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April 9, 2014

Mr. Ed Amsler
Medical Liability Mutual Insurance Company
Two Park Avenue
Suite 2500
New York, NY 10016

Dear Mr. Amsler:

Re: Statute of Limitations on New York Medical Malpractice Claims

Legislation is currently being proposed in New York (Bill A1056/S744) which would significantly lengthen the statute of limitations which applies to medical malpractice claims. The purpose of this letter is to analyze the effect of this legislation, if enacted, upon premiums and loss reserves for medical malpractice insurance.

BACKGROUND

There is currently a 2.5 year statute of limitations on civil actions for most medical malpractice claims. Specifically, Section 214-a of Article 2 of the New York State Civil Laws specifies that “an action for medical, dental or podiatric malpractice must be commenced within two years and six months of the act, omission or failure complained of ...”. There are some exceptions to the statute, the most important of which applies to infants, where, according to Section 208, “If a person entitled to commence an action is under a disability because of infancy at the time the cause of action accrues, ... the time [for commencing the action] shall be extended by the period of disability [but] not beyond ten years after the cause of action accrues...”.

Two other qualifications apply to the 2.5 year limitation. First, where a patient has undergone “continuous treatment” over a period of time by a physician, the 2.5 year limiting interval begins at the date of the last treatment. Second, where the malpractice

action is based on the discovery of a foreign object in the body of a patient, a claim may be brought within one year of the date of discovery of the object, which may be after 2.5 years from the date of the original act which implanted the foreign object into the body.

The current statute of limitations has been in effect since 1975. Previously, it was 3.0 years (instead of 2.5 years) for most claims and up to age 21 (instead of 10 years) for claims involving infants.

Legislation (Bill A1056/S744) is being proposed to extend the 2.5 year limitation by allowing claimants to bring actions for medical malpractice within 2.5 years from the date of discovery of injury (when discovered or reasonably should have been discovered) or within 2.5 years of the last treatment where there is continuous treatment for the same illness, injury or condition which gave rise to the accrual of an action. It would therefore permit more medical malpractice claims than currently allowed and would increase losses and malpractice premiums required to cover the losses. Since this legislation would significantly lengthen the time of reporting malpractice claims, there would also be an increase in the uncertainty associated with the determination of appropriate malpractice premiums.

This report is an update to our previous analysis on changes to the statute of limitations provided on February 23, 2009.

CONCLUSIONS

We estimate the effect of the proposed legislation (a change in the statute of limitations) would be to increase annual medical malpractice losses by 14.5%. Thus premiums might be expected to increase by 14.5% as well, offset slightly by the increased investment income which would be associated with increased reporting lags and payment lags. Since there is a large degree of uncertainty associated with these estimates, we conclude that medical malpractice premiums would likely increase by an amount ranging from 11.5% to 17.5%.

ANALYSIS OF PROPOSED CHANGE TO LEGISLATION

The purpose of this letter is to quantify the effect upon medical malpractice premiums and losses of the proposed changes to the current legislation. To analyze the effect, we attempted to answer two questions, namely:

- (1) Does the current statute of limitations effectively limit the amount of medical malpractice losses?

(2) What would be the increase to the annual medical malpractice losses and premiums if the 2.5 year limitation with regard to occurrence were increased to a 2.5 year limitation with regard to discovery of injury?

Question 1 - Does the current statute of limitations effectively limit the amount of medical malpractice losses?

We have substantial MLMIC data which can be used to evaluate the answer to this question. For many years, Milliman has evaluated MLMIC data by reporting “layer”, where “layer” pertains to the reporting lag between the inception of a policy year (normally July 1 in New York) and the year that claims are reported. Layer 1 pertains to claims reported in the same year as policy inception (actually within the 6 month period between July 1 and December 31 of the year of inception). Layer 2 pertains to claims reported in the following year. Layer 3 pertains to claims reported in the third year and so on.

Assume that a 2.5 year limitation applied to all claims from the date of occurrence of the claims. Since the date of occurrence can be at any time during the year following the July 1 policy inception date, the last claim within the 2.5 year limitation which can be reported for policy year 2013 must be reported by December 31, 2016. In terms of the report layers that we analyze, the last claim within the 2.5 year limitation would fall into the fourth layer. The fifth and higher layers would have no claims because those claims would be barred by the 2.5 year limitation. (We know of course that the fifth and higher layers do contain some claims, but those can be ascribed to claims involving infants and the other exceptions specified in the statute.)

Next, observe the actual MLMIC data, whereby estimated ultimate losses are allocated to report layers.¹ This data is presented on attached Exhibit 1, Column (4) as percentage allocations of total losses to each report layer. We observe that layers 1 through 4 do contain much higher percentages of losses than do the fifth and higher layers; i.e. percentages for the lower layers equal 28% (layers 1 and 2), 30% (layer 3), and 28% (layer 4), while percentages in higher layers drop sharply to 5% in layer 5, etc. This data appears to indicate that the 2.5 year limitation sharply restricts the timing and amount of the reporting of losses.

