AMERICAN ACADEMY *of* ACTUARIES

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Hearing on
"Causes of the Medical Liability Insurance Crisis"

Statement of James Hurley, ACAS, MAAA
Chairperson, Medical Malpractice Subcommittee
American Academy of Actuaries

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INTRODUCTION

The American Academy of Actuaries appreciates the opportunity to provide comments on issues related to patient access to health care and, in particular, the availability and pricing of medical malpractice insurance. The Academy hopes these comments will be helpful as Congress considers related proposals.

This testimony discusses what has happened to medical malpractice financial results and likely effect on rates, the ratemaking process, and some discussion of frequent misconceptions.

MEDICAL MALPRACTICE – WHAT HAS HAPPENED?

The medical malpractice insurance marketplace is in serious turmoil after an extended period of reported high profitability and competitiveness during the 1990s. This turmoil began with serious deterioration in financial results, continued with some consequences of these results and, at least at this point, gives rise to an uncertain future. Industry-wide financial results reflect a 2001 combined ratio (the measure of how much of a premium dollar is dedicated to paying insurance costs of the company in a calendar year) that reached 153 percent and an operating ratio (reducing the combined ratio for investment income) of about 135 percent; the worst results since separate tracking of this line of business began in 1976. Projections for 2002 are for a lower combined ratio of approximately 140 percent and probable lesser improvement in the operating ratio. This follows 1999 and 2000 operating ratios of 106 percent.

The consequences of these poor financial results are several. Insurers have voluntarily withdrawn from medical malpractice insurance (e.g., St. Paul Companies, Inc., writer of approximately nine percent of total medical malpractice insurance premium in 2000) or have selectively withdrawn from certain marketplaces or segments of medical malpractice insurance. In addition, several insurers have entirely withdrawn due to poor financial results (e.g., Phico, MIIX, Frontier, Reciprocal of America, some of which are under regulatory supervision). Overall, premium capacity has been reduced by more than 15 percent. These withdrawals fall unevenly across the states and generally affect those identified as jurisdictions with serious problems more severely than others.

Capacity to write business would have decreased even more if not for the fact that much medical malpractice coverage is written by companies specializing in this coverage, some of whom were formed for this specific purpose.

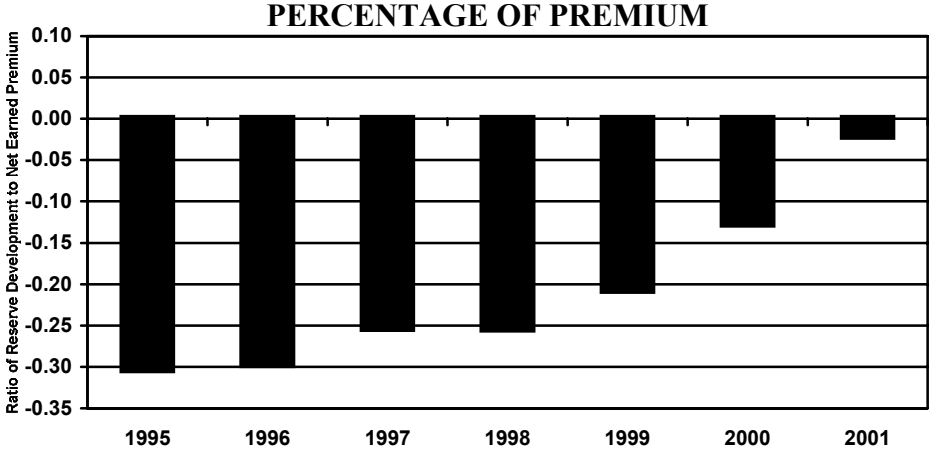
The future outlook is not positive, at least in the short term. Claim costs are increasing more rapidly now than they were previously. Further, the lower interest rate environment would require higher premium rates, even if losses were not increasing. The combined effect is that there are likely to be more poor financial results and additional rate increases.

Background

Today's premium increases are hard to understand without considering the experiences of the last decade. Rates during this time period often stayed the same or decreased relative to the beginning of the period due to several of the following factors:

- Favorable Reserve Development--Ultimate losses for coverage years in the late 1980s and early 1990s have developed more favorably than originally projected. Evidence of this emerged gradually over a period of years as claims settled. When loss reserves for prior years were reduced, income was contributed to the current calendar years, improving financial results (i.e., the combined and operating ratios). That was the pattern during the middle to late 1990s for 30 provider-owned medical malpractice insurers whose results are shown in Chart A. What is evident from that chart is that favorable reserve development (shown as a percentage of premium) was no longer a significant factor in 2001 for these insurers as the effect approached zero. In contrast to the experience of these provider-owned insurers, the prior-year reserves for the total medical malpractice line of business actually deteriorated in 2000 and in 2001.

