

MILLIMAN CLIENT REPORT

The Doctors Company

Increase in New Mexico Cap on Damages: Analysis of Effect on Loss and ALAE Costs

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November 3, 2020

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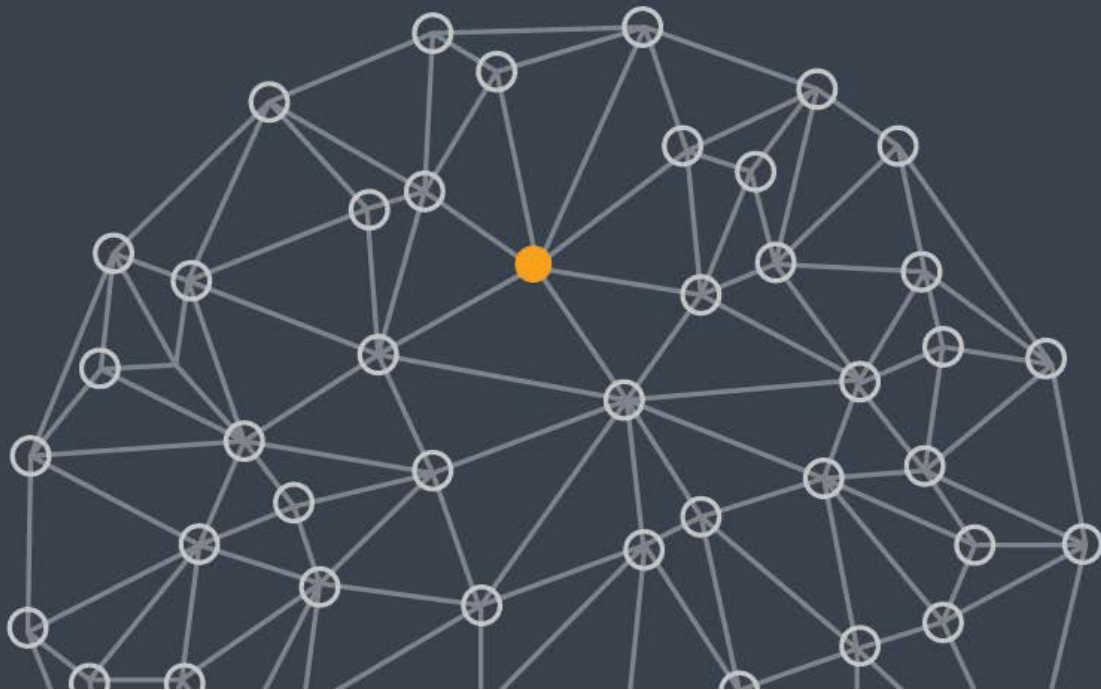


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Background and Introduction

Milliman was requested by The Doctors Company (“TDC”) to estimate the impact on loss and allocated loss adjustment expense (“ALAE”) costs in the possible event of an increase to the cap on non-medical damages for medical professional liability (“MPL”) cases in New Mexico. This report presents the results of our analysis.

Damages in Medical Liability Cases

Damages awarded to a patient injured from a medical event can be separated into economic and non-economic components¹. Economic damages compensate the injured party for the financial impact of the injury. These damages are typically quantifiable and can be separated into medical and non-medical losses. Non-medical economic losses include items such as lost wages.

Non-economic damages are more difficult to quantify as there are no specific monetary amounts from which to calculate. Non-economic damages include items such as pain and suffering, loss of consortium, etc. The sum of the economic and non-economic components is the total amount awarded to the injured party.

Background on New Mexico MPL Tort Law

New Mexico tort law provides for a cap on damages related to MPL claims. Under current tort law, a claimant’s recovery is capped at \$600,000 per event, although medical costs are excluded from this cap. Primary providers write coverage at limits of \$200,000 per claim. New Mexico’s Patient Compensation Fund (“PCF”) provides coverage in excess of this per claim limit, subject to the cap on damages.

We understand several proposals may be under consideration to modify the cap on damages:

Table 1
Proposals to Modify Cap on Damages

Proposal	Cap on Damages	
	Non-Medical	Non-Economic
Current	\$600,000	N/A
1	1,000,000	N/A
2	1,100,000	N/A
3	2,000,000	N/A
4	1,000,000	\$250,000
5	1,200,000	250,000
6	1,500,000	250,000
7	1,800,000	250,000
8	2,000,000	250,000

¹ Punitive damages also exist, but are rare and typically not a part of MPL cases.

We understand that under all proposals the caps would apply per medical event (i.e., per occurrence) and that medical expenses would remain outside of all caps. The cap on non-economic damages of \$250,000 (i.e., the 'cap within a cap') would apply in Scenarios 4 through 8; there would be no cap on non-economic damages in the other scenarios.

Scope of Milliman Analysis

The scope of Milliman's analysis was to estimate the effect on the medical professional liability loss and ALAE costs for New Mexico physicians and surgeons in the event the cap on damages were modified as described above. This would represent the cost increase across both primary and PCF coverage layers. The effect on expenses other than ALAE is excluded from the scope of this review, as this may depend on whether a change to the primary policy limit and PCF attachment point is also implemented.

In estimating the effect of any change in the cap on damages, it is appropriate to estimate effects on both the frequency and severity of claims. This analysis includes results for both effects individually, as well as the total indicated impact.

Milliman Qualifications

Chad C. Karls is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries ("the Academy"). He meets the Academy's qualification standards for basic and continuing education to provide the actuarial opinion given within this report.

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Summary of Results

Impact on Loss and ALAE Costs

We estimate modifying the cap on damages on MPL claims in New Mexico would have the following impacts on loss and ALAE costs for physicians:

Table 2
Estimated Change in Loss and ALAE Pure Premium
Under Various Proposals to Modify Cap on Damages
Central Estimate

(1)	(2)	(3)	(4)	(5)	(6)
Proposal	<u>Cap on Damages</u>		<u>Projected Change</u>		
	Non-Medical	Non-Economic	Effect on Claim Frequency	Effect on Loss and ALAE Severity	Effect on Loss and ALAE Pure Premium*
Current	\$600,000	N/A	N/A	N/A	N/A
1	1,000,000	N/A	+10.0%	+23.6%	+35.9%
2	1,100,000	N/A	+10.0	+28.1	+40.9
3	2,000,000	N/A	+15.0	+51.1	+73.8
4	1,000,000	\$250,000	0.0	-0.9	-0.9
5	1,200,000	250,000	0.0	+0.2	+0.2
6	1,500,000	250,000	0.0	+1.5	+1.5
7	1,800,000	250,000	0.0	+2.3	+2.3
8	2,000,000	250,000	0.0	+2.7	+2.7

$$* (6) = [1 + (4)] \times [1 + (5)] - 1.$$

The projected effect on the loss and ALAE pure premium represents the overall projected effect on loss and ALAE costs for physicians. We have decomposed these indications into their frequency and severity components above as well.

We estimated ranges around our central estimates based on alternate selected impacts on frequency. The ranges we selected are summarized in Table 3 below and shown on Summary Exhibit 1. The ranges for each proposal are shown in Summary Exhibits 2 through 9.

Table 3
Range of Indicated Increases in Loss & ALAE Pure Premium

Proposal	Non-Medical	Non-Economic	Low	Central	High
1	\$1,000,000	N/A	+29.7%	+35.9%	+42.1%
2	1,100,000	N/A	+34.5	+40.9	+47.3
3	2,000,000	N/A	+66.2	+73.8	+81.3
4	1,000,000	\$250,000	-5.9	-0.9	+4.0
5	1,200,000	250,000	-4.8	+0.2	+5.3
6	1,500,000	250,000	-3.6	+1.5	+6.6
7	1,800,000	250,000	-2.8	+2.3	+7.4
8	2,000,000	250,000	-2.5	+2.7	+7.8

Note, the only assumption that differs between these scenarios is the projected effect of the increase in claim frequency. We based these projected effects on the various empirical indications shown on Summary Exhibit 12. Note that since a higher cap would result in a greater overall severity increase, we would expect a larger change in frequency under the scenarios with higher caps as well.

With this in mind, for the first and second proposals, we have selected 5, 10, and 15 percent increases in frequency in the low, central, and high scenarios, respectively. For the third proposal, we have selected 10, 15, and 20 percent increases in frequency. For the fourth through eighth proposals, we have selected a 5 percent decrease, no change, and a 5 percent increase in frequency.

The severity components are shown on Summary Exhibit 10. Summary Exhibit 11 provides a visual representation of TDC's New Mexico claims. These amounts include payments in both the primary and PCF layers of coverage. Note that we have estimated the split between medical and non-medical payments in the PCF layer of coverage, as discussed later in this report. The amounts shown on the exhibit represent non-medical payments only and demonstrate the manner in which the current \$600,000 cap limits these payments.

We believe one of the primary reasons for the relatively large estimated impact of increasing the cap on non-medical damages in New Mexico is due to the current distribution of losses in the state. Specifically, there is a disproportionate percentage of non-medical losses at the current cap of \$600,000 and thus, all else equal, this has the effect of increasing the estimated percent of losses in the layer between the current cap (\$600,000) and the modeled non-medical cap. This ultimately results in relatively larger estimated impacts.

Discussion of Results

Based on discussions with TDC management, the above results were estimated using data and information specific to TDC's physician and surgeon book in New Mexico. These indications would vary between various medical specialties, hospitals, and other health care providers and facilities. In the event the cap on damages is increased in New Mexico, we recommend TDC analyze the indicated impact by categories such as these.

Data Sources

We relied on various data sources in our analysis. The following provides a discussion of the most significant of these sources, including the most notable areas in which we have relied on them.

Data Sources

- 1) TDC New Mexico claim history (claims closed from 2010 to 2017);
- 2) National Practitioner Data Bank (“NPDB”) Public Use Data File; and
- 3) Multiple editions of the American Medical Association’s (“AMA”) *Physician Characteristics and Distribution in the US*.

TDC New Mexico Claim History

We received detailed physicians and surgeons closed claim data from TDC specific to the state of New Mexico, including payments in the PCF layer of coverage. The data was valued as of December 31, 2017 and contained all such claims closed since 2010. We relied on TDC’s data to the extent possible within our analysis, including in deriving indications of the following model parameters (the overall structure of our model is discussed further in the following section of this report):

- Claim severities (medical, non-medical, ALAE on closed with indemnity (“CWI”) claims, and ALAE on non-CWI claims);
- Claims per occurrence;
- Portion of claims CWI;
- Relationship between paid indemnity and paid ALAE; and
- Years from report date to closed date.

As is typical of claims databases for MPL insurers, TDC’s detailed claim data does not contain information on the medical and non-medical components of the indemnity payments.² Consequently we relied on conversations with TDC claims staff to understand these components of TDC’s claims, the results of which are shown in Exhibits A4 through A9.

² The majority of indemnity payments are the result of settlements, in which distinctions between medical and non-medical damages or economic and non-economic damages are typically not specified.

National Practitioner Data Bank Public Use Data File

The NPDB is a “web-based repository of reports containing information on medical malpractice payments and certain adverse actions related to health care practitioners, providers, and suppliers.”³ The NPDB provides a public use data file⁴ with de-identified MPL claims paid on behalf of physicians and other health care providers. It can be useful in assessing the number and rounded amount of paid claims against physicians and other individual health care providers by state. We have relied in part on data from the NPDB public use data file to determine the potential frequency increase resulting from an increase in the cap on damages.

AMA’s Physician Characteristics and Distribution in the US, Multiple Editions

The AMA’s publication *Physician Characteristics and Distribution in the US* provides the number of active physicians by state and year, along with other information. We relied on this information together with the data from the NPDB to estimate relative claim frequency by state.

³ <http://www.npdb.hrsa.gov/topNavigation/aboutUs.jsp>

⁴ The NPDB requests we refer to this database more completely as “National Practitioner Data Bank Public Use Data File, December 31, 2017, U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Professions, Division of Practitioner Data Banks.”

Discussion of Analysis

The following provides a detailed discussion of our analyses of the indicated impact a modified cap on damages would have on loss and ALAE costs in New Mexico.

Impact on MPL Costs

There are several ways in which the costs associated with MPL coverage would be impacted if the cap on damages in New Mexico were materially increased:

- 1) Those claims for which a verdict is rendered with non-medical damages in excess of \$600,000 would have these damages capped at the higher limit, rather than the current limit of \$600,000. Hence (absent an appeal) the PCF would pay a larger indemnity related to non-medical damages.
- 2) Many settlement amounts would also increase. In the event the cap on non-medical damages were increased, for many claims there would be the possibility of a verdict in excess of \$600,000 in non-medical damages. Plaintiffs would then be dis-incented from accepting a settlement they otherwise might have accepted under the lower cap. Consequently, TDC and the PCF, in their defense of claims, would be incented to make larger settlements so as to avoid potentially larger verdicts.
- 3) Given the larger indemnity payments and the financial incentive to defend against them, defense costs (i.e., ALAE) per claim can also be expected to increase.
- 4) The number of claims reported and indemnified can be expected to increase. This results from the greater incentive for plaintiffs to file claims, given the possibility of greater recovery.

