

Malpractice Liability Assessment Model

*Estimates of the Cost Impact of
Managed Care Accountability Legislation*

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and the
American Medical Association**

August 1, 1998

Executive Summary

The American Medical Association (AMA) commissioned William M. Mercer, Incorporated (Mercer) to develop an actuarial model (the “Model”) to assess the cost impact of managed care accountability legislation. The Model derives the estimates of cost impact from projections of medical services and malpractice claims experience.

The Model examines the impact of a Model Managed Care Accountability Law that contains the following three components:

- A direct cause of action against health insurance carriers, HMOs, and managed care entities for damages caused by their failure to exercise ordinary care in making health care treatment decisions;
- A prohibition on hold harmless and indemnification clauses in provider contracts; and
- A prohibition on the use of the corporate practice of medicine defense.

The Model was constructed using a general logic flow that begins with a population enrolled in an IPA or network model HMO that contracts with physicians or physician networks. The enrollment is distributed among commercial, Medicare and Medicaid managed care programs. Mercer cost models produce medical service projections by physician subspecialty. Managed care organization (MCO) malpractice claim incidence is derived from the MCO medical services by physician subspecialty. Applying an average MCO malpractice award and legal expense to the malpractice claim incidence yields the change in MCO cost per member per month. This result converted to a percent of MCO premium.

A complex array of formulas and quantitative and qualitative assumptions underlies the general logic flow. A technical committee formed by Mercer and the AMA, which included attorneys, economists, and actuaries, derived the assumptions from a review of the literature and an analysis of various data sets.

The Model takes into consideration a number of variables thought to affect the impact of the Model Law. These variables include (i) three levels of legislative impact related to the impact of the Model Law’s prohibition of the corporate practice of medicine defense; (ii) two constructions of ERISA preemption to capture the extent to which the actions brought by enrollees of ERISA plans could be preempted by ERISA; (iii) alternative types of MCOs to account for different mixes of plan types found across the country; (iv) alternative enrollment mixes; and (v) three types of caps on malpractice awards to account for different state tort reform laws.

Executive Summary

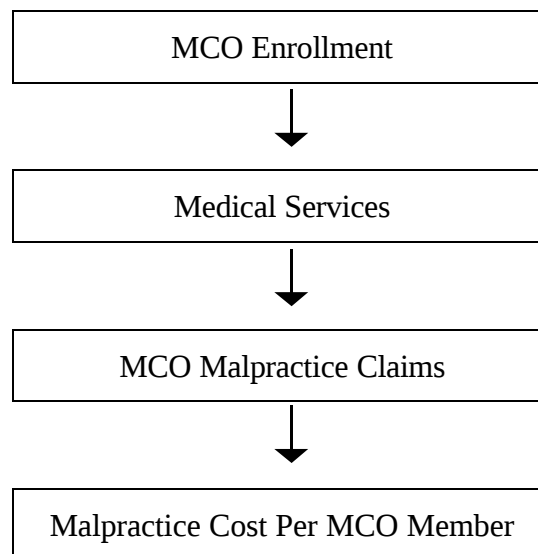
The Model produces the following estimates for the three levels of legislative impact for narrow and broad ERISA construction.

Increase as a Percent of MCO Premium - No Cap on Awards

Legislative Impact	<u>ERISA Preemption</u>	
	Narrowly Construed	Broadly Construed
Significant	1.8%	0.5%
Moderate	1.2%	0.3%
Low	0.9%	0.2%

Background

In order to estimate the impact of managed care accountability legislation, a model (the “Model”) was developed. The Model's general logic flow begins with a population enrolled in an IPA or network model HMO that contracts with physicians or physician networks. The enrollment is distributed among commercial (employer sponsored), Medicare, and Medicaid managed care programs. William M. Mercer, Incorporated (Mercer) cost models produce medical service projections by physician subspecialty. Managed care organization (MCO) malpractice claim incidence is derived from the MCO medical services by physician subspecialty. Applying an average MCO malpractice award and legal expense to the malpractice claim incidence yields the change in MCO cost per member per month. This result is converted to a percent of MCO premium. The schematic below summarizes the general logic flow:



A complex array of formulas and quantitative and qualitative assumptions underlies the general logic flow. A technical committee formed by Mercer and the AMA, which included attorneys, economists, and actuaries, derived the assumptions from a review of the literature and an analysis of various data sets, some in the public domain and others that are proprietary.