CHART A: LOSS RESERVE DEVELOPMENT AS PERCENTAGE OF PREMIUM



- Low Level of Loss Trend--The annual change in the cost of claims (frequency and severity) through most of the 1990s was lower than expected by insurers, varying from state to state and by provider type. This coincided with historically low medical inflation and may have benefited from the effect of tort reforms of the 1980s. Rates established earlier anticipated higher loss trends and were able to cover these lower loss trends to a point. As a result, rate increases were uncommon and there were reductions in several states. This was justified in part because the rates established at the beginning of the last decade proved too high, inasmuch as carriers had assumed higher loss trends.

  Insurers responded to the emerging favorable loss trend in different ways. Some held rates stable and paid policyholder dividends or gave premium discounts. Some reduced filed rates. Others increased rates modestly and tried to refine pricing models to improve overall program equity. In general, however, premium adequacy declined in this period. Collected rates came into line with insurers' costs, but competitive actions pushed rates even lower, particularly in some jurisdictions.

- High Investment Yields--During the 1990s, investment returns produced a real spread between fixed income rates of return and economic inflation. Counter to what some may believe, medical malpractice investment results are based on a portfolio that is dominated by bonds with stock investments representing a minority of the portfolio. Although medical malpractice insurers had only a modest holding of stocks, capital gains on stocks also helped improve overall financial results. These gains improved both the investment income ratio and the operating ratio.

- Reinsurers Helped--Many medical malpractice insurers are not large enough to take on the risks inherent in this line of insurance on their own. The additional capacity provided by reinsurers allows for greater availability of medical malpractice. Similar to what was happening in the primary market, reinsurers reduced rates and covered more exposure, making the net results even better.

- Insurers Expanded Into New Markets--Given the financial results of the early-to-mid-1990s, some insurers expanded into new markets (often with limited information to develop rates). They also became more competitive in existing markets, offering more generous premium discounts. Both actions tended to push rates down.

What Has Changed?

Although these factors contributed to the profitability of medical malpractice insurance in the 1990s, they also paved the way for the changes that began at the end of the decade.

- Loss Trend Began to Worsen--Loss cost trends, particularly claim severity, started to increase toward the latter part of the 1990s. The number of large claims increased, but even losses adjusted to eliminate the distortions of very large claims began to deteriorate. This contributed to indicated rate increases in many states.

- Loss Reserves Became Suspect--As of year-end 2001, aggregate loss reserve levels for the industry are considered suspect. Reserve reductions seem to have run their course. As mentioned earlier, the total medical malpractice insurance industry increased reserves for prior coverage year losses in 2000 and 2001, although results vary on a company-by-company basis. Some observers suggest that aggregate reserves will require further increases, particularly if severity trends continue or intensify.

- Investment Results Have Worsened--Bond yields have declined and stock values are down from 1990s highs. The lower bond yields reduce the amount of expected investment earnings on a future policy that can be used to reduce prospective rates. A one percent drop in interest rates can be translated to a premium rate increase of two to four percent (assuming no changes in other rate components) due to the several year delay in paying losses on average. A 2.5 percent drop in interest rates, which has occurred since 2000, can translate into rate increases of between 5 percent and 10 percent. Note that this factor may discourage an insurer from maintaining market presence and also may discourage new entrants.

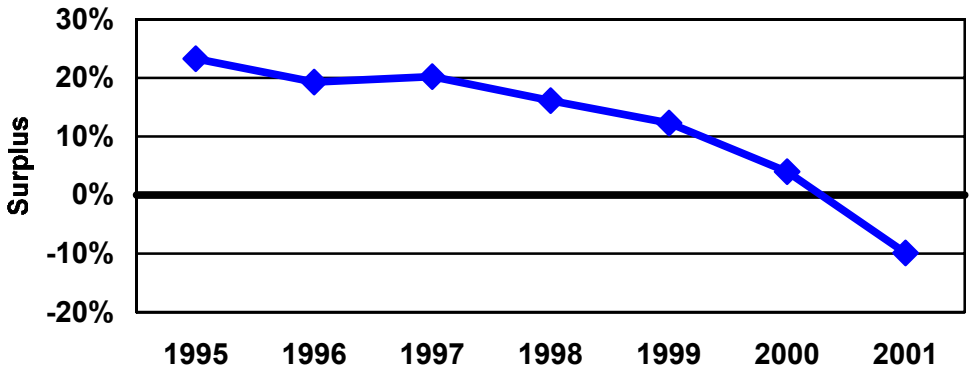
- The Reinsurance Market Has Hardened--Reinsurers' experience deteriorated as their results were affected by increased claim severity and pricing changes earlier in the decade. Because reinsurers generally cover the higher layers of losses, their results are disproportionately influenced by increases in claim severity. This, coupled with the broadly tightened reinsurance market after Sept. 11, has caused reinsurers to raise rates substantially and tighten reinsurance terms for medical malpractice.