Items (1) and (2) above represent an increase in indemnity severity (i.e., average indemnity claim cost). Item (3) can be characterized as an increase in ALAE. Last, item (4) is an increase in claim frequency.

If a cap on non-economic damages were also implemented, the directional impact is less clear as the non-economic cap would be applied prior to the non-medical cap, although the overall impact would inherently be less than without a non-economic cap. Hence the above discussion applies more readily to the first three proposals than to the last two. However, the same idea – that verdicts impact settlements and indemnity payments impact both ALAE and claim frequency – holds regardless of the proposed changes.

Impact on Indemnity and Defense Cost Severity

As discussed in the Background section of this report, the cap on non-medical damages of \$600,000 has been in place in New Mexico throughout the available history of TDC's data. Consequently, no data is available within New Mexico with which to directly derive the financial impact of modifying the cap. Thus we must rely on a statistical simulation-based model intended to replicate MPL claims as they would be distributed if the cap on damages were modified.⁵ In developing this model we have relied on internal data from TDC, including payments on these claims in the PCF's layer of coverage, supplemented with information from other resources when the requisite data from TDC was unavailable.⁶

⁵ We discussed a similar model estimating the effect of the overturn of the cap on damages in Illinois in an article entitled "Illinois Tort Reform and the Cost of Medical Liability Claims," published in the July/August 2010 issue of *Contingencies*, the magazine of the American Academy of Actuaries.

⁶ These are discussed in the prior segment of our report, Data Sources.

Table 4 below shows the average severity per reported occurrence for each proposed cap on damages scenario. The results are also displayed in Summary Exhibit 10, where they are also split between indemnity and ALAE:

Table 4
Average Severity per Reported Occurrence

Proposal	Cap on Damages		Indemnity		ALAE		Total	
	Non-Medical	Non-Economic	Average Severity	Indicated Change	Average Severity	Indicated Change	Average Severity	Indicated Change
Current	\$600,000	N/A	\$160,400	N/A	\$90,100	N/A	\$250,500	N/A
1	1,000,000	N/A	201,000	+25.3%	108,500	+20.4%	309,500	+23.6%
2	1,100,000	N/A	209,100	+30.4	111,700	+24.0	320,800	+28.1
3	2,000,000	N/A	260,900	+62.7	117,600	+30.5	378,500	+51.1
4	1,000,000	\$250,000	147,700	-7.9	100,500	+11.5	248,200	-0.9
5	1,200,000	250,000	150,300	-6.3	100,800	+11.9	251,100	+0.2
6	1,500,000	250,000	153,100	-4.6	101,100	+12.2	254,200	+1.5
7	1,800,000	250,000	154,900	-3.4	101,300	+12.4	256,200	+2.3
8	2,000,000	250,000	155,800	-2.9	101,400	+12.5	257,200	+2.7

Exhibit A1 lists the parameters used in the model, each of which is discussed further below.

Claims per Occurrence

An occurrence of alleged medical professional liability can result in multiple claims.⁷ It is necessary to distinguish between claims and occurrences in our analysis as the statutory cap on damages applies on a per occurrence basis, while TDC's payment data is maintained on a per claim basis. We estimated a distribution of claims per occurrence using TDC's New Mexico data. A review of the TDC New Mexico data indicates, on average, 1.75 claims are reported for each occurrence. This estimate was derived using the closed year information detailed in Exhibit A2 and summarized in Table 5.

Table 5
Closed Claims Per Closed Occurrence

Closed Year	Closed Claims	Closed Occurrences	Claims per Occurrence
2010	150	100	1.50
2011	163	113	1.44
2012	222	162	1.37
2013	201	130	1.55
2014	136	82	1.66
2015	204	113	1.81
2016	122	72	1.69
2017	151	84	1.80
Selected Claims per Occurrence			1.75

We have further assumed the number of claims per occurrence follows a Zero-Truncated Poisson distribution⁸ (with a mean of 1.75 claims per occurrence).

⁷ An example of an occurrence resulting in multiple claims is a surgical injury in which multiple surgeons, the anesthesiologist, hospital, and perhaps others are named as liable.

⁸ The goodness-of-fit of this distribution relative to other discrete distributions that might have been considered was confirmed in a similar manner to the goodness-of-fit tests discussed below for the distribution of indemnity per claim.

Claim Disposition Ratios

Within the simulation model we must distinguish between claims that close with indemnity (“CWI”) and claims that close without indemnity (“CWOI”). Thus we must estimate the portion of claims that fall within each of these categories. The indications for these percentages and our selections are shown on Exhibit A3. These derivations use TDC’s New Mexico data on a closed year basis and are summarized in Table 6.

Table 6
Claim Disposition Ratios

Closed Years	Portion CWI	Portion CWOI
2010 – 2017	28%	72%
2012 – 2017	28	72
2014 – 2017	22	78
2016 – 2017	18	82
Selected	20%	80%

Portion of Non-Medical and Non-Economic Loss by Coverage Layer

Claim payments have generally been recorded by TDC in total, rather than distinguished between medical and non-medical or economic and non-economic payments. This is also the case with the PCF payments, and is common practice in the MPL industry, as most CWI claims are resolved through settlements in which no distinction is made between medical and non-medical or economic and non-economic amounts.

Therefore, we relied on conversations with TDC staff as well as TDC data and PCF data, supplemented with other information, to estimate the distribution of medical versus non-medical and economic versus non-economic losses in the primary and PCF layers. The results of this analysis are detailed in Table 7 below as well as Exhibits A4 through A9.

Table 7
Selected Portion of Non-Medical Loss by Layer

Coverage Layer	Non-Medical Portion
Primary	100%
PCF (Below \$600,000 per claim)	85%

Selected Portion of Non-Economic Loss by Layer

Coverage Layer	Non-Economic Portion
Primary	85%
PCF (Below \$600,000 per claim)	65%

Indemnity and Defense Cost Severity

The next step in our analysis was to project the indemnity and ALAE costs associated with the claims modeled as described above. By definition, for claims closed with indemnity, we model both indemnity and defense costs. For claims closed without indemnity, we model ALAE costs only. Thus we must estimate each of the following:

- Non-medical severity per claim closed with indemnity;
- Medical severity per claim closed with indemnity;
- ALAE cost severity per claim closed with indemnity; and
- ALAE cost severity per claim closed without indemnity.

Indications and our selections for each of these are shown on Exhibits A10 through A14 and in the following table:

Table 8
Projected Severity Per Claim
Under Current Cap on Damages

Category	Projected Severity	Data and Indications
Non-Medical per CWI	\$334,705	Exhibit A10
Non-Economic per CWI	279,301	Exhibit A11
Medical per CWI	129,987	Exhibit A12
Defense Costs per CWOI	44,368	Exhibit A13
Defense Costs per CWI	82,381	Exhibit A14

Similar to the claim disposition ratios, these indications are derived using TDC's New Mexico data on a closed year basis. Thus our selections serve as estimates for the average severities in New Mexico with the current cap on non-medical damages in place.

As noted above, in estimating defense cost severity, we have derived separate indications for both CWI and CWOI claims. We have observed that claims that close with indemnity have higher defense costs, on average, than those that do not.

Each of the severities is adjusted for inflation to an assumed policy effective date of January 1, 2019. Our analyses of inflation rates are shown in Exhibits A15 through A18. We have relied on TDC's New Mexico data in projecting that non-medical severity (subject to the current cap on damages) will increase at 5% per annum, medical severity will increase at 6% per annum, and defense cost severity will increase at 5% per annum. Furthermore, as the data used is arranged on a closed year basis, Exhibit A19 calculates the trend-to dates, assuming an effective date of January 1, 2019, that policies will be written uniformly over the year, and a selected lag of 20 months and 29 months between claim report and claim close date, for CWOI and CWI claims, respectively, based on the TDC New Mexico data.

Distribution of Non-Medical Indemnity per Claim

In addition to estimating the component portions of indemnity severity, it is also necessary to estimate the manner in which individual non-medical payments will vary around the average non-medical severity. To do so, we have performed goodness-of-fit tests of various statistical distributions against each of the detailed claim datasets available. Exhibit A20 summarizes the results of the Kolmogorov-Smirnov, Anderson-Darling, and Chi-Squared goodness-of-fit tests for the non-medical payments within the TDC New Mexico data.

A goodness-of-fit test⁹ measures how well a given statistical distribution fits a given set of observations. Three of the most common goodness-of-fit tests (which we believe to be the most appropriate three for these circumstances) are the Kolmogorov-Smirnov, Anderson-Darling, and Chi-Squared tests. A brief description of each test follows:

- Kolmogorov-Smirnov¹⁰: measures the greatest difference at all points (i.e., values in the dataset) between the statistical distribution and the empirical distribution of the dataset.
- Anderson-Darling¹¹: measures the difference at various segmented points between the statistical distribution and the empirical distribution of the dataset, then weights the squared differences based on the expected distribution.
- Chi-Squared¹²: apports the data points by size into various segments and measures the difference between the number of data points in each segment and the number expected in each segment based on the statistical distribution.

⁹ See <http://en.wikipedia.org/wiki/Goodness-of-fit> for additional information on goodness-of-fit tests.

¹⁰ See http://en.wikipedia.org/wiki/Kolmogorov-Smirnov_test for additional information on the Kolmogorov-Smirnov test.

¹¹ See http://en.wikipedia.org/wiki/Anderson-Darling_test for additional information on the Anderson-Darling test.

¹² See http://en.wikipedia.org/wiki/Chi_Squared_test for additional information on the Chi-Squared test.

Table 9 summarizes the results found on Exhibit A20.

Table 9
Summary of Best Fitting Distributions
TDC New Mexico Data

Fit	Test	Distribution
Best	Kolmogorov-Smirnov	Gamma
	Anderson-Darling	Gamma
	Chi-Squared	Weibull
Second	Kolmogorov-Smirnov	Lognormal
	Anderson-Darling	Lognormal
	Chi-Squared	Gamma
Third	Kolmogorov-Smirnov	Weibull
	Anderson-Darling	Weibull
	Chi-Squared	Lognormal

A lower test statistic, as shown on Exhibit A20, indicates a better fit to the given statistical distribution. We considered all common statistical distributions in performing these tests, not only those shown on the exhibit. The exhibit displays only the best-fitting three of all statistical distributions considered.¹³

Based on the results of these tests and the simplicity of the distribution, we believe the lognormal distribution best represents the distribution of non-medical indemnity per claim in total and in its components. In general, a lognormal distribution is completely defined by two parameters:

- The mean of the distribution, in our case, the expected non-medical indemnity per claim (i.e., non-medical indemnity severity); and
- The coefficient of variation¹⁴ of the distribution, which determines how widely dispersed individual non-medical indemnity payments are around the mean.

The above table by itself may appear to support the use of the gamma distribution rather than the lognormal. However, the improved fit of the gamma distribution is achieved largely by the presence of a third parameter. Given the relatively small differences in goodness-of-fit between the gamma and lognormal distribution, as well as the risk of over-fitting presented by this additional parameter, we believe the lognormal distribution is a better model of non-medical losses.

¹³ Distributions considered included the Lognormal, Gamma, Weibull, Exponential, Logistic, Student's t, Normal, Beta, and Pareto, among others.

¹⁴ The reader may be more familiar with the concept of standard deviation. The coefficient of variation is equal to the standard deviation of the given distribution divided by its mean.

The mean of the lognormal distribution for indemnity was discussed in the section above. The coefficient of variation for the lognormal distribution for non-medical losses was estimated based on the New Mexico data, as shown on Exhibit A21. The coefficient of variation is relied on to model uncapped losses. The capping of current losses is considered in the development of the indications shown on this exhibit.

Distribution of Non-Economic Indemnity per Claim

Within the model, non-economic indemnity is modeled as a percentage of non-medical indemnity. We have estimated this percentage on average to be 83.4%, as shown on Exhibit A11. Based on goodness-of-fit measures similar to those described above, we have assumed that this percentage varies uniformly around this average between 66.9% and 100.0%. Note that the actual variation in non-economic severity within our model is greater than this distribution would indicate, as it is a function of the distribution of non-medical indemnity per claim as well as the ratio of non-economic indemnity to non-medical indemnity.