In early discussions, a number of approaches to developing cost estimates were reviewed, and the technical committee decided to construct the estimates from medical services projections and malpractice claims experience. This approach was selected over the alternative of using malpractice insurance premiums as the basis for projections. Malpractice insurance coverage varies significantly. Policies are sold with a variety of deductibles and coverage limits. Price changes usually reflect anticipated increases in claims, prior premium deficiencies and profit margins. Thus, it was determined that using malpractice insurance premiums as the basis for cost estimates was not the best approach to determining the expected impact of managed care accountability legislation.

Model Managed Care Accountability Law

The Malpractice Liability Assessment Model examines the impact of a Model Managed Care Accountability Law (the “Model Law”). The Model Law applies to all managed care organizations, but does not apply to employers that sponsor group health plans.

Under the Model Law, an MCO is liable for damages caused to an enrollee by the MCO’s failure to exercise ordinary care in making health care treatment decisions. The Model Law defines a health care treatment decision as a determination made when medical services are provided by the plan and a decision that affects the quality of the diagnosis, care or treatment provided to the enrollees. As in other negligence actions, a plaintiff must demonstrate that the MCO breached its duty to exercise ordinary care, and that such breach was the proximate cause of the plaintiff’s injury.

The Model Law also provides for a vicarious liability cause of action, under which an MCO is liable for damages caused by the health care treatment decisions made by its employees, agents, and representatives. In many states, MCOs are already subject to claims for malpractice under this type of vicarious liability theory. However, as discussed later in this report, MCOs assert a number of defenses to malpractice actions, including the corporate practice of medicine doctrine and the preemption of state law causes of action under the Employee Retirement Income Security Act of 1974 (ERISA). The Model Law prohibits MCOs from asserting the corporate practice of medicine doctrine as a defense to malpractice actions. Whether a court will determine that ERISA preempts a cause of action under the Model Law when brought against an MCO contracting with an ERISA plan is unknown. As discussed later in this report, the Model accounts for the potential impact of ERISA by considering both a broad and narrow construction of the preemption provisions.

The Model Law provides that, as a defense to a cause of action under either a direct negligence or vicarious liability theory, an MCO may assert that it did not control, influence or participate in the treatment decision, and did not deny or delay payment for any treatment recommended by a provider.

The Model Law also prohibits MCOs from including indemnification provisions in contracts with providers that would require the providers to hold the MCO harmless for the MCO’s conduct.

Variables in the Model

The Malpractice Liability Assessment Model takes into consideration a number of variables thought to affect the impact of the Model Law. Each of these variables and the reasons for including them are discussed below.

A. Legislative Impact

The Model considers three levels of legislative impact--significant, moderate and low--designed to reflect the impact of the Model Law's prohibition of the corporate practice of medicine defense.

The corporate practice of medicine is a legal doctrine that may prevent a non-professional corporation, such as a general business corporation, from employing physicians. Although few states have statutes explicitly prohibiting the corporate practice of medicine, many states have a body of older case law and Attorney General opinions that have established this doctrine.

The bar against the corporate practice of medicine is not enforced in all states. Where it is enforced, MCOs often assert the doctrine as a defense to malpractice actions, under the theory that MCOs are legally precluded from practicing medicine and, thus, are incapable of committing malpractice.