The bottom line is that these changes require insurers to increase rates if they are to preserve their financial health and honor future claim payments.

The Results

To obtain a better understanding of the effect of these changing conditions, we focus on the results of 30 specialty insurers that are primarily physician owned or operated and that write primarily medical malpractice business. Their results reflect the dynamics of the medical malpractice line. This sample represents about one-third of the insured exposures in the United States.

CHART B: CALENDAR YEAR OPERATING RESULTS TURN NEGATIVE



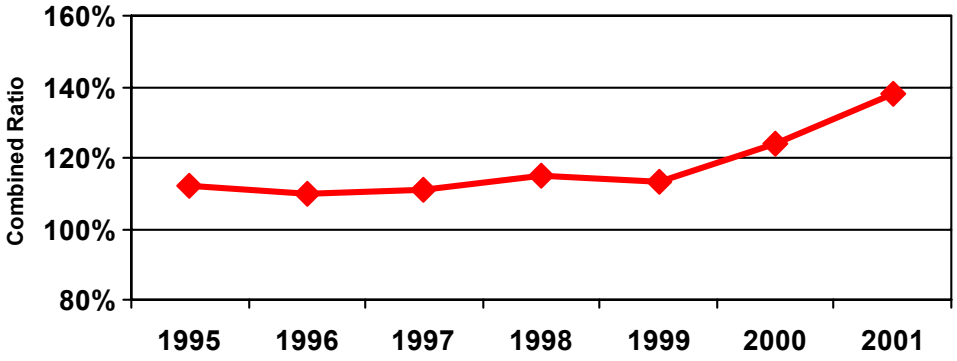
These insurers, achieving more favorable financial results than those of the total industry, showed a slight operating profit (four percent of premiums) in 2000. This deteriorated to a 10-percent operating loss in 2001 (see Chart B).

There are two key drivers of these financial results:

- Insurance Underwriting--For these companies, a simplified combined ratio was calculated by dividing calendar year loss and loss adjustment and underwriting expenses by premium. The combined ratios were 124 percent and 138 percent in 2000 and 2001, respectively. That means in 2001, these insurers incurred $1.38 in losses and expenses for each $1.00 of premium. The preceding five years were fairly stable, from 110 percent to 115 percent. Deterioration of the loss

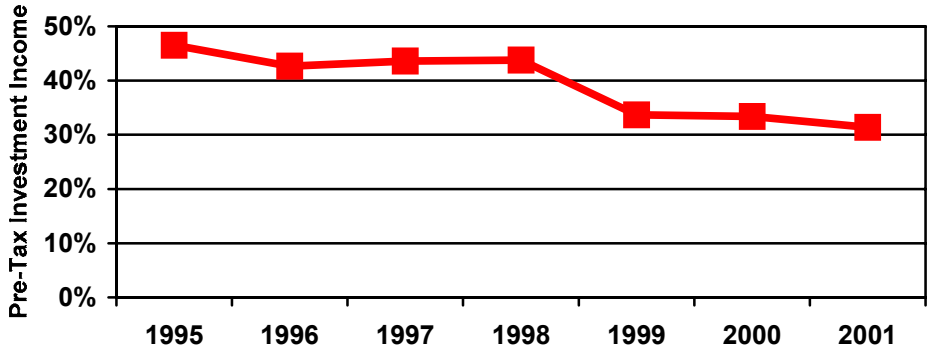
and loss adjustment expense ratio drove these results; the underwriting expense ratio remained relatively constant (see Chart C).

CHART C: COMBINED RATIO



- Investment Income--Pre-tax investment income (including realized capital gains and losses) derives from policyholder-supplied funds invested until losses are paid as well as from the company capital ('surplus'). The ability of investment income to offset some of the underwriting loss is measured as a percentage of earned premiums. This statistic declined during the measurement period from the mid-40 percent to the mid-30 percent level and, in 2001, to 31 percent (see Chart D).

