.	All Insurers	$1,000,000	$1,000,000
2.	Reinsurance Only – Credit Life and/or Accident and Health	150,000	50% of capital

Insurers are also subject to risk-based capital requirements.

TEXAS I.C. art. 2.02, 3.02, 3.22, 15.04, 21.43, 21.44

		CAPITAL	SURPLUS
1.	Companies Other Than Life, Accident or Health	$1,000,000	$1,000,000
2.	Life and/or Accident and/or Health	700,000	700,000
3.	Foreign Mutual - Cyclone, Tornado, Hail and Storm Insurance		2,000,000

The Department may adopt rules, regulations and guidelines requiring any company incorporated under this article and any admitted alien or foreign insurer to maintain capital and surplus levels in excess of the statutory levels required by this article based upon nature, type and volume of risks, company's portfolio, and company's reserves. Insurers also are subject to risk-based capital requirements.

UTAH §§ 31A-5-211, 31A-17-302, 31A-6-204, 31A-7-201, 31A-9-209, 31A-14-205

		CAPITAL (STOCK) OR SURPLUS (MUTUAL)	COMPULSORY SURPLUS
1.	Life, Annuity, Health or any combination	$400,000	(See note #)
*2.	Property	200,000	
*3.	Surety	300,000	
*4.	Bail Bonds Only	100,000	
*5.	Marine and Transportation	200,000	
*6.	Vehicle Liability, Residential Dwelling, or both	400,000	
*7.	Liability	600,000	
*8.	Workers' Compensation	300,000	
9.	Title	200,000	
10.	Professional Liability, excluding Medical Malpractice	700,000	
11.	Professional Liability, including Medical Malpractice	1,000,000	
12.	Multiple Lines, except life, annuity or title	2,000,000	

*Subject to an aggregate of $1,000,000 capital for more than one of these lines.

Assessable Mutuals: shall not issue life or annuities; need not have a permanent surplus if policyholder assessment liability is unlimited; compulsory surplus is equal to that required of an insurer in compliance with the code.

Compulsory Surplus: the greater of

a. 75% minimum capital; or

b. net total of: $.50 per $1,000 life insurance amount at risk, plus 10% disability premiums earned, plus 3 1/2% annuity reserves, plus 15% net workers' compensation and other liability premiums earned, plus 20% medical malpractice premiums earned, plus 10% net premiums earned on lines of insurance not set forth, plus 5% admitted value of common stocks and real estate, plus 2% admitted value of all other invested assets (some exclusions apply), less any mandatory security valuation reserve being maintained, and less minimum required capital (or permanent surplus) required.

"Phase-In Standards" apply to insurers who do not meet the above compulsory surplus requirements as of 12/31/86.

Insurers are also subject to risk-based capital requirements.

VERMONT tit. 8 §§ 3301, 3304, 3309; Bulletin 43

STOCK INSURERS:	**CAPITAL**	**SURPLUS**
All Insurers Seeking to Commence Business After 7/1/91	$2,000,000	$3,000,000
Prior to 7/1/91	250,000	150,000
MUTUAL INSURERS:	**BASIC SURPLUS**	**FREE SURPLUS**
Commencing Business After 7/1/91	$2,000,000	$3,000,000
Prior to 7/1/91	250,000	150,000

Commissioner may prescribe additional capital or surplus for all insurers based upon the type, volume, and nature of insurance transacted. Insurers also are subject to risk-based capital requirements.

VIRGINIA §§ 38.2-1037, 38.2-1028, 38.2-1029, 38.2-1030, 38.2-1206, 38.2-1213, 38.2-5500 to 38.2-5514

	NEW INSURERS:	**CAPITAL**	**SURPLUS**
1.	All Stock Insurers	$1,000,000	$3,000,000
2.	Assessable Mutual Insurers		1,600,000
3.	Non-assessable Mutual Insurers		4,000,000
4.	Assessable Reciprocals		1,600,000
5.	Non-assessable Reciprocals		4,000,000

Insurers also are subject to risk-based capital requirements.

WASHINGTON §§ 48.05.340, 48.05.360

		PAID-IN CAPITAL (STOCK) OR BASIC SURPLUS (MUTUAL)	**ADDITIONAL SURPLUS**
1.	Life	$2,000,000	$2,000,000
2.	Disability	2,000,000	2,000,000
3.	Life and Disability	2,400,000	2,400,000
4.	Property	2,000,000	2,000,000
5.	Marine and Transportation	2,000,000	2,000,000
6.	General Casualty	2,400,000	2,400,000
7.	Vehicle	2,000,000	2,000,000
8.	Surety	2,000,000	2,000,000
9.	Any Two of the Following: Property, Marine and Transportation, General Casualty, Vehicle, Surety, or Disability	3,000,000	3,000,000
10.	Multiple Lines (all but Life and Title)	3,000,000	3,000,000

Commissioner may require insurers to maintain additional capital and surplus based on type, volume and nature of insurance business transacted, consistent with NAIC requirements. Insurers also are subject to risk-based capital requirements.

WEST VIRGINIA §§ 33-3-5a, 33-3-5b, 33-24-10, 33-40-1 to 33-40-13

	CAPITAL	SURPLUS	MUTUAL SURPLUS
All insurers:	$1,000,000	$1,000,000	$2,000,000
Prepaid limited health service organizations:			
With respect to services not including inpatient: greater of $250,000 or 10% of expenses for prior 12 months.			
With respect to services including inpatient: greater of $1,000,000 or 10% of expenses for prior 12 months.			

Commissioner may require insurers to maintain additional capital and surplus based on type, volume and nature of insurance business transacted. Insurers also are subject to risk-based capital requirements.

WISCONSIN § 611.19

		MINIMUM CAPITAL (STOCK INSURER) OR SURPLUS (MUTUAL INSURER)	ADDITIONAL SURPLUS
1.	All Stock and Non-assessable Mutual Insurers	$2,000,000	50% of minimum
2.	Assessable Mutuals: Initial Minimum Assessment Unlimited Assessment Limited	 100,000 None Reduced to reasonable amount	

Commissioner may reduce or increase the required amounts based on a list of contingencies. Insurers are also subject to risk-based capital requirements.

WYOMING §§ 26-3-108 to 26-3-110, 26-24-109

		CAPITAL	STOCK INSURERS SURPLUS	MUTUALS SURPLUS	RECIPROCALS AND FOREIGN DOMESTIC MUTUALS SURPLUS
1.	Life	$1,000,000	$500,000	$1,500,000	$150,000
2.	Disability	1,000,000	500,000	1,500,000	150,000
3.	Life and Disability	1,000,000	1,000,000	2,000,000	
4.	Property	1,000,000	1,000,000	2,000,000	200,000
5.	Casualty without Surety or W.C.	1,000,000	1,000,000	2,000,000	200,000
6.	Casualty with Surety and W.C.	1,000,000	1,500,000	2,500,000	250,000
7.	Marine and Transportation	1,000,000	1,000,000	2,000,000	
8.	Multiple Line (property and any additional kind)	2,000,000	2,000,000	4,000,000	
9.	Title	500,000	250,000		

The commissioner may require additional capital and surplus based on types, volume, and nature of insurance business transacted. Insurers also are subject to risk-based capital requirements.

The charts in **Appendix A** do not constitute a formal legal opinion by the NAIC staff on the provisions of state law and should not be relied upon as such. Every effort has been made to provide correct and accurate summaries to assist the reader in targeting useful information. For further details, the statutes and regulations cited should be consulted.

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