Research determined that states generally fall within one of three scenarios with respect to how the corporate practice of medicine doctrine is enforced:

- *Scenario 1:* The state actively enforces a complete bar against the corporate practice of medicine.
- *Scenario 2:* The state actively enforces a bar against the corporate practice of medicine, but excepts from the bar certain providers, such as hospitals, HMOs, and professional corporations.
- *Scenario 3:* The state has no bar against the corporate practice of medicine *or* has a bar that is not enforced.

The Model Law prohibits MCOs from asserting the corporate practice of medicine doctrine as a defense. The impact of this prohibition is captured by the legislative impact variable. In a state that falls within Scenario 1, the Model Law is assumed to have the most significant impact because the corporate practice of medicine doctrine, which has served as an effective barrier to suits against MCOs, will no longer be available as a defense. A state that falls within Scenario 2 will experience a more moderate impact from the Model Law, based on the assumption that some MCOs already have been exposed to malpractice liability. In a state that falls within Scenario 3, the Model Law has the least impact, because the state has not recognized the bar against the corporate practice of medicine as a barrier to actions against MCOs.

Variables in the Model

B. ERISA Preemption

The Model considers two constructions of the ERISA preemption--broad and narrow. ERISA limits the ability of states to regulate employee benefit plans, including health benefit plans, and establishes the federal government as the primary regulator of these plans. ERISA preempts all state laws that relate to employee benefits, although the statute expressly preserves states' ability to regulate the business of insurance. Under this framework, claims appeal procedures are regulated at the federal level, and MCOs that offer a product through a health benefit plan are often protected by ERISA from state court litigation.

While there is an increasing trend toward allowing state malpractice claims against MCOs that are based on the quality of care--as opposed to the quantity of care--it is unclear whether a court would rule that the Model Law is preempted by ERISA. Given this uncertainty, the Model is designed to capture how broadly ERISA preemption is construed. If ERISA preemption is broadly construed to preempt all actions against MCOs by ERISA enrollees other than claims for vicarious liability arising from alleged malpractice of a provider, the MCO liability exposure from ERISA enrollees remains limited. Alternatively, if ERISA preemption is narrowly construed to allow vicarious liability and direct negligence actions against MCOs by ERISA enrollees, the MCO liability exposure from ERISA enrollees is expanded.

A substantial percentage of MCO enrollees are in employer-sponsored plans . For this set of calculations, the Model assumes that 90% of the MCO enrollees are covered under an ERISA employee benefit plan. This percentage varies significantly for different states. Thus, the extent to which ERISA enrollees may bring a state law cause of action against MCOs will have an impact on results of the Model.

C. Type of MCO

The Model considers alternative types of MCOs to account for the different mix of plan types found across the states. The Model assumes that the Model Law will have the least impact on staff model HMOs, because they have already been subject to vicarious liability malpractice claims, based on their direct employment of physicians. IPA/network model HMOs (with which preferred provider organizations (PPOs) are included) will, conversely, experience a greater impact from the Model Law because they have generally not been subject to vicarious liability claims.

It is assumed that a staff model HMO will incur 30% of the additional liability incurred by IPA/network model HMOs. Based on industry reports, it is also assumed that 96% of enrollment in MCOs is in IPA/network model HMOs and the remaining 4% of enrollment is in staff model HMOs.

Variables in the Model

D. MCO Enrollment Mix

The Model allows for different mixes of commercial, Medicaid and Medicare enrollment. Medical services vary in nature and intensity for each of these populations. Medicaid enrollees, predominantly mothers and children, require considerable obstetric and pediatric services. Medicare enrollees, on the other hand, typically require more cataract surgery and joint replacements than other populations. These variations in medical needs impact the malpractice liability exposure associated with each population.

E. Caps on Malpractice Awards

The Model considers three types of caps on damage awards to account for different state tort reform laws. The Model provides estimates for (i) no cap, (ii) a cap of \$250,000 on non-economic damages with no cap on economic or punitive damages, and (iii) a cap of \$500,000 on non-economic damages with no cap on economic or punitive damages. While there are numerous variations in state law with respect to damage caps, research indicated that the alternatives selected were representative of many states.