Relationship Between Defense Costs and Indemnity

We have also observed claims with greater indemnity payments tend to have greater defense costs. Exhibit A22 provides various indications of the relationship between indemnity and defense costs using several approaches. We tested both linear and log-linear relationships between indemnity and defense costs. Based on the results of our analysis, we selected a log-linear relationship with a slope of 0.68 using non-medical loss as the independent variable. In other words, we have assumed defense costs increase less than one dollar for each dollar increase in non-medical loss, and the rate of increase in defense costs declines as non-medical loss increases.

The relationship between non-medical loss and defense costs on indemnified claims is as follows¹⁵:

$$\ln [\text{Defense Costs}] = \ln [\text{Non-Medical Loss}] \times 0.68 + \text{Constant}$$

This is mathematically equivalent to¹⁶:

$$\text{Defense Costs} = [\text{Non-Medical Loss} \wedge 0.68] \times \exp [\text{Constant}]$$

The constant is calculated so that the average defense costs from the model are equal to the indication discussed above.

¹⁵ Here, the mathematical expression “ln” refers to the natural logarithm function.

¹⁶ The mathematical expression “exp” refers to taking the exponent of the expression within the following braces, in which the base of the exponent is the natural number “e.”

Estimated Severities Absent Cap on Damages

As a final step to develop the parameters for the simulation model, we estimated the non-medical indemnity severity per claim absent any cap on damages. Note this step is distinct from measuring the effect of the increased cap itself, as the effect of increasing the cap is measured on a per occurrence basis, taking account of the variation in the number of claims per occurrence discussed above. The estimated non-medical indemnity severity per CWI claim absent any cap on damages is based on the model parameters discussed above and is shown in Table 10:

Table 10
Projected Non-Medical Severity Per CWI Claim
With and Without Cap on Damage

Category	Projected Severity	
	\$600,000 Cap	Uncapped
Non-Medical Indemnity per CWI ¹⁷	\$334,705	\$1,037,500

Defense costs are assumed to vary with indemnity based on the observed log-linear relationship discussed above, so no additional analysis was required to estimate defense costs without the cap on damages.

The Simulation Model

We created a simulation model incorporating each of the assumptions discussed above. The model simulated 80,000 occurrences of medical professional liability, including the number of claims for each occurrence. For each claim, the model simulated whether the claim was closed with indemnity. If the claim was simulated to close with indemnity, the model in turn simulated its medical and non-medical damages.

For each simulated occurrence, the non-medical indemnity was capped at the proposed cap for each scenario to calculate the effect of each cap on the given occurrence. Under the fourth and fifth proposals, non-economic loss was first capped at \$250,000 per occurrence prior to applying the non-medical cap. Defense costs were projected under each distinct proposal based on the capped indemnity amounts, according to the formula discussed above. The mean indemnity and defense costs per occurrence were calculated from the 80,000 simulated values, as shown on Summary Exhibit 10.

¹⁷ Non-medical indemnity severity per CWI claim without the cap on damages is estimated given the severity per CWI claim with the cap on non-medical damages of \$600,000 and the assumption of a lognormal distribution discussed herein.

Impact on Claim Frequency

In addition to an increase in indemnity and defense cost severity, we also believe that the implementation of an increased cap in New Mexico would result in an increase in the number of filed and indemnified claims. Table 11 (in which amounts are illustrative only) provides an example of the greater incentive absent a cap on damages for a plaintiff to file a less meritorious claim.

Table 11
Effect of Caps on Damages on the Decision to Litigate
Two Claim Example – Meritorious and Non-meritorious Claims

Claim	Medical Damages	Non-Medical Damages	Cap on Non-Medical Damages	Probability of Plaintiff Verdict	Expected Gross Indemnity*	Expected Net Financial Value**
A	\$800,000	\$1,000,000	\$1,100,000	20%	\$360,000	\$15,000
A	800,000	1,000,000	600,000	20%	280,000	(5,000)
B	800,000	1,000,000	1,100,000	80%	1,440,000	1,095,000
B	800,000	1,000,000	600,000	80%	1,120,000	835,000

* Calculated as the product of the capped damages and the probability of a plaintiff verdict.

** Calculated as the expected gross indemnity less fixed litigation costs of \$75,000 and variable litigation costs of 15% of the capped damages.

In the above example, Claims A and B each have the same potential damages and differ only in the probability of a plaintiff verdict. Claim B is more meritorious, with a likelihood of a plaintiff's verdict of 80%. Using either cap on non-medical damages, a financial incentive exists for the plaintiff to file Claim B.

In contrast, Claim A is less meritorious, with a likelihood of a plaintiff's verdict of 20%. With the higher cap on damages, financial incentive nonetheless exists to file Claim A due to the size of the potential recovery. With a smaller cap on damages in place, the low probability of recovery combined with the cost of litigation creates a disincentive to file this less meritorious claim. Although the above example is a simplification of the complex realities of MPL cases, it is illustrative of the manner in which caps on damages can impact claim frequency.

The increase in frequency that results from a large change to the statutory damage cap has been demonstrated empirically by the experience of other states. In particular, an increase in claim frequency when a cap on damages has been overturned and decreases in claim frequency in states that have enacted caps on damages both demonstrate the significant effect on frequency a cap can have (see Summary Exhibit 12):

Table 12
Projected Increase in Claim Frequency
Due to Overturn of Cap on Damages

State Group	Empirical Impact		
Repeal ¹⁸	30%		
Tort Reform ¹⁹	23 *		
AM Best Survey of CA MPL Insurers	11		
Scenario:	Low	Central	High
Projected Effect of Increase in Frequency: \$1M & \$1.1M Non-Medical Cap	+5%	+10%	+15%
Projected Effect of Increase in Frequency: \$2M Non-Medical Cap	+10%	+15%	+20%
Projected Effect of Increase in Frequency: \$1M - \$2M Non-Medical Cap with \$250k Non-Economic Cap	-5%	0%	+5%

* Based on an average of all six states. Additional indications are shown on Summary Exhibit 12.

Exhibit B1 estimates the empirical impact in Oregon of the increase in claim frequency after Oregon's cap on damages was overturned in 1999. Columns (2) and (3) on this exhibit provide the claim frequency in Oregon and countrywide (excluding states impacted by tort reform)²⁰. Columns (4) and (5) (shown graphically in Exhibit B2) normalize each of these frequencies to 1999 so that the change in frequency in Oregon since the overturn of the cap on damages can be compared against the experience of other states not materially impacted by the enactment or overturn of tort reform during the corresponding time period. This is shown in column (6).

¹⁸ Oregon, as discussed in this section of the report.

¹⁹ Florida, Mississippi, Nevada, Oklahoma, South Carolina, and Texas (note this list excludes states such as Illinois, in which tort reform was implemented for a relatively short period of time prior to being overturned).

²⁰ Calculated as the number of claims closed with indemnity from the National Practitioner Data Bank public use data file divided by the number of active physicians from successive editions of the American Medical Association's *Physician Characteristics and Distribution in the US*.

For the first two years following the overturn, claim frequency in Oregon decreased relative to countrywide. We believe this is because the claim data aggregated by the NPDB is collected on a closed year basis. Consequently there is a lag between an increase in claims reported due to the overturn (which we believe would have occurred beginning as early as 1999, subsequent to the overturn) and their subsequent closing (which is not manifest in the data until 2002). Beginning in 2002 claim frequency in Oregon shows a consistent increase relative to the countrywide norm.

Exhibit B3 is similar to Exhibit B1 but provides indications of the effect of the enactment of a cap on damages (rather than its overturn) in the six states identified as “tort reform” states for purposes of this discussion. Therefore, an additional step on Exhibit B3 is required to convert the empirical indications of the impact of enacting a cap on damages to indications of overturning a cap on damages (which we have assumed is the mathematical inverse). Several indications are presented, which we reference in projecting the frequency increase due to the implementation of the increased cap. These indications are displayed graphically on Exhibits B4 through B9. Exhibit B10, which shows the actual frequency by calendar year for the tort reform states, is referenced by Exhibit B3 which shows only the relative frequency beginning with the base year.

Lastly, we have included the results of an AM Best survey of MPL insurers preceding the vote on Proposition 46 in California, which would have significantly increased the cap on damages in that state. While these results are not directly applicable to New Mexico, we believe they nonetheless provide an indication of the perception of MPL writers as to the expected impact of an increase in a cap on damages. These estimates served as one indication of a frequency increase, as shown on Exhibit B11.

Qualifications

Any change to the liability system as it currently exists in New Mexico is inherently subject to significant uncertainty. MPL costs in New Mexico given an increased cap on non-medical damages will ultimately depend upon the societal attitudes toward litigation, insurer actions following any ruling, and other future uncertainties such as the impact of inflation and economic conditions.

The results of our analysis are additionally uncertain due to the somewhat limited availability of data to evaluate the impact of the proposal. In specific instances, credible New Mexico-specific data was unavailable for model parameterization. Data for our analysis was requisitely based in part on data outside of New Mexico. Furthermore, though many states have implemented damage caps across the United States over the past 40 years, limited empirical data is available on the effect of dramatically increasing or overturning a damage cap.

As discussed in this report, if the cap on damages were increased in New Mexico, both patients and plaintiff attorneys would have additional financial incentive to file a claim alleging negligence in a medical environment. We expect such incentives would increase the number of filed claims relative to the current environment. However, the impact on the number of filed claims in particular is highly uncertain, and could be higher or lower than we have estimated herein.

TDC's actions may serve to limit the financial impact of increasing the cap on damages. Specifically, TDC will have significant influence on the portion of claims to be settled. This additional layer of reaction to the possible increase in the cap on damages adds additional uncertainty to the resultant financial effect.

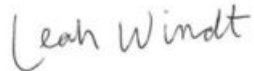
Closing

We appreciate the opportunity to perform this analysis for The Doctors Company. If you have any questions or comments, please let us know.

Sincerely,



Chad C. Karls, FCAS, MAAA
Principal and Consulting Actuary



Leah A. Windt, ACAS, MAAA
Associate Actuary

CCK/LAW/all

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**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Summary of Impact Due to Cap Increase and/or Implementation of cap on Non-Economic Damages

	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1)	\$600,000	None	0.0%	0.0%	0.0%
(2)	\$1,000,000	None	29.7%	35.9%	42.1%
(3)	\$1,100,000	None	34.5%	40.9%	47.3%
(4)	\$2,000,000	None	66.2%	73.8%	81.3%
(5)	\$1,000,000	\$250,000	-5.9%	-0.9%	4.0%
(6)	\$1,200,000	\$250,000	-4.8%	0.2%	5.3%
(7)	\$1,500,000	\$250,000	-3.6%	1.5%	6.6%
(8)	\$1,800,000	\$250,000	-2.8%	2.3%	7.4%
(9)	\$2,000,000	\$250,000	-2.5%	2.7%	7.8%

(1) Current Scenario

(2) - (9) from Exhibits 2 through 9

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$1,000,000	None	5.0%	10.0%	15.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$1,000,000	None	23.6%	23.6%	23.6%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$1,000,000	None	29.7%	35.9%	42.1%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$1,100,000	None	5.0%	10.0%	15.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$1,100,000	None	28.1%	28.1%	28.1%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$1,100,000	None	34.5%	40.9%	47.3%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$2,000,000	None	10.0%	15.0%	20.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$2,000,000	None	51.1%	51.1%	51.1%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$2,000,000	None	66.2%	73.8%	81.3%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$1,000,000	\$250,000	-5.0%	0.0%	5.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$1,000,000	\$250,000	-0.9%	-0.9%	-0.9%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$1,000,000	\$250,000	-5.9%	-0.9%	4.0%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$1,200,000	\$250,000	-5.0%	0.0%	5.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$1,200,000	\$250,000	0.2%	0.2%	0.2%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$1,200,000	\$250,000	-4.8%	0.2%	5.3%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$1,500,000	\$250,000	-5.0%	0.0%	5.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$1,500,000	\$250,000	1.5%	1.5%	1.5%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$1,500,000	\$250,000	-3.6%	1.5%	6.6%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$1,800,000	\$250,000	-5.0%	0.0%	5.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$1,800,000	\$250,000	2.3%	2.3%	2.3%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$1,800,000	\$250,000	-2.8%	2.3%	7.4%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap Change on New Mexico Loss & ALAE Costs

Description	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Scenarios Based on Selected Frequency		
			Low	Central	High
(1) Projected Increase in Frequency Due to Damage Cap Increase; Summary Exhibit 12	\$2,000,000	\$250,000	-5.0%	0.0%	5.0%
(2) Projected Increase in Severity Due to Damage Cap Increase; Summary Exhibit 10	\$2,000,000	\$250,000	2.7%	2.7%	2.7%
(3) Indicated Increase in Loss & ALAE Pure Premium; { [1 + (1)] x [1 + (2)] } - 1	\$2,000,000	\$250,000	-2.5%	2.7%	7.8%