CHART D: INVESTMENT INCOME AS A PERCENTAGE OF PREMIUM DECLINES

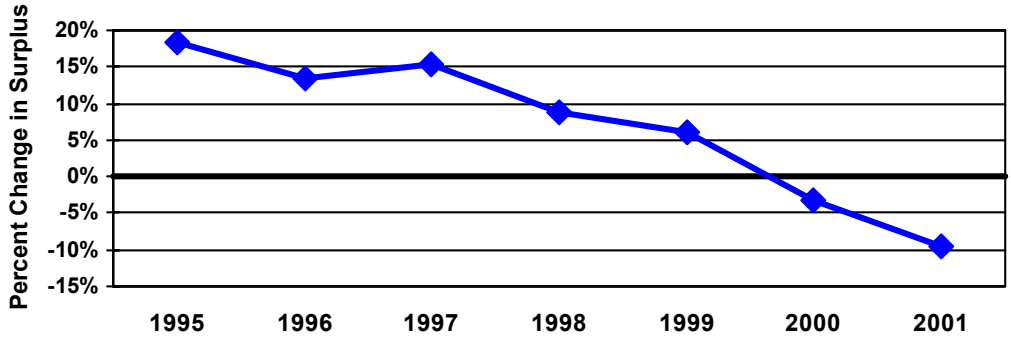


This offset will continue to decline because (i) most insurer-invested assets are bonds, many of which were purchased before recent lower yields, and interest earnings do not yet fully reflect these lower yields; and (ii) the premium base is growing due to increased rates and growth in exposure.

Invested assets are not increasing as rapidly as premium and, therefore, investment income as a percentage of premium will decline.

The effect of these results on surplus is reflected in Chart E, which shows the percent change in surplus from one year to the next. Surplus defines an insurer's capacity to write business prospectively and to absorb potential adverse loss development on business written in prior years (see Chart E).

CHART E: SURPLUS CHANGE TURNS NEGATIVE



THE RATEMAKING PROCESS

Ratemaking is the term used to describe the process by which companies determine what premium is indicated for a coverage. In the insurance transaction, the company assumes the financial risk associated with a future, contingent event in exchange for a fixed premium before it knows what the true cost of the event is, if any. The company must estimate those costs, determine a price for it and be willing to assume the risk that the costs may differ, perhaps substantially, from those estimates. A general principle of ratemaking is that the rate charged reflects the costs resulting from the policy and the income resulting from the anticipated policy covered losses, not what is actually paid or is going to be paid on past policies. It does not reflect money lost on old investments. In short, a rate is a reflection of future costs.

In general, the actuarial process used in making these estimations for medical malpractice insurance starts with historical loss experience for the specific coverage and, usually, for a specific jurisdiction. Rates are determined for this coverage, jurisdiction, and a fixed time period. To the appropriately projected loss experience, a company must incorporate consideration of all expenses, the time value of

money and an appropriate provision for risk and profit associated with the insurance transaction.

For a company already writing a credible volume of the coverage in a state, the indications of the adjusted ultimate loss experience can be compared to its current premiums to determine a change. For a company entering the line or state for the first time, obtaining credible data to determine a proper premium is often difficult and, sometimes, not possible. In the latter situation, the risk of being wrong is increased significantly.

Additionally, some lines of insurance coverage are more predictable than other lines. The unpredictability of coverage reflects its inherent risk characteristics. Most companies would agree that costs and, therefore, rates for automobile physical damage coverage, for example, are more predictable than for medical malpractice insurance because automobile insurance is relatively high frequency/low severity coverage compared to medical malpractice insurance. In the case of auto physical damage, one has a large number of similar claims for relatively small amounts that fall in a fairly narrow range. In medical malpractice insurance, one has a small number of unique claims that have a much higher average value and a significantly wider range of possible outcomes. There also is significantly longer delay for medical malpractice insurance between the occurrence of an event giving rise to a claim, the reporting of the claim, and the final disposition of the claim. This longer delay adds to the uncertainty inherent in projecting the ultimate value of losses, and consequently premiums.

The following guidelines explain the ratemaking process:

1. Historical loss experience is collected in coverage year detail for the last several years. This usually will include paid and outstanding losses and counts. The data is reviewed for reasonableness and consistency, and estimates of the ultimate value of the coverage-year loss are developed using actuarial techniques.