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A. Expected MCO Malpractice Claim Incidence

The Model derives the expected MCO malpractice claims for three categories of enrollment: commercial, Medicare and Medicaid. There are significant differences in the nature and intensity of the medical services provided to each of these populations. Mercer claim cost models provide medical services distributions by physician subspecialty for each of these populations.

Services for the three categories of enrollees provided by physicians are measured in terms of RVUs (relative value units). These units reflect both the frequency and complexity of the services provided. Total RVUs quantify a physician's annual practice in terms of volume and complexity. Studies provide the average number of RVUs for a given specialty. Comparing the RVUs provided annually by physicians to the number reflected by an MCO's medical services experience yields the share of a physician's practice dedicated to providing health services to MCO members. The MCO's share of a physician's practice translates to a share of the physician's professional liability exposure. For example, if 1,000 members require 90 RVUs of cardiology services annually and a cardiologist, on average, performs 9,000 RVUs per year, the members' services occupy 1% of a cardiologist's practice. We assume, therefore, that MCO members account for a 1% share of a cardiologist's professional liability. Assuming the annual incidence of professional liability claims for a cardiologist is 0.169, the annual incidence per 1,000 MCO members is 0.00169 (0.01×0.169).

Since this technique maps only physician professional liability claims to MCO members, another adjustment is required to assign hospital liability claims to MCO members. The estimated ratio of the total physician and hospital liability claims to physician liability claims is 1.14. Applying this factor to the annual incidence of physician professional liability claims per 1,000 members produces an estimate of the incidence of claims that includes both physician and hospital liability claims.

In addition, assumptions were developed regarding the expected incidence of malpractice claims against MCOs. To bring an action against an MCO, the MCO must somehow participate in the health care treatment decision, by denying or delaying payment or otherwise controlling or influencing the decision. Many malpractice claims will be based exclusively on the physician's or hospital's conduct, and will not meet this threshold. Because this is a new area of law, there is a paucity of data available on MCO malpractice claims.

To develop reasonable assumptions on the percent of existing malpractice claims that will become MCO claims following enactment of the Model Law, the technical committee considered the expected incidence of MCO malpractice claims under the three legislative impact scenarios. Direct negligence claims are introduced separately. The Model assumes that existing claims against physicians and hospitals will remain the same, and makes the following assumptions for additional vicarious liability claims against MCOs.

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Legislative Impact for the State	Percent of Malpractice Claims that Become MCO Claims
Significant Impact	20%
Moderate Impact	10%
Low Impact	5%

Thus, under the scenario in which the Model Law will have the most significant impact in eliminating existing barriers to suits against MCOs, a maximum of 20% of the existing malpractice claims against hospitals and physicians are assumed to be asserted against MCOs on the basis of vicarious liability. In the low legislative impact scenario, it was assumed that 5% of the existing malpractice claims would be asserted against MCOs. This range is attributable to the relationship between existing bars to the corporate practice of medicine and the incidence of vicarious liability claims against MCOs.

The Model Law also allows for a direct negligence theory of liability that is not necessarily linked to physician or hospital malpractice, and requires a threshold showing that MCO conduct was the proximate cause of injury. Direct negligence claims are assumed to arise in addition to claims against physicians and hospitals. It is assumed that there will be a 10% increase over existing malpractice claims against physicians and hospitals for all legislative impact scenarios. Unlike the expected incidence of vicarious liability claims, it is assumed that the incidence of direct negligence claims is not linked to the corporate practice of medicine doctrine. Rather, the availability of a cause of action on direct negligence grounds is based directly on enactment of the Model Law. Therefore, the expected incidence of direct negligence claims is constant across the three legislative impact scenarios.

To illustrate this approach, the calculation of malpractice claims is shown for an MCO with one million members. This calculation is for a commercial (employer sponsored) population, and would be repeated for Medicare and Medicaid enrollees by assigning a different number of physician professional liability claims.