¹ Damages except medical care and related benefits

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Indicated Increase in Severity Under Increased Cap on Damages

	Cap on Non-Medical Damages ¹	Cap on Non-Economic Damages	Estimated Mean Per Reported Occurrence			Indicated Change in Costs ⁵		
			Indemnity	ALAE	Indemnity & ALAE	Indemnity	ALAE	Indemnity & ALAE
(1)	\$600,000	None	160,400 ²	90,100 ³	250,500	NA	NA	NA
(2)	\$1,000,000	None	201,000 ⁴	108,500 ⁴	309,500	25.3%	20.4%	23.6%
(3)	\$1,100,000	None	209,100 ⁴	111,700 ⁴	320,800	30.4%	24.0%	28.1%
(4)	\$2,000,000	None	260,900 ⁴	117,600 ⁴	378,500	62.7%	30.5%	51.1%
(5)	\$1,000,000	\$250,000	147,700 ⁴	100,500 ⁴	248,200	-7.9%	11.5%	-0.9%
(6)	\$1,200,000	\$250,000	150,300 ⁴	100,800 ⁴	251,100	-6.3%	11.9%	0.2%
(7)	\$1,500,000	\$250,000	153,100 ⁴	101,100 ⁴	254,200	-4.6%	12.2%	1.5%
(8)	\$1,800,000	\$250,000	154,900 ⁴	101,300 ⁴	256,200	-3.4%	12.4%	2.3%
(9)	\$2,000,000	\$250,000	155,800 ⁴	101,400 ⁴	257,200	-2.9%	12.5%	2.7%

¹ Damages except medical care and related benefits

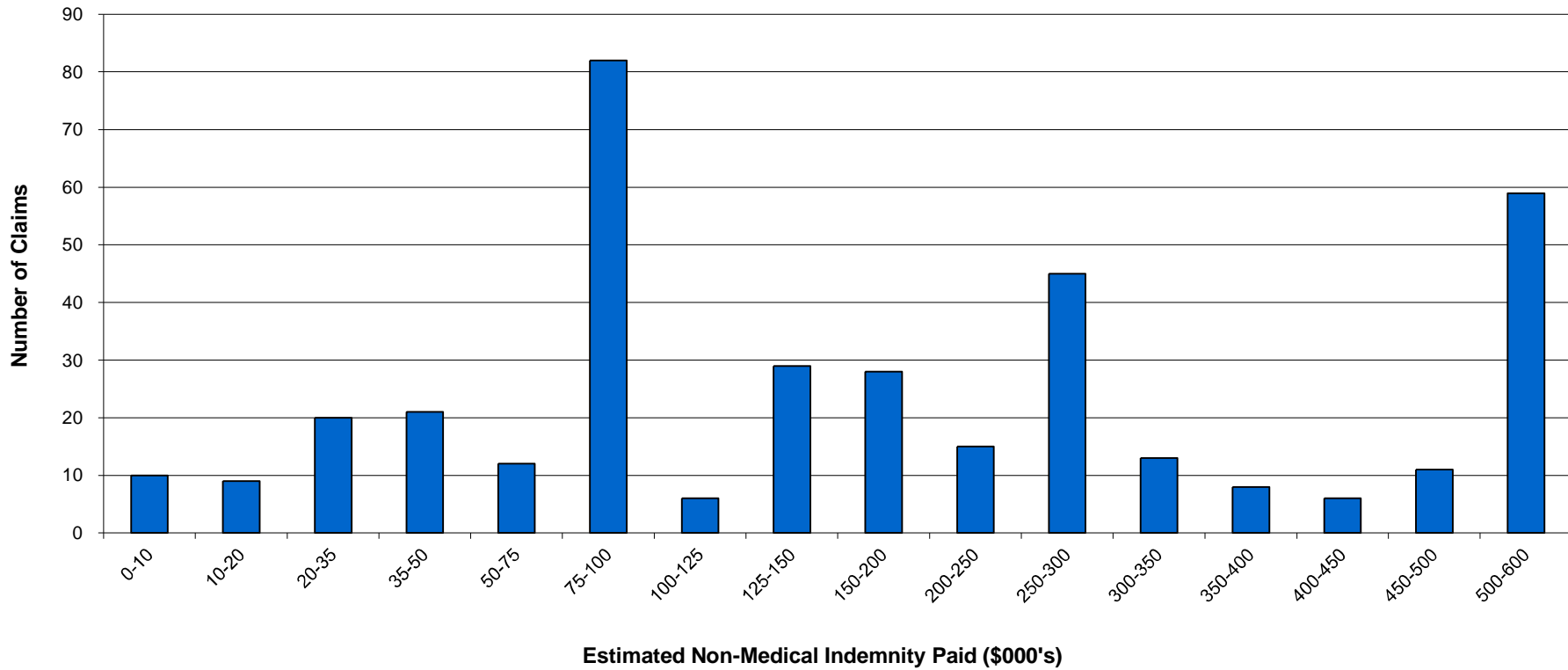
² Equals Closed With Indemnity Ratio x Claims Per Occurrence x [Non-Medical Loss per CWI Claim (Capped at \$600,000) + Medical Loss per CWI Claim], calculated as 20% x 1.75 x [\$334,705 + \$129,987] = \$162,642 (see Exhibit A1 of Milliman report dated July 24, 2019). Any differences are due to simulation rounding.

³ Equals Closed Without Indemnity Ratio x Claims Per Occurrence x ALAE per Closed Without Indemnity Claim (With non-medical damages capped at \$600,000) + Closed With Indemnity Ratio x Claims Per Occurrence x ALAE per Closed With Indemnity Claim (With non-medical damages capped at \$600,000), calculated as 80.0% x 1.75 x \$44,368 + 20% x 1.75 x \$82,381 = \$90,949 (see Exhibit A1 of Milliman report dated July 24, 2019). Any differences are due to simulation rounding.

⁴ Results of simulation modeling consistent with parameters listed above and other parameter assumptions as given in the supporting exhibits.

⁵ Change from current scenario displayed in (1)

**New Mexico Claims Closed with Indemnity (Closed Years 2010 to 2017)
The Doctors Company: Medical Professional Liability
Untrended (\$000)**



**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Selected Impact on Indemnity Frequency

<u>Impact of Cap on Damages on Frequency</u>	<u>Reference</u>	<u>Indication</u>
Empirical -- Based on Repeal State	Exhibit B1	30%
Empirical -- Based on Tort Reform States	Exhibit B3	
Average, Giving Each State Equal Weight		23%
Claim Count Weighted Average		33%
Average, \$500,000 Cap		24%
Average, \$350,000 Cap		7%
Average, \$250,000 Cap		68%
AM Best Survey of California MPL Insurers Preceding Vote on Proposition 46	Exhibit B11	11%

Selected Impact of Tort Reform Overturn on Frequency:	Low	Central	High
\$1,000,000 / \$1,100,000 Non-Medical Cap without Non-Economic Cap	5%	10%	15%
\$2,000,000 Non-Medical Cap without Non-Economic Cap	10%	15%	20%
\$1,000,000 - \$2,000,000 Non-Medical Cap with \$250,000 Non-Economic Cap	-5%	0%	5%

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Summary of Parameters

Parameter	Mean Value	Distribution	Reference
Claims Per Occurrence	1.75	Zero-truncated Poisson	Exhibit A2
Closed With Indemnity Ratio	20.0%	N/A	Exhibit A3
Closed Without Indemnity Ratio	80.0%	N/A	Exhibit A3
Non-Medical Loss per CWI Claim (Capped at \$600,000)	334,705	Lognormal -- CV of 2.75	Exhibit A10
Average Portion of Non-Medical Loss that is Non-Economic	83.4%	Uniform, 66.9% to 100.0%	Exhibit A11
Medical Loss per CWI Claim	129,987	N/A	Exhibit A12
ALAE per Closed Without Indemnity Claim (With non-medical damages capped at \$600,000)	44,368	N/A	Exhibit A13
ALAE per Closed With Indemnity Claim (With non-medical damages capped at \$600,000)	82,381	N/A	Exhibit A14
Slope of Relationship Between Ln(ALAE) and Ln(Non-Medical Loss)	0.680	N/A	Exhibit A22

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Claims per occurrence by closed year

	(1)	(2)	(3) (1) / (2)
Closed Year	Closed Claims	Closed Occurrences	Closed Claims per Occurrence
2010	150	100	1.50
2011	163	113	1.44
2012	222	162	1.37
2013	201	130	1.55
2014	136	82	1.66
2015	204	113	1.81
2016	122	72	1.69
2017	151	84	1.80
Total	1,349	856	1.58
Last Six	1,036	643	1.61
Last Four	613	351	1.75
		Selected:	1.75

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

CWI and Non-CWI frequency by closed year

	(1)	(2)	(3)	(4)	(5)
			(1) - (2)	(2) / (1)	(3) / (1)
<u>Closed Year</u>	<u>Closed Claims</u>	<u>CWI Claims</u>	<u>Non-CWI Claims</u>	<u>Percent CWI</u>	<u>Percent Non-CWI</u>
2010	150	39	111	26%	74%
2011	163	42	121	26%	74%
2012	222	98	124	44%	56%
2013	201	58	143	29%	71%
2014	136	28	108	21%	79%
2015	204	59	145	29%	71%
2016	122	20	102	16%	84%
2017	151	30	121	20%	80%
Total	1,349	374	975	28%	72%
Last Six	1,036	293	743	28%	72%
Last Four	613	137	476	22%	78%
Last Two	273	50	223	18%	82%
			Selected:	20%	80%

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Selected Medical vs Non-Medical Loss in Primary and PCF Layers

(1)	Selected Portion of Non-Medical Loss in Primary Layer Based on Conversation with TDC Claims Staff	100.0%
(2)	Indicated Portion of Non-Medical Loss in PCF Layer (Below \$600,000 per Claim) Based on Conversation with TDC Claims Staff	100.0%
(3)	Indicated Portion of Non-Medical Loss in PCF Layer (Below \$600,000 per Claim) Exhibit A5	81.0%
(4)	Selected Portion of Non-Medical Loss in PCF Layer (Below \$600,000 per Claim)	85.0%

Note: excludes Klonis and Bryant batch claims, for which allocation between medical and non-medical loss has been provided by The Doctors Company.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Distribution of Primary versus PCF Layer Loss by Year

	(1)	(2)	(3)	
Closed Year	Primary Indemnity Paid	PCF Indemnity Paid Below \$600K Per Claim	PCF Indemnity Paid Excess of \$600K Per Claim	Total
2010	38.1%	40.2%	21.6%	100.0%
2011	42.7%	37.6%	19.7%	100.0%
2012	55.9%	34.7%	9.4%	100.0%
2013	51.0%	29.4%	19.6%	100.0%
2014	36.6%	40.5%	22.9%	100.0%
2015	51.8%	34.3%	13.9%	100.0%
2016	23.6%	28.9%	47.5%	100.0%
2017	33.7%	39.1%	27.2%	100.0%
Total	42.5%	35.6%	22.0%	100.0%
Last Six	43.2%	34.4%	22.4%	100.0%
Last Four	37.5%	36.1%	26.4%	100.0%
Selected	37.5%	36.0%	26.5%	
Non-Medical Portion	100.0% ²	81.0% ³	0.0% ⁴	66.7% ¹
Non-Economic Portion	85.0% ⁵	64.2% ³	0.0% ⁴	55.0% ¹

¹ Overall selected percent non-medical and non-economic (see Exhibit A9 and Exhibit A7)

² Based on claims data and conversation with TDC claims staff.

³ Based on selected overall non-medical/non-economic portions, non-medical/non-economic portions in other layers, and selected distribution by layer above.

⁴ Based on New Mexico cap on non-medical damages of \$600,000.

⁵ Based on professional judgment and relationship between non-economic and non-medical loss by layer.