In columns (5) through (7) of Exhibit 1, we show what we would theoretically expect to happen if losses were reported at completely random times after the dates of occurrence, subject to complete limitations after either 2.5 years (for claims not involving infants) or 10 years (for claims involving infants). This presumes a uniform distribution of loss reporting for the periods prior to the limitations. Column (5) applies to claims which do

¹ Reference: Derived from MLMIC 2014-15 Physician Rate Analysis, Exhibit 14, Sheet 1

not involve infants (which correspond to roughly 75% of all MLMIC claims). Column (6) applies to Obstetric claims which involve infants. Column (7), which applies to all claims, is the combination of the previous two columns.

In Column (5), we show that 30% of losses would theoretically be reported in layers 1, 2, 30% in layer 3, but only 15% in layer 4. A reduced percentage is shown for layer 4 because claims reported in layer 4 would need to be incurred late in the policy year; claims incurred early in the policy year would be time-barred by the 2.5 year limitation early in layer 4. For a comparable reason, the Obstetrics losses in Column (6) are spread uniformly over the layers except that reduced amounts are shown for the highest layers 11 and 12.

The actual data in Column (4) is close to the randomly distributed amounts for layers 1, 2, and 3 but larger than these amounts for layer 4. We believe this is because some claimants accelerate their reporting of claims to avoid their being time-barred. Thus, even more losses than the theoretically expected amounts are reported just before the time limits.

In summary, the data in Column (4) shows sharp reductions to reported losses both after layer 4 and layer 11. These reductions are evidence that the current 2.5 year and 10 year limitations do effectively limit the amount of medical malpractice losses.

Question 2 - What would be the increase to the medical malpractice losses if the 2.5 year limitation were increased?

As discussed in our prior reports and from the data provided on Exhibit 1, substantial amounts of MLMIC losses are reported up to the last possible moment before being time-barred by either the current 2.5 year or 10 year limitations. If this were not the case, i.e. if it were true that most claims were reported well before the 2.5 year limit, there would be little or no effect of an extension of the limit. Given the facts as we observe them however, we expect a material effect.

To make a reasonable projection of the effect of the legislation, we observe from Column (4) of Exhibit 1 that losses in the lowest reporting layers 1, 2 equal 28% of the total losses, losses in layer 3 equal 30%, and losses in layer 4 equal 28% of total losses. After layer 4, the percentages drop sharply, presumably because of the 2.5 year limit. If the limit were increased, we would expect losses to decline more gradually after the fourth layer.

Estimating the new reporting pattern is difficult since injuries that have occurred in the past that would have become malpractice claims if they had not been time-barred were never reported. Therefore, we have no historical data to determine their magnitude.

However, other states have similar statutes of limitations to those proposed for New York. We examined the historical claims reported for large writers of medical professional liability in these states to determine patterns in claim reporting by time period.

Using the cumulative number of reported claims from Schedule P – Part 5F- Section 1A Medical Malpractice Occurrence, we were able to determine a claim reporting pattern for a proxy group of states (i.e. those states² having a statute of limitations of 2 to 3 years after discovery). Exhibit 2, Columns (2) and (3) show the proxy group's reporting pattern sorted by report layer. We observe a much more gradual decline in each successive report layer. We then calculated incremental decay factors based on the changes in incremental claims reported in Column (3). The decay factors represent the expected decline in claims reporting (and thus loss reporting) under the current statute of limitations in each state. The selected decay factors in Column (5) were applied to the report layer loss patterns (adjusted to be consistent with the proxy group reporting pattern in total for Layers 1,2, and 3) in Exhibit 1 to estimate the revised New York loss reporting pattern for Layers 4 through 10, under the proposed legislation. This modified loss reporting pattern results in an average projected increase in losses of 14.5%. Due to offsetting factors such as increased investment income generated by increasing reporting and payment lags, we expect that premiums would also likely increase by 14.5%, with a range of uncertainty of plus or minus 3%.

LIMITATIONS

Data

In performing this analysis we have relied on data and other information provided to us by MLMIC and publicly available data sources. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

² Includes DC, OK, RI, and WY.

Variability

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will differ from the assumptions used in this analysis, which while reasonable are approximations given limited and uncertain data.

Distribution

This report was prepared for the management of MLMIC. We understand that MLMIC may wish to distribute this report to regulators or legislators or other interested parties. We consent to such distribution as long as the work product is distributed in its entirety.

Milliman does not intend to benefit any third party recipient of its work product, even if Milliman consents to the release of its work product to such third party. Any reader of this report must possess a certain level of expertise in areas relevant to this analysis to appreciate the significance of the assumptions and the impact of these assumptions on the illustrated results. It may be appropriate for third party recipients to obtain actuarial input in evaluating these results.