MCO Claims In A State In Which Model Law Has a Significant Impact

Calculation Steps	Malpractice Claims
Physician malpractice claims involving MCO members	147.4
Physician and hospital malpractice claims	$147.4 \times 1.14 = 168$
Vicarious liability claims against MCO	$168 \times .20 = 33.6$
Direct negligence claims against MCO	$168 \times .10 = 16.8$
MCO malpractice claims	$33.6 + 16.8 = 50.4$

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The incidence of MCO claims is also related to ERISA preemption. The following assumptions were made regarding the incidence of MCO claims under the broad and narrow constructions of ERISA preemption.

ERISA Construction	MCO Claims Allowed
Narrow	100%
Broad	5%

B. Average Award per MCO Malpractice Claim

After the MCO malpractice claim incidence is estimated, the Model then determines the average cost of an MCO malpractice claim. The distribution of awards was developed from statistics in “Civil Jury Cases and Verdicts in Large Counties,” Bureau of Justice Statistics, July 1995. The award amounts include verdicts in the Nation's 75 largest counties for physician and hospital malpractice awards. The technical committee determined that hospital data should be included in deriving the average award for MCOs based on certain similarities between the types of organizations. For example, like hospitals, MCOs are an institutional provider, subject to vicarious liability claims, and generally carry higher insurance coverage than physicians as a result of their potentially greater financial exposure.

Another study published by Tillinghast-Towers Perrin, “Tort Cost Trends: An International Perspective” reports that physician malpractice award payments account for approximately 63% (\$6.6 billion/\$10.5 billion) of the total malpractice payments. The 63% is based on 1995 award payments. This percentage has been fairly stable over the last several years. A study of hospital malpractice claims in Ohio, published in the Journal of Healthcare Management entitled “11 Years of Million-Dollar Malpractice Claims” provides information that reveals that 67% of the hospital malpractice claims include physicians as a principal party in the case. Collectively, these statistics suggest that physicians are defendants in 80-90% of medical malpractice cases. This supports using physicians as the primary means to link malpractice claims to MCOs.

The malpractice awards data from the Bureau of Justice Statistics included the following statistical characteristics for cases *with plaintiff awards*.

Original Awards Distribution

Median Award	\$201,000
Average Award	\$1,484,000
Awards over \$250,000	47.1%

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Awards over \$1,000,000

24.8%

Because the data includes hospital awards, which account for a significant percentage of the awards in excess of \$1 million, the awards distribution is substantially higher than what would be expected from physician awards.

The original awards distribution was adjusted to:

1. Remove the influence of damage caps. (the distribution is adjusted for caps on damages after steps (2) and (3));
2. Reflect the increasing number of \$1 million plus awards observed over the last several years; and
3. Accommodate the expectation that MCOs will be subject to higher malpractice awards than physicians.

Adjusting the original malpractice claim distribution was an iterative process. Each iteration was compared to information from various sources as described below. This change produced the following:

Adjusted Awards Distribution for MCOs

Median Award	\$875,000
Average Award	\$1,718,600
Awards over \$250,000	82.0%
Awards over \$1,000,000	52.0%

To test the reasonableness of the adjusted awards distribution, we compared the statistics to other sources. The Health Care Liability Alliance reported that 50% of the medical malpractice awards in 1994 were between \$120,000 and \$1,300,000. The Model's adjusted malpractice award distribution produces a comparable statistic of 55%. The 1994 California Medical Malpractice Large Loss Trend Study reported that the average cost for claims over \$1,000,000 was approximately \$2.5 million over five years. The comparable statistic for the adjusted claims distribution is \$2,875,000. Given the adjustment made to account for MCOs' greater financial resources and the observed growth of \$1 million plus awards, the distribution produces reasonable results. Jury Verdict Research similarly reported a median physician malpractice claim cost of \$500,000 for 1994. The adjusted claims distribution produces a somewhat higher median claim cost of \$874,000. Again, considering the Model's adjustments, the median derived from the

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adjusted award distribution appears appropriate. Although the data used in these comparisons were not perfectly compatible, the comparisons were determined to be sufficient to support the reasonableness of the adjusted malpractice awards distribution.