Note: Percentages derived from losses on Exhibit A6

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Primary versus PCF Layer Loss by Year

	(1)	(2)	(3)	(4)
Closed Year	Primary Indemnity Paid	PCF Indemnity Paid Below \$600K Per Claim	PCF Indemnity Paid Excess of \$600K Per Claim	Total
2010	5,119,000	5,407,500	2,908,698	13,435,198
2011	5,245,382	4,614,000	2,415,073	12,274,456
2012	6,405,878	3,983,750	1,075,000	11,464,628
2013	8,284,926	4,775,000	3,182,000	16,241,926
2014	3,952,500	4,368,000	2,475,000	10,795,500
2015	7,013,569	4,652,020	1,885,775	13,551,364
2016	2,209,143	2,700,000	4,447,312	9,356,455
2017	4,748,500	5,512,500	3,830,000	14,091,000
Total	42,978,898	36,012,770	22,218,858	101,210,527
Last Six	32,614,516	25,991,270	16,895,087	75,500,873
Last Four	17,923,712	17,232,520	12,638,087	47,794,319

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

*Relationship Between Non-Economic Indemnity and Total Indemnity
Using the Texas Closed Claim Database¹
\$000s*

<u>Closed Year</u>	<u>Total Paid Indemnity</u>	<u>Non-Economic Paid Indemnity</u>	<u>Percent Non-Economic</u>
2000	235,985	137,151	58.1%
2001	194,416	109,854	56.5%
2002	210,145	111,604	53.1%
2003	180,555	97,357	53.9%
2004	266,370	158,095	59.4%
2005	128,597	73,661	57.3%
2006	96,192	44,374	46.1%
2007	28,904	18,212	63.0%
2008	59,572	40,933	68.7%
2009	45,272	23,418	51.7%
2010	40,000	17,628	44.1%
2011	53,973	22,572	41.8%
2012	34,450	17,244	50.1%
Total	1,574,430	872,104	55.4%
2000-2007	1,341,164	750,308	55.9%
2000-2005	1,216,068	687,722	56.6%
2000-2003	821,101	455,966	55.5%
Selected Percent Non-Economic²			55.0%
Factor to adjust to Non-Medical³			1.21
Selected Percent Non-Medical			66.7%

¹ Includes only claims in which detail was provided for both economic and non-economic losses.

² Takes into consideration the caps on damages in Texas and New Mexico.

³ Based on professional judgement.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Selected Economic vs Non-Economic Loss in Primary and PCF Layers

(1)	Selected Portion of Non-Economic Loss in Primary Layer Exhibit A5	85.0%
(2)	Indicated Portion of Non-Economic Loss in PCF Layer (Below \$600,000 per Claim) Exhibit A5	64.2%
(3)	Adjusted Indicated Portion of Non-Economic Loss in PCF Layer (Below \$600,000 per Claim) Row (2) x Exhibit A4 Row (4) / Exhibit A4 Row (3)	67.4%
(4)	Selected Portion of Non-Economic Loss in PCF Layer (Below \$600,000 per Claim)	65.0%

Note: excludes Klonis and Bryant batch claims, for which allocation between economic and non-economic loss has been provided by The Doctors Company.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

*Relationship Between Non-Economic Indemnity and Total Indemnity
Using Randomly Selected New Mexico Claims from The Doctors Company¹
\$000s*

Closed Year	Total Paid Indemnity	Non-Economic Paid Indemnity	Percent Non-Economic	Number Of Claims
2013	1,805	972	53.9%	2
2014	21,062	11,850	56.3%	8
2015	887	735	82.9%	3
2016	11,732	9,491	80.9%	7
2017	10,164	7,050	69.4%	8
2018	8,500	1,000	11.8%	1
Total	54,150	31,098	57.4%	29
Selected Percent Non-Economic²			55.0%	
Factor to adjust to Non-Medical³			1.21	
Selected Percent Non-Medical			66.7%	

¹ Claims were selected by The Doctors Company and detail on plaintiff demands and associated settlements provided to Milliman.

² Takes into consideration the caps on damages in Texas and New Mexico.

³ Based on professional judgement.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Trended non-medical indemnity severity by closed year

	(1)	(2)	(3) (2) / (1)	(4)
Closed Year	CWI Claims	Non-Medical Indemnity Paid ¹	Non-Medical Indemnity Severity	Non-Medical Indemnity Severity Trended to 6/1/2022 ²
2010	39	9,715,375	249,112	445,554
2011	42	9,167,282	218,269	371,799
2012	98	12,992,066	132,572	215,070
2013	58	12,243,676	211,098	326,153
2014	28	7,665,300	273,761	402,828
2015	59	16,164,710	273,978	383,950
2016	20	4,697,691	234,885	313,491
2017	30	9,434,125	314,471	399,725
Total	374	82,080,226		334,705
Last Six	293	63,197,568		314,633
Last Four	137	37,961,827		380,977
			Selected:	334,705

¹ Estimated as primary layer indemnity plus 85.0% of first \$400,000 of PCF layer indemnity per claim (See Exhibit A4).

² Trended at 5.0% per annum (see Exhibit A16); see Exhibit A19 for derivation of average closed date

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Trended non-economic indemnity severity by closed year

	(1)	(2)	(3) (2) / (1)	(4)
Closed Year	CWI Claims	Non-Economic Indemnity Paid ¹	Non-Economic Indemnity Severity	Non-Economic Indemnity Severity Trended to 6/1/2022 ²
2010	39	7,866,025	201,693	360,742
2011	42	7,457,675	177,564	302,462
2012	98	11,234,434	114,637	185,974
2013	58	10,060,937	173,464	268,008
2014	28	6,198,825	221,387	325,762
2015	59	14,273,700	241,927	339,034
2016	20	3,826,320	191,316	255,341
2017	30	7,619,350	253,978	322,833
Total	374	68,537,266		279,301
Last Six	293	53,213,566		265,140
Last Four	137	31,918,195		320,556
			Selected:	279,301
			Selected Relative to Non-Medical Severity ³ : 83.4%	

¹ Estimated as 85.0% of primary layer indemnity plus 65.0% of first \$400,000 of PCF layer indemnity per claim (See Exhibit A8).

² Trended at 5.0% per annum (see Exhibit A15); see Exhibit A19 for derivation of average closed date

³ Non-economic severity (above) divided by selected non-medical severity (Exhibit A10).

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Trended medical indemnity severity by closed year

	(1)	(2)	(3) (2) / (1)	(4)
Closed Year	CWI Claims	Medical Indemnity Paid ¹	Medical Indemnity Severity	Medical Indemnity Severity Trended to 6/1/2022 ²
2010	39	3,719,823	95,380	190,994
2011	42	3,107,173	73,980	139,756
2012	98	5,372,563	54,822	97,702
2013	58	3,898,250	67,211	113,002
2014	28	3,130,200	111,793	177,318
2015	59	824,707	13,978	20,916
2016	20	4,793,683	239,684	338,350
2017	30	4,656,875	155,229	206,725
Total	374	29,503,274		129,987
Last Six	293	22,676,277		120,466
Last Four	137	13,405,465		139,910
			Selected:	129,987

¹ Estimated as PCF layer indemnity in excess of \$400,000 per claim plus 15.0% of first \$400,000 of PCF layer indemnity per claim, based on Exhibit A4.

² Trended at 6.0% per annum (see Exhibit A16); see Exhibit A19 for derivation of average closed date

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Trended ALAE severity on non-CWI claims by closed year

	(1)	(2)	(3) (2) / (1)	(4)
				ALAE Severity on Non-CWI Claims Trended to 9/1/2021 ¹
Closed Year	Non-CWI Claims	ALAE Paid on Non-CWI Claims	ALAE Severity on Non-CWI Claims	
2010	127	1,453,937	11,448	19,740
2011	124	3,823,065	30,831	50,631
2012	136	5,023,240	36,936	57,767
2013	139	3,846,137	27,670	41,215
2014	123	3,835,133	31,180	44,232
2015	129	3,501,346	27,142	36,670
2016	90	3,905,574	43,395	55,837
2017	107	3,693,989	34,523	42,306
Total	975	29,082,420		43,173
Last Six	724	23,805,417		46,006
Last Four	449	14,936,041		43,926
			Selected:	44,368

¹ Trended at 5.0% per annum (see Exhibit A18); see Exhibit A19 for derivation of average closed date

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Trended ALAE severity on CWI claims by closed year

	(1)	(2)	(3) (2) / (1)	(4)
				ALAE Severity on CWI Claims Trended to 6/1/2022 ¹
Closed Year	CWI Claims	ALAE Paid on CWI Claims	ALAE Severity on CWI Claims	
2010	39	1,755,009	45,000	80,486
2011	42	2,782,874	66,259	112,865
2012	98	2,512,275	25,635	41,588
2013	58	2,841,892	48,998	75,704
2014	28	2,133,971	76,213	112,145
2015	59	3,862,677	65,469	91,748
2016	20	1,186,692	59,335	79,191
2017	30	2,283,079	76,103	96,734
Total	374	19,358,468		78,569
Last Six	293	14,820,586		73,398
Last Four	137	9,466,419		95,175
			Selected:	82,381

¹ Trended at 5.0% per annum (see Exhibit A18); see Exhibit A19 for derivation of average closed date

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Non-economic indemnity severity trend

	(1)	(2)	(3) (2) / (1)	(4) Ln (3)
Closed Year	CWI Claims	Non-Economic Indemnity Paid ¹	Non-Economic Indemnity Severity	Natural Log of Non-Economic Indemnity Severity
2010	39	7,866,025	201,693	12.21
2011	42	7,457,675	177,564	12.09
2012	98	11,234,434	114,637	11.65
2013	58	10,060,937	173,464	12.06
2014	28	6,198,825	221,387	12.31
2015	59	14,273,700	241,927	12.40
2016	20	3,826,320	191,316	12.16
2017	30	7,619,350	253,978	12.45
			<u>Indicated Trend</u>	<u>R Squared</u>
		All Years	5.5%	27.2%
		Last Seven	9.1%	48.6%
		Last Six	13.3%	63.4%
		Selected Trend:	<input type="text" value="5.0%"/>	

¹ Estimated as 85.0% of primary layer indemnity plus 65.0% of first \$400,000 of PCF layer indemnity per claim (See Exhibit A8).

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Non-medical indemnity severity trend

	(1)	(2)	(3) (2) / (1)	(4) Ln (3)
Closed Year	CWI Claims	Non-Medical Indemnity Paid ¹	Non-Medical Indemnity Severity	Natural Log of Non-Medical Indemnity Severity
2010	39	9,715,375	249,112	12.43
2011	42	9,167,282	218,269	12.29
2012	98	12,992,066	132,572	11.79
2013	58	12,243,676	211,098	12.26
2014	28	7,665,300	273,761	12.52
2015	59	16,164,710	273,978	12.52
2016	20	4,697,691	234,885	12.37
2017	30	9,434,125	314,471	12.66
			<u>Indicated Trend</u>	<u>R Squared</u>
		All Years	5.4%	24.5%
		Last Seven	9.3%	47.2%
		Last Six	14.2%	65.5%
		Selected Trend:	<input type="text" value="5.0%"/>	

¹ Estimated as primary layer indemnity plus 85.0% of first \$400,000 of PCF layer indemnity per claim (See Exhibit A4).

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Medical indemnity severity trend

	(1)	(2)	(3) (2) / (1)	(4) Ln (3)
				Natural Log of
Closed Year	CWI Claims	Medical Indemnity Paid ¹	Medical Indemnity Severity	Medical Indemnity Severity
2010	39	3,719,823	95,380	11.47
2011	42	3,107,173	73,980	11.21
2012	98	5,372,563	54,822	10.91
2013	58	3,898,250	67,211	11.12
2014	28	3,130,200	111,793	11.62
2015	59	824,707	13,978	9.55
2016	20	4,793,683	239,684	12.39
2017	30	4,656,875	155,229	11.95
			<u>Indicated Trend</u>	<u>R Squared</u>
		All Years	7.0%	3.9%
		Last Seven	13.7%	9.3%
		Last Six	21.9%	13.9%
		Selected Trend:	<input type="text" value="6.0%"/>	

¹ Estimated as PCF layer indemnity in excess of \$400,000 per claim plus 15.0% of first \$400,000 of PCF layer indemnity per claim, based on Exhibit A4.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

ALAE severity trend by closed year

	(1)	(2)	(3)	(4)
			(2) / (1)	Ln (3)
<u>Closed Year</u>	<u>Closed Claims</u>	<u>ALAE Paid</u>	<u>ALAE Severity</u>	<u>Natural Log of ALAE Severity</u>
2010	166	3,208,946	19,331	9.87
2011	166	6,605,939	39,795	10.59
2012	234	7,535,515	32,203	10.38
2013	197	6,688,029	33,949	10.43
2014	151	5,969,104	39,530	10.58
2015	188	7,364,022	39,170	10.58
2016	110	5,092,266	46,293	10.74
2017	137	5,977,068	43,628	10.68
			<u>Indicated Trend</u>	<u>R Squared</u>
		All Years	8.9%	58.3%
		Last Seven	4.2%	47.5%
		Last Six	7.2%	86.8%
		Selected Trend:	<input type="text" value="5.0%"/>	

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Years from report date to closed date by closed year