This report may not be filed with the SEC or other securities regulatory bodies.

* * * * *

We appreciate this opportunity to be of assistance to Medical Liability Mutual Insurance Company.

Sincerely,



Thomas A. Ryan, FCAS, MAAA

Medical Liability Mutual Insurance Company

**Analysis of Proposed Change in Statute of Limitations
Estimated Effect on Reported Losses**

| (1) Report Layer | (2) Interval (Yrs) from Start of Policy From | (3) To | (4) Selected Percent of Losses Reported | (5) Theoretical Percent of Non-OB | (6) OB | (7) Percent of Losses Reported Total | (8) Selected Decay Factor | (9) Projected Percent of Losses Reported |
|------------------------|---|-----------|---|---|-----------|--|------------------------------------|--|
| 1,2 | 0.0 | 1.5 | 28.4% | 30.0% | 2.5% | 32.5% | | 28.4% |
| 3 | 1.5 | 2.5 | 30.1% | 30.0% | 2.5% | 32.5% | | 30.1% |
| 4 | 2.5 | 3.5 | 28.1% | 15.0% | 2.5% | 17.5% | 70.0% | 21.1% |
| 5 | 3.5 | 4.5 | 5.3% | 0.0% | 2.5% | 2.5% | 70.0% | 14.8% |
| 6 | 4.5 | 5.5 | 2.4% | 0.0% | 2.5% | 2.5% | 50.0% | 7.4% |
| 7 | 5.5 | 6.5 | 1.1% | 0.0% | 2.5% | 2.5% | 60.0% | 4.4% |
| 8 | 6.5 | 7.5 | 1.0% | 0.0% | 2.5% | 2.5% | 70.0% | 3.1% |
| 9 | 7.5 | 8.5 | 0.6% | 0.0% | 2.5% | 2.5% | 60.0% | 1.9% |
| 10 | 8.5 | 9.5 | 0.5% | 0.0% | 2.5% | 2.5% | 55.0% | 1.0% |
| 11 | 9.5 | 10.5 | 0.9% | 0.0% | 2.2% | 2.2% | | 0.9% |
| 12 | 10.5 | 11.5 | 0.9% | 0.0% | 0.3% | 0.3% | | 0.9% |
| 13 | 11.5 | 12.5 | 0.3% | 0.0% | 0.0% | 0.0% | | 0.3% |
| 14 | 12.5 | 13.5 | 0.1% | 0.0% | 0.0% | 0.0% | | 0.1% |
| 15 | 13.5 | 14.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 16 | 14.5 | 15.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 17 | 15.5 | 16.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 18 | 16.5 | 17.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 19 | 17.5 | 18.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 20 | 18.5 | 19.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 21 | 19.5 | 20.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 22 | 20.5 | 21.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| 23 | 21.5 | 22.5 | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| | | | 100.0% | 75.0% | 25.0% | 100.0% | | 114.5% |

Notes:

- (4) Selected based on Exhibit 14, Sheet 1, MLMIC 2014-2015 Physician Rate Analysis
(5) - (7) Theoretical Percentage of Loss Reporting based on random reporting pattern.
(8) From Exhibit 2, Column (5).
(9) = (4), Boxed entries are prior value of (9) x (8).

**Medical Liability Mutual Insurance Company
Analysis of Proposed Change in Statute of Limitations
Calculation of Decay Factor**

| (1) | (2) | (3) | (4) | (5) |
|--------------|--|-------------|------------------------|-----------------------|
| Report Layer | Claim Reporting Pattern For Proxy Group* Cumulative | Incremental | Indicated Decay Factor | Selected Decay Factor |
| 1,2 | 50.4% | 50.4% | | |
| 3 | 69.1% | 18.6% | 36.9% | |
| 4 | 81.6% | 12.5% | 67.2% | 70.0% |
| 5 | 89.9% | 8.3% | 66.2% | 70.0% |
| 6 | 94.1% | 4.2% | 50.5% | 50.0% |
| 7 | 96.5% | 2.5% | 59.0% | 60.0% |
| 8 | 98.2% | 1.7% | 68.3% | 70.0% |
| 9 | 99.2% | 1.0% | 61.1% | 60.0% |
| 10 | 99.8% | 0.6% | 55.7% | 55.0% |
| 11 | 100.0% | 0.2% | | |
| 12+ | 100.0% | <u>0.0%</u> | | |
| | | 100.0% | | |

*Proxy Group of States with similar statutes of limitations (2-3 years after discovery) to that proposed in NY. Includes DC, OK, RI, and WY.

(2), (3) From Schedule P - Part 5F - Section 3A - Medical Malpractice Occurrence (Cumulative Number of Claims Reported) as of 12/31/2012 adjusted to report layer time periods.

(4) =(3) / prior (3).