Because the awards distributions are based only on plaintiff awards, the statistics must be converted to an average for all claims. The Model takes into account the prevailing assumption that plaintiffs are successful in 25% of the cases. Therefore, the average award is multiplied by 25% to arrive at an average for all cases.

Average Cost per MCO Award

Source	Plaintiff Verdict	All Awards
Bureau of Justice Statistics	\$1,484,000	\$371,000
Adjusted Claims Distribution	\$1,718,600	\$429,651

The Model's figure for all claims (\$429,651) is applied to the expected MCO malpractice claims incidence to produce the estimated malpractice liability. Legal expenses are assumed to average \$125,000 over all suits.

C. Per Member Per Month Cost Calculation

The MCO malpractice claim incidence and average award per claim translate to a cost per member per month (PMPM).

$$\text{Cost PMPM} = \frac{(\text{MCO Malpractice Claim Incidence per 1,000 members})}{(\text{Average Award} + \text{Legal expense}) / 1,000 \text{ members} / 12 \text{ months}}$$

Substituting factors in the formula further illustrates the calculation for an IPA model with commercial enrollment.

$$\text{Cost PMPM} = .0504 \times (\$429,651 + \$125,000) / 12,000 = \$2.33 \text{ PMPM}$$

Using the variables outlined above, this estimate is for an IPA/network model HMO in a state in which the Model Law has a significant impact. The MCO malpractice claim incidence will be lower in the moderate and low impact scenarios, thus producing a lower cost PMPM.

This illustrative calculation is for commercial (employer-sponsored) programs. Similar formulas are applied to derive costs PMPM for Medicare and Medicaid managed care programs. The cost PMPM is converted to a percent of premium increase.

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D. Additional Assumptions

The Model is designed to assess the direct costs associated with the legislative changes that increase malpractice liability exposure. Specifically, the Model estimates the increase in malpractice exposure and the expenses involved in defending against these claims.

Indirect costs may result from an increase in MCO malpractice liability exposure, such as the cost of defensive medicine. The Model does not include an adjustment for the cost of defensive medicine. It was determined that an adjustment was not warranted for several reasons. Physicians, hospitals and other providers, including MCOs, albeit to a lesser extent, have been subject to malpractice liability for many years, and, as such, many of the costs of defensive medicine are already reflected in current claims experience. In addition, MCOs in many states already are subject to consumer protection laws and customer demand for managed care accountability. Thus, many MCOs already have adapted their patterns of care delivery to respond to these demands. At the same time, given the motivation in a managed care environment to control costs in order to increase enrollment and remain competitive, defensive medicine practices may not be as prevalent as in a fee-for-service environment. In today's competitive environment, the motivation to control costs may prevail even if the business risk of malpractice suits increases. Moreover, relative to individual physicians, MCOs are better able to manage and bear risk--a fact that should lessen the likelihood and extent of defensive medicine on the part of these organizations. Lastly, any increase in utilization as a result of the Model Law would likely be offset by a decrease in malpractice liability. Few estimates of defensive medicine take this offset into account.

E. Cost Impact Estimates

Exhibit 1 summarizes the variables and assumptions applied in the Model. *Exhibits 2, 3 and 4* provide cost projections for each of the legislative impact scenarios based on the corporate practice of medicine doctrine (i.e., significant, moderate, and low impact).

For each scenario, the estimates are provided for the alternative constructions of ERISA preemption (i.e., narrowly construed and broadly construed) and for the three alternative caps on damages. Hypothetical enrollments are applied that can be adjusted to account for individual state variation. The Model is designed to accommodate state-specific assessments.

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