Closed Year	(1)	(2)	(3)	(4)
	Non-CWI Claims	Non-CWI Claims	CWI Claims	CWI Claims
	Count of Claims	Average Years From Report to Close	Count of Claims	Average Years From Report to Close
2010	127	1.32	39	2.13
2011	124	1.88	42	2.50
2012	136	1.81	98	1.51
2013	139	1.39	58	2.19
2014	123	1.57	28	2.64
2015	129	1.59	59	3.86
2016	90	2.04	20	2.70
2017	107	1.56	30	2.35
Total	975	1.63	374	2.38
Last Six	724	1.64	293	2.39
Last Four	449	1.67	137	3.11
		Selected:		2.42
	Assumed Effective Date of Rates:	1/1/2019		1/1/2019
	Average Report Date:	1/1/2020		1/1/2020
	Average Non-CWI Close Date:	9/1/2021		6/1/2022

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

*Goodness of Distribution Fit Tests
Based on The Doctors Company New Mexico Claims, Non-Medical Loss Only, Closed Years 2010 to 2017*

Fit	Goodness of Fit Test								
	Kolmogorov-Smirnov			Anderson-Darling			Chi-Squared		
	Distribution	# Parameters	Test Statistic	Distribution	# Parameters	Test Statistic	Distribution	# Parameters	Test Statistic
Best	Gamma	3	0.0899	Gamma	3	5.54	Weibull	2	364.61
Second	Lognormal	2	0.0978	Lognormal	2	6.24	Gamma	3	367.07
Third	Weibull	2	0.1226	Weibull	2	7.61	Lognormal	2	369.74

Selected Indemnity Distribution: Lognormal

Note: Underlying indemnity has been trended at 5.0% per annum to closed year 2018.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

*Based on all Closed With Indemnity Claims, Trended at 5.0% to Closed Year 2018
New Mexico Closed Claim Data - 2010 to 2017 Closed Years (Non-Medical Loss Only)
Cumulative Distribution Function*

Loss Increment (\$000's)	Actual Distribution	Lognormal Distribution Under Given Coefficient of Variation							
		2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75
0-10	1.3%	1.7%	2.4%	3.2%	4.0%	4.7%	5.4%	6.1%	6.8%
10-20	4.3%	5.7%	7.3%	8.7%	10.0%	11.2%	12.3%	13.3%	14.2%
20-35	7.5%	12.8%	14.9%	16.8%	18.4%	19.8%	21.1%	22.2%	23.2%
35-50	10.7%	19.6%	22.0%	23.9%	25.6%	27.0%	28.2%	29.3%	30.3%
50-75	16.3%	29.6%	31.9%	33.7%	35.2%	36.5%	37.6%	38.5%	39.3%
75-100	19.0%	37.9%	39.9%	41.4%	42.7%	43.8%	44.7%	45.5%	46.2%
100-125	38.0%	44.7%	46.4%	47.7%	48.7%	49.6%	50.4%	51.0%	51.6%
125-150	42.0%	50.5%	51.8%	52.8%	53.7%	54.4%	55.0%	55.5%	56.0%
150-200	51.1%	59.4%	60.2%	60.9%	61.4%	61.8%	62.2%	62.5%	62.8%
200-250	54.3%	66.1%	66.5%	66.8%	67.1%	67.3%	67.5%	67.6%	67.8%
250-300	63.9%	71.2%	71.3%	71.4%	71.4%	71.5%	71.5%	71.6%	71.6%
300-350	71.9%	75.2%	75.0%	75.0%	74.9%	74.8%	74.8%	74.7%	74.7%
350-400	75.7%	78.4%	78.1%	77.9%	77.7%	77.6%	77.4%	77.3%	77.2%
400-450	77.3%	81.0%	80.6%	80.3%	80.0%	79.8%	79.6%	79.5%	79.3%
450-500	79.4%	83.2%	82.7%	82.3%	82.0%	81.7%	81.5%	81.3%	81.1%
500-600	100.0%	86.5%	85.9%	85.5%	85.1%	84.7%	84.4%	84.2%	84.0%
Based on Individual Data Points		Chi-Squared Statistic							
Total	100%	457%	309%	253%	241%	254%	279%	311%	346%
Total \$0K to \$500K	79%	411%	254%	188%	168%	172%	190%	214%	243%
Total \$20K to \$600K	96%	397%	244%	174%	147%	143%	152%	169%	190%
		Kolmogorov-Smirnov Statistic							
Total	100%	14.5%	15.4%	16.2%	16.8%	17.4%	17.9%	18.3%	18.7%
Total \$0K to \$500K	79%	11.3%	9.5%	8.1%	8.5%	9.6%	10.6%	11.5%	12.3%
Total \$20K to \$600K	96%	11.3%	9.5%	8.1%	8.5%	9.6%	10.6%	11.5%	12.3%
		Anderson-Darling Statistic							
Total	100%	8.75	7.90	7.86	8.25	8.88	9.63	10.44	11.27
Total \$0K to \$500K	79%	128.15	122.90	119.19	116.46	114.39	112.78	111.50	110.47
Total \$20K to \$600K	96%	131.01	127.31	124.89	123.27	122.15	121.38	120.85	120.48

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

*Correlation of ALAE with Given Loss Type, by Type of Relationship
Based on Closed Years 2010 to 2017*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Loss Type	Type of Relationship	Slope	Intercept	R Squared	Indicated Correlation Coefficient	
					Pearson's R	Spearman's Rank Order
Economic ¹	Linear	0.075	54,723.889	0.119	0.344	0.182
	Log-Linear	0.287	7.075	0.062	0.249	0.182
Non-Economic ²	Linear	0.196	19,919.549	0.171	0.413	0.387
	Log-Linear	0.640	2.462	0.149	0.386	0.387
Medical ³	Linear	0.070	57,634.390	0.100	0.316	0.355
	Log-Linear	0.080	9.425	0.003	0.055	0.355
Non-Medical ⁴	Linear	0.181	17,333.793	0.187	0.433	0.433
	Log-Linear	0.680	1.895	0.167	0.409	0.433
Total ⁵	Linear	0.072	38,674.402	0.176	0.419	0.355
	Log-Linear	0.541	3.484	0.128	0.358	0.355
Selected						
Non-Medical		Log-Linear	0.680			

¹ Trended to closed year 2018 at 8.0% per annum.
² Trended to closed year 2018 at 5.0% per annum.
³ Trended to closed year 2018 at 6.0% per annum.
⁴ Trended to closed year 2018 at 5.0% per annum.
⁵ Medical and non-medical loss, trended as noted above.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Impact of Cap on Damages on Indemnity Frequency - Based on Repeal State

(1)	(2)	(3)	(4)	(5)	(6)
			= (2) / [(2) 1999]	= (3) / [(3) 1999]	= (4) / (5) - 1
Calendar Year	Frequency		Relative Frequency		Change in Oregon Relative to Countrywide ¹
	Oregon	Countrywide ¹	Oregon	Countrywide ¹	
1999	0.93%	1.84%	1.00	1.00	0.0%
2000	0.87%	1.83%	0.94	0.99	(5.8)%
2001	0.89%	1.92%	0.96	1.04	(7.5)%
2002	1.09%	1.70%	1.18	0.92	27.2%
2003	1.20%	1.66%	1.29	0.90	43.9%
2004	1.02%	1.53%	1.10	0.83	32.5%
2005	0.72%	1.46%	0.77	0.79	(2.7)%
2006	0.80%	1.32%	0.86	0.72	20.0%
2007	0.79%	1.18%	0.85	0.64	33.2%
2008	0.84%	1.11%	0.91	0.60	51.0%
2009	0.70%	1.06%	0.75	0.58	29.9%
2010	0.75%	1.00%	0.81	0.54	50.3%
2011	0.60%	0.95%	0.65	0.52	25.5%
2012	0.70%	0.89%	0.75	0.48	55.5%
2013	0.46%	0.91%	0.50	0.49	1.4%
2014	0.57%	0.85%	0.61	0.46	32.2%
2015	0.59%	0.81%	0.64	0.44	45.9%
2016	0.46%	0.75%	0.49	0.41	21.4%
2017	0.59%	0.76%	0.63	0.41	53.6%
				All Year Geometric Average ²	31.4%
				Geometric Average through 2012 ²	32.3%
				Three-Year Geometric Average ²	34.3%
				Five-Year Geometric Average ²	23.1%

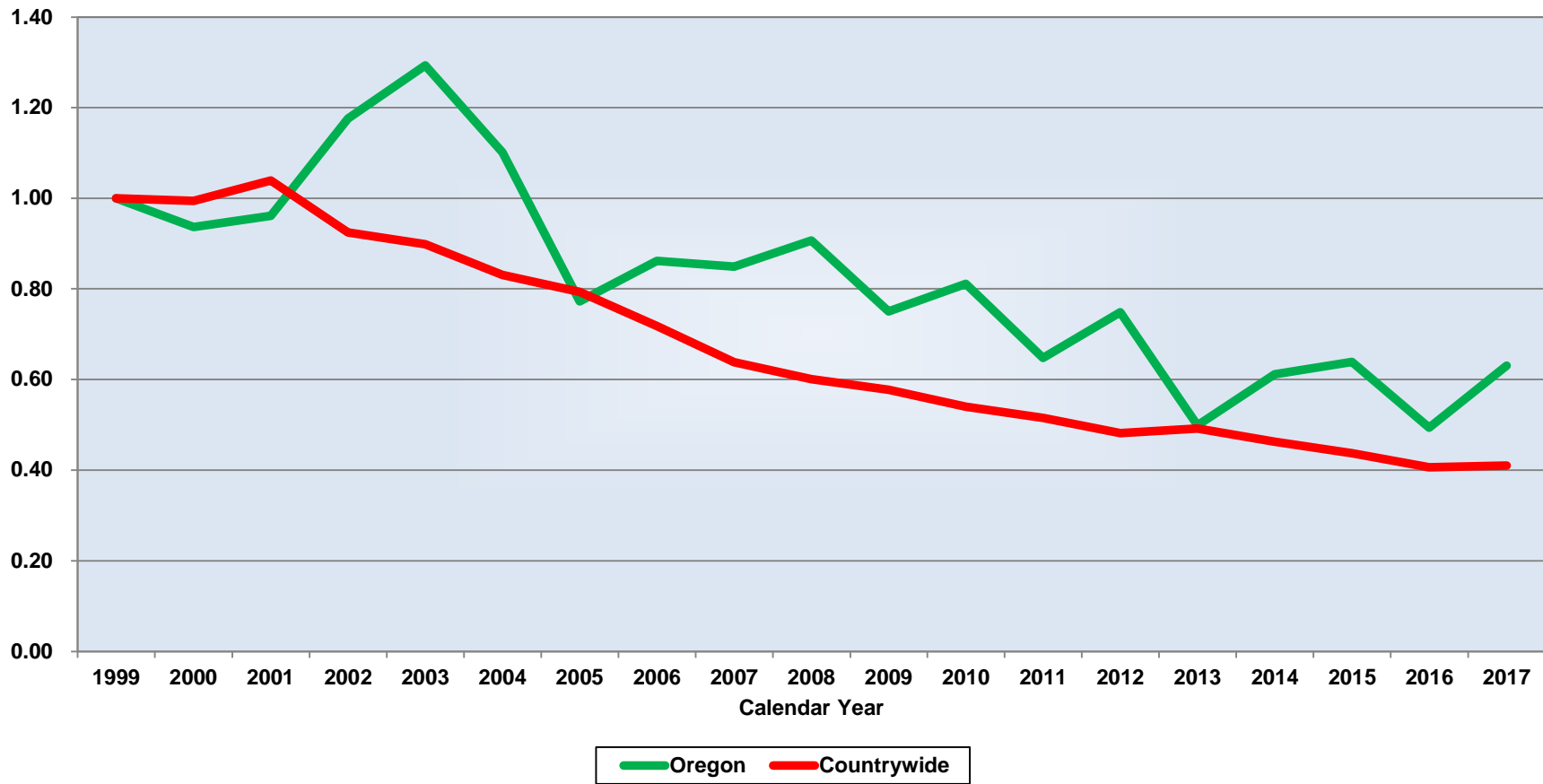
Indicated Increase in Frequency Due to Damage Cap Overturn: 30.0%

¹ Excluding tort reform impacted states: FL, MS, NV, OK, SC, TX, & OR.

² All averages begin three years subsequent to the Base Year.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

Oregon Frequency Relative to Countrywide Frequency 1999 - 2017



Note: Reference Exhibit B1 for the data points underlying the chart.