2. Ultimate losses are adjusted to the prospective level (i.e., the period for which rates are being made). This involves an appropriate adjustment for changes in average costs and claim frequencies (called trend). Adjustments also would be made for any changes in circumstances that may affect costs (e.g., if a coverage provision has been altered).

3. Adjusted ultimate losses are compared to premium (or doctor counts) to determine a loss ratio (or loss cost per doctor) for the prospective period.

4. Expenses associated with the business must be included. These are underwriting and general expenses (review of application, policy issuance, accounting, agent commission, premium tax, etc.) Other items to consider are the profit and contingency provision, reinsurance impact, and federal income tax.

5. A final major component of the ratemaking process is consideration of investment income. Typically for medical malpractice insurance, a payment pattern and anticipated prospective rate of return are used to estimate a credit against the otherwise indicated rate.

These five steps, applied in a detailed manner and supplemented by experienced judgment, are the standard roadmap followed in developing indicated rates. There are a number of other issues to address in establishing the final rates to charge. These include recognizing differences among territories within a state, limits of coverage, physician specialty, and others. The final rates will reflect supplemental studies of these various other aspects of the rate structure.

Many states have laws and regulations that govern how premium rates can be set and what elements can or must be included. The state regulators usually have the authority to regulate that insurance premium rates are not excessive, inadequate, or unfairly discriminatory. It is not uncommon for state insurance regulators to review the justification for premium rates in great detail and, if deemed necessary, to hold public hearings with expert testimony to examine the basis for the premium rates. In many states, the insurance regulator has some authority to restrict the premium rates that insurance companies can charge.

FREQUENT MISCONCEPTIONS

In closing, it might be helpful to address some frequent misconceptions about the insurance industry and medical malpractice insurance coverage.

Misconception 1: "Insurers are increasing rates because of investment losses, particularly their losses in the stock market."

As we have pointed out, investment income plays an important role in the overall financial results of insurers, particularly for insurers of medical professional liability, because of the long delay between payment of premium and payment of losses. The vast majority of invested assets are fixed-income instruments. Generally, these are purchased in maturities that are reasonably consistent with the anticipated future payment of claims. Losses from this portion of the invested asset base have been minimal, although the rate of return available has declined.

Stocks are a much smaller portion of the portfolio for this Group, representing about 15 percent of invested assets. After favorable performance up through the latter 1990s, there has been a decline in the last few years, contributing to less favorable investment results and overall operating results. Investment returns are still positive, but the rates of return have been adversely affected by stock declines and more so by lower fixed income investment yields.

In establishing rates, insurers do not recoup investment losses. Rather, the general practice is to choose an expected prospective investment yield and calculate a discount factor based on historical payout patterns. In many cases, the insurer expects to have an underwriting loss that will be offset by investment income. Since interest yields drive this process, when interest yields decrease, rates must increase.

Misconception 2: "Companies operated irresponsibly and caused the current problems."

Financial results for medical liability insurers have deteriorated. Some portion of these adverse results might be attributed to inadequate knowledge about rates in newly entered markets and to being very competitive in offering premium discounts on existing business. However, decisions related to these actions were based on expectations that recent loss and investment markets would follow the same relatively stable patterns reflected in the mid-1990s. As noted earlier, these results also benefited from favorable reserve development from prior coverage years. Unfortunately, the environment changed on several fronts — loss cost levels increased, in several states significantly; the favorable reserve development ceased; investment yields declined; and reinsurance costs jumped.

While one can debate whether companies were prudent in their actions, today's rate increases reflect a reconciliation of rates and current loss levels, given available interest yields. There is no added cost for

past mispricing. Thus, although there was some delay in reconciling rates and loss levels, the current problem reflects current data.

Misconception 3: "Companies are reporting losses to justify increasing rates."

This is a false observation. Companies are reporting losses primarily because claim experience is worse than anticipated when prices were set. Several companies have suffered serious adverse consequences given these financial results, including liquidation or near liquidation. Phico, MIIX, Frontier and, most recently, the Reciprocal of America, are all companies forced out of the business and in run-off due to underwriting losses. Further, the St. Paul Companies, Inc, formerly the largest writer of medical malpractice insurance, are now in the process of withdrawing from this market. One reason for this decision is an expressed belief that the losses are too unpredictable to continue to write the business.

The Academy appreciates the opportunity to provide an actuarial perspective on these important issues and would be glad to provide the subcommittee with any additional information that might be helpful.