**Milliman Analysis of Effect on Loss & ALAE Costs
Increase in New Mexico Cap on Damages
For The Doctors Company**

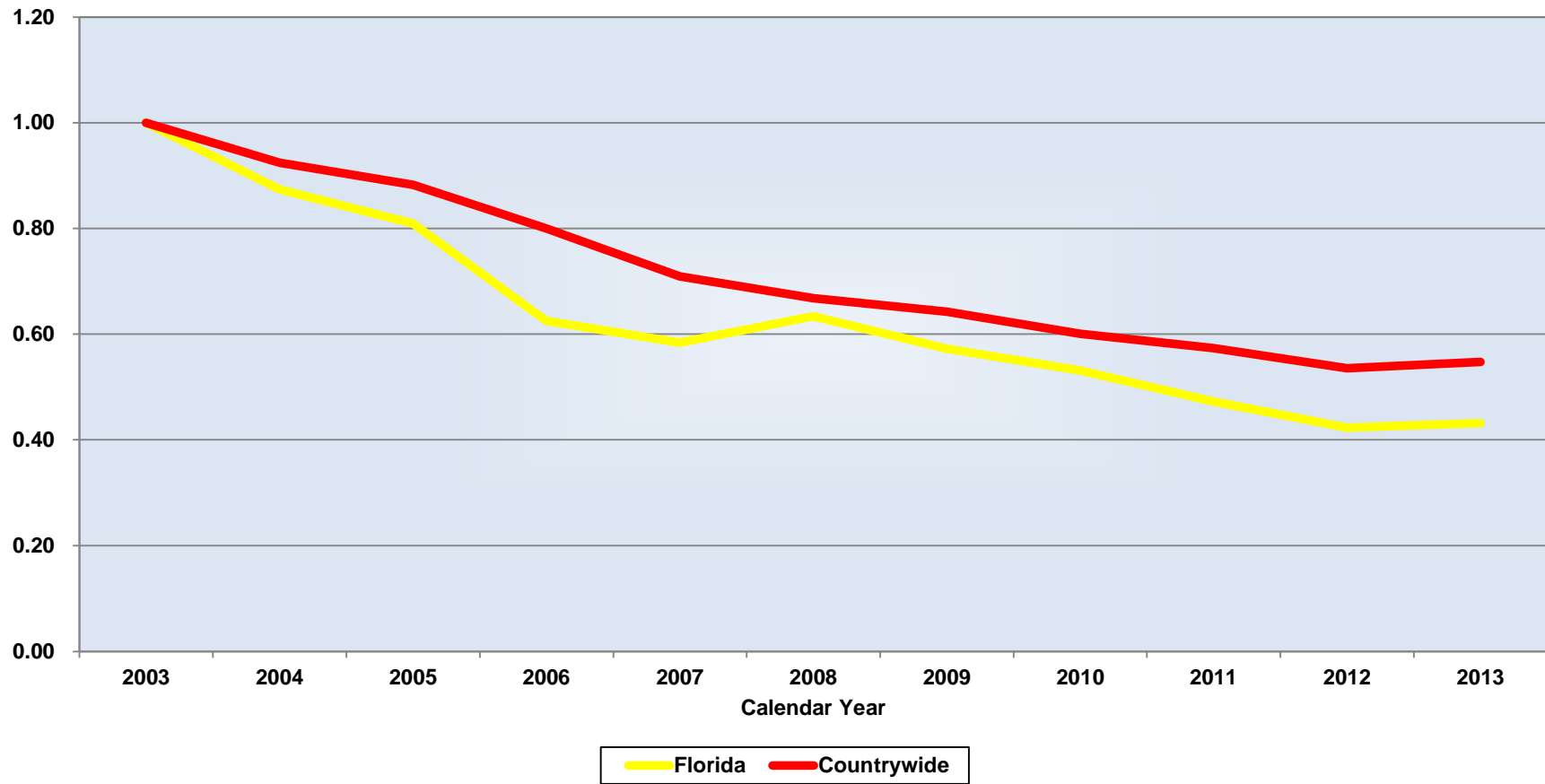
Impact of Cap on Damages on Indemnity Frequency - Based on Overturned States - Damage Cap Year as the Base Year¹

(1)	(2)	(3) = (2) / (15) - 1	(4)	(5) = (4) / (14) - 1	(6)	(7) = (6) / (16) - 1	(8)	(9) = (8) / (16) - 1	(10)	(11) = (10) / (17) - 1	(12)	(13) = (12) / (15) - 1	(14)	(15)	(16)	(17)	
Calendar Year	Tort Reform States												Countrywide ² - Varying Start Years				
	FL	Change in FL Relative to Countrywide ²	MS	Change in MS Relative to Countrywide ²	NV	Change in NV Relative to Countrywide ²	OK	Change in OK Relative to Countrywide ²	SC	Change in SC Relative to Countrywide ²	TX	Change in TX Relative to Countrywide ²	2002	2003	2004	2005	
2001																	
2002			1.00	0.0%									1.00				
2003	1.00	0.0%	0.69	(28.9)%									0.97	1.00			
2004	0.87	(5.5)%	0.63	(29.9)%	1.00	0.0%	1.00	0.0%					0.98	0.92	1.00		
2005	0.81	(8.3)%	0.56	(35.1)%	1.03	8.2%	1.08	13.2%	1.00	0.0%			0.92	0.86	0.95	1.00	
2006	0.63	(21.8)%	0.65	(16.0)%	0.80	(7.4)%	0.79	(8.8)%	1.01	11.3%			0.57	0.78	0.80	0.86	0.91
2007	0.58	(17.7)%	0.59	(14.3)%	0.76	(0.6)%	0.97	26.1%	1.05	31.2%			0.48	0.69	0.71	0.77	0.80
2008	0.63	(5.1)%	0.51	(21.0)%	0.68	(5.8)%	0.85	17.0%	0.74	(1.7)%			0.40	0.65	0.67	0.72	0.76
2009	0.57	(11.0)%	0.46	(26.2)%	0.70	0.5%	0.92	31.8%	0.63	(13.2)%			0.40	0.62	0.64	0.69	0.73
2010	0.53	(11.5)%	0.42	(27.9)%	0.47	(27.5)%	0.65	0.8%	0.60	(12.3)%			0.39	0.58	0.60	0.65	0.68
2011	0.47	(17.6)%	0.43	(23.8)%	0.51	(17.0)%	0.67	7.5%	0.53	(18.8)%			0.33	0.56	0.57	0.62	0.65
2012	0.42	(21.0)%	0.57	8.8%	0.43	(26.1)%	0.53	(9.3)%	0.60	(1.3)%			0.33	0.52	0.54	0.58	0.61
2013	0.43	(21.1)%	0.38	(29.3)%	0.48	(19.1)%	0.73	23.6%	0.55	(10.7)%			0.30	0.53	0.55	0.59	0.62
2014	0.45	(11.7)%	0.44	(13.0)%	0.40	(28.4)%	0.63	12.9%	0.49	(16.8)%			0.28	0.50	0.51	0.56	0.58
2015	0.47	(3.5)%	0.26	(45.7)%	0.44	(15.6)%	0.54	2.3%	0.44	(20.9)%			0.24	0.47	0.49	0.53	0.55
2016	0.42	(6.9)%	0.28	(36.5)%	0.42	(13.2)%	0.47	(3.7)%	0.43	(16.8)%			0.25	0.44	0.45	0.49	0.51
2017	0.49	6.8%	0.26	(40.5)%	0.50	1.1%	0.53	7.3%	0.46	(10.3)%			0.27	0.44	0.46	0.49	0.52
All Year Geometric Average ³		(12.2)%		(25.8)%		(14.5)%		9.9%		(12.5)%			(40.6)%				
Geometric Average through 2012 ³		(15.3)%		(20.3)%		(13.5)%		8.4%		(13.6)%			(41.5)%				
Three-Year Geometric Average ³		(15.2)%		(22.4)%		(2.0)%		24.8%		(9.2)%			(33.8)%				
Five-Year Geometric Average ³		(13.6)%		(22.9)%		(10.8)%		16.1%		(9.7)%			(35.0)%				
Indicated Impact of Enacting Damage Cap		(12.2)%		(25.8)%		(14.5)%		9.9%		(12.5)%			(40.6)%				
Indicated Impact of Overturning Damage Cap ⁴		13.9%		34.8%		16.9%		(9.0)%		14.3%			68.2%				
Weight Based on Closed Claims ⁵		44%		5%		3%		5%		6%			36%				
Damage Cap Group ⁶		500,000		500,000		350,000		350,000		350,000			250,000				
Straight Average Impact of Overturn		23.2%															
Weighted Average Impact of Overturn ⁷		33.3%															
Average Impact for \$500,000 Cap Group		24.4%															
Average Impact for \$350,000 Cap Group		7.4%															
Average Impact for \$250,000 Cap Group		68.2%															

¹ Based on the frequencies calculated on Exhibit B10, normalized to the year of tort reform.
² Excluding tort reform impacted states: FL, MS, NV, OK, SC, TX, & OR.
³ All averages begin three years subsequent to the Base Year.
⁴ = [1 / (1 + Indicated Impact of Enacting Damage Cap)] - 1
⁵ Weights are based on the number of claims closed with indemnity in the base year (i.e., year in which the cap was enacted).
⁶ See Exhibit A5 for a summary of damage caps by state.
⁷ Weighted average of Indicated Impact of Overturning Damage Cap for each Tort Reform State, where the weights are as given above.

Milliman Analysis of Effect on Loss & ALAE Costs Increase in New Mexico Cap on Damages For The Doctors Company

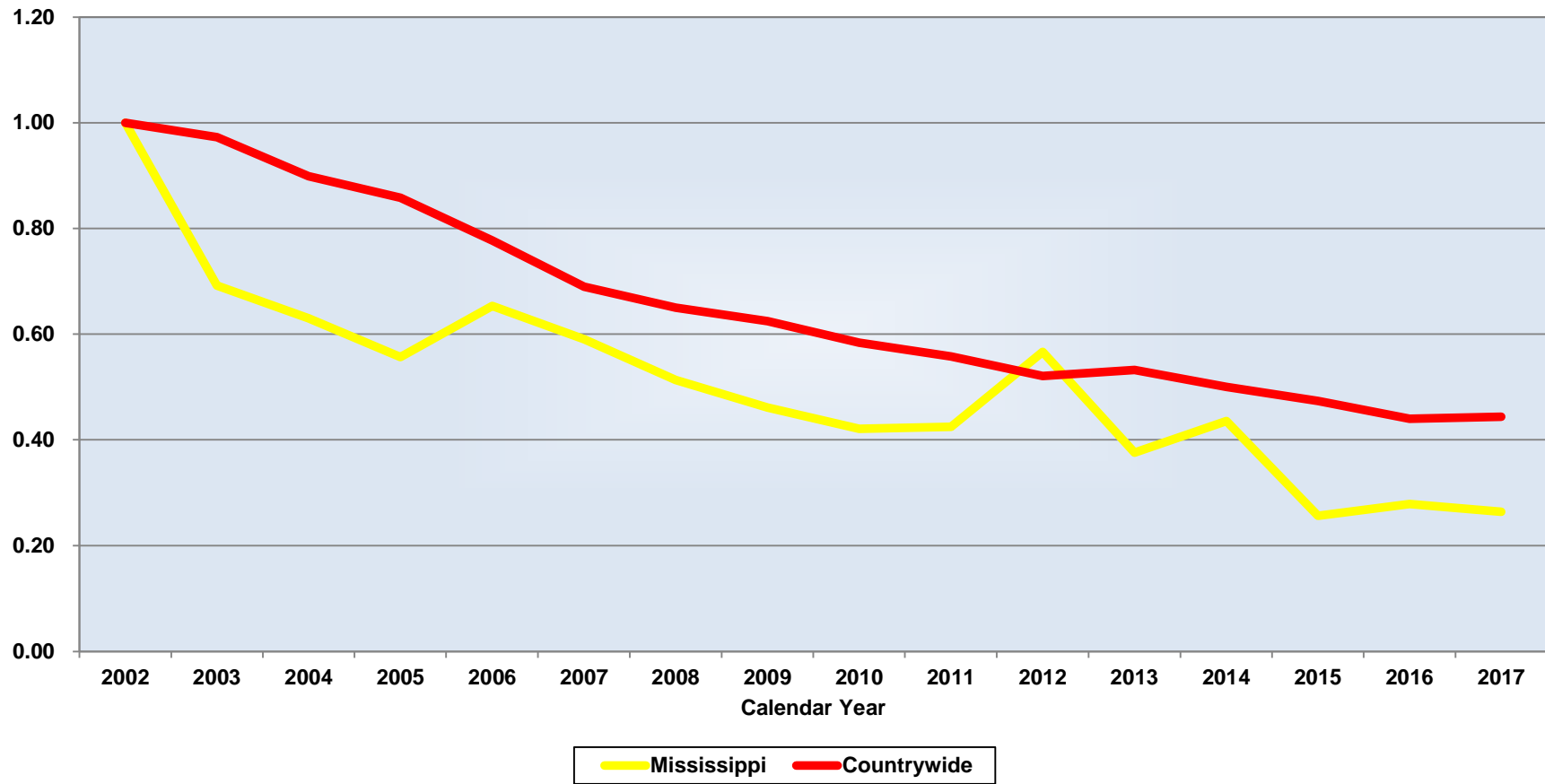
Florida Frequency Relative to Countrywide Frequency 2003 - 2017



Note: Reference Exhibit B3 for the data points underlying the chart.

Milliman Analysis of Effect on Loss & ALAE Costs Increase in New Mexico Cap on Damages For The Doctors Company

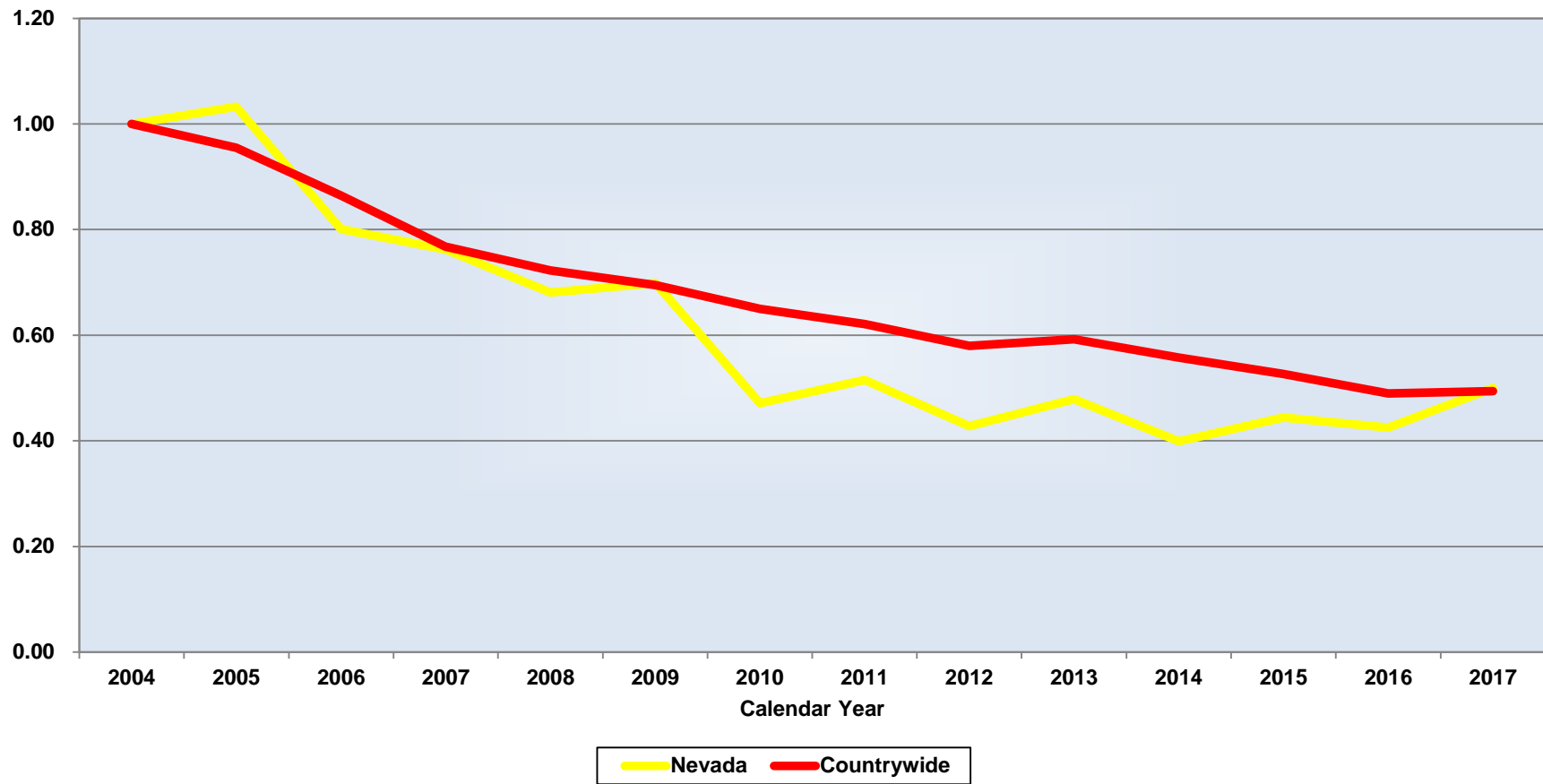
Mississippi Frequency Relative to Countrywide Frequency 2002 - 2017



Note: Reference Exhibit B3 for the data points underlying the chart.

Milliman Analysis of Effect on Loss & ALAE Costs Increase in New Mexico Cap on Damages For The Doctors Company

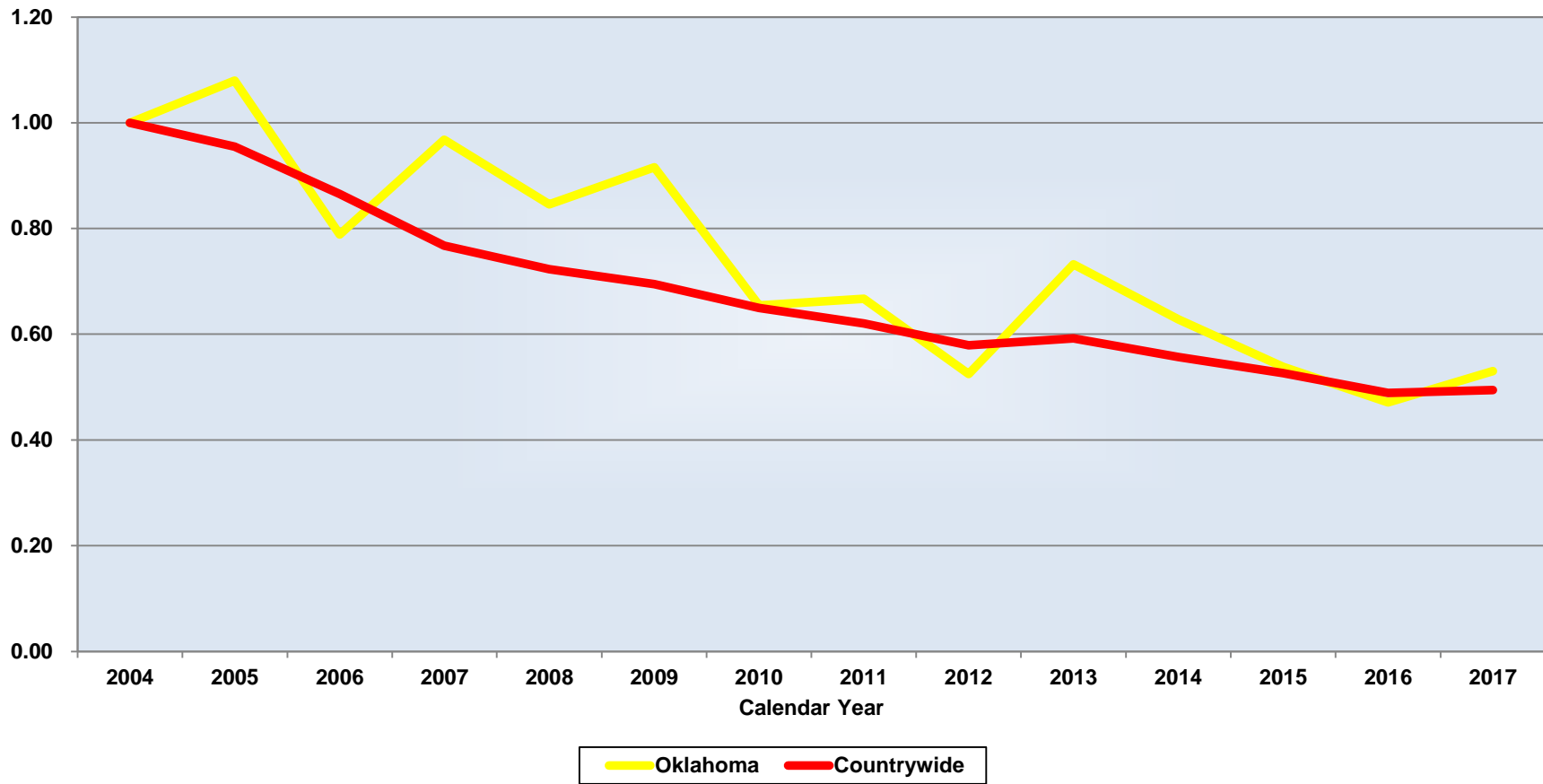
Nevada Frequency Relative to Countrywide Frequency 2004 - 2017



Note: Reference Exhibit B3 for the data points underlying the chart.

**Milliman Analysis of Effect on Loss & ALAE Costs
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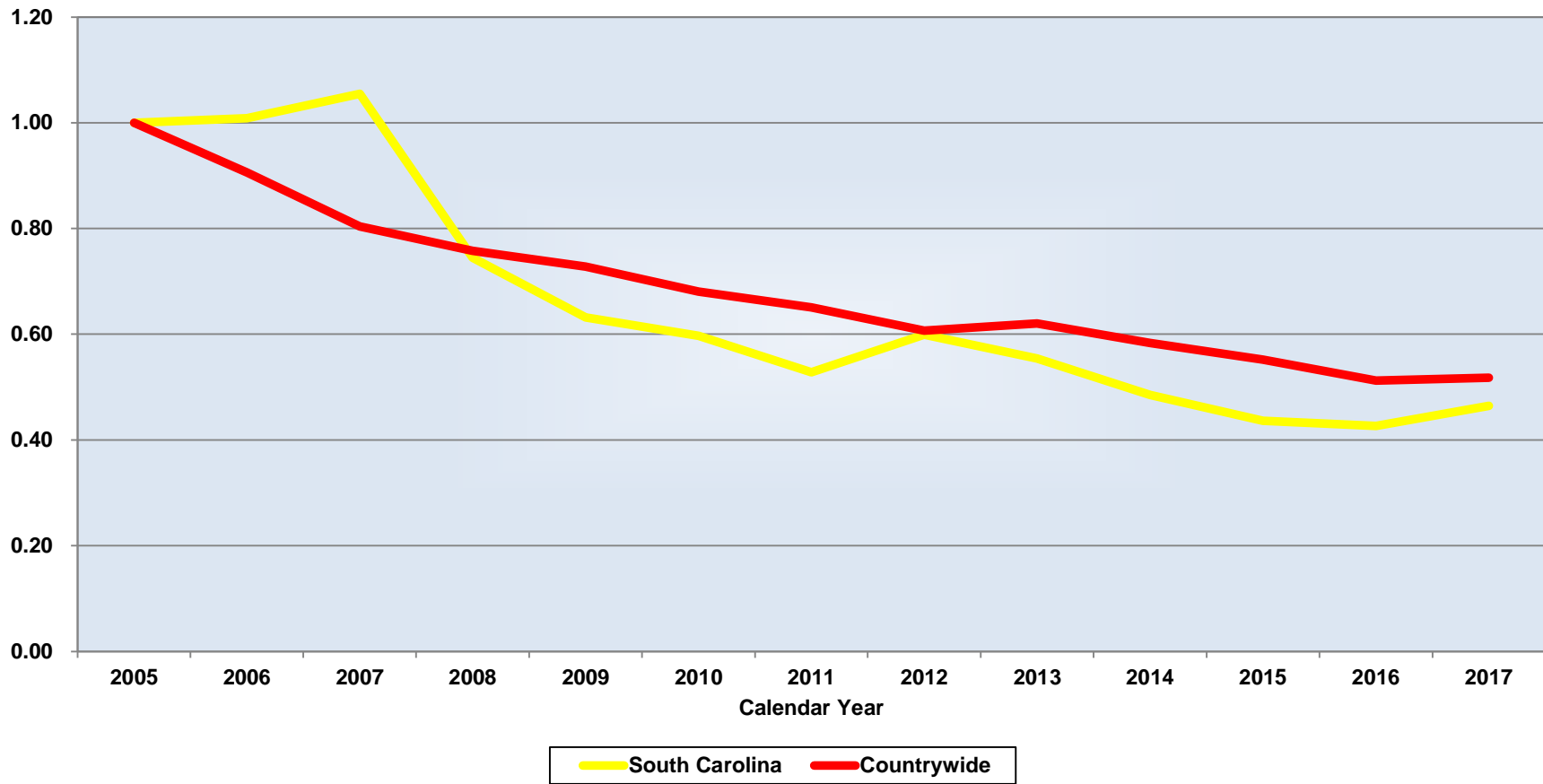
Oklahoma Frequency Relative to Countrywide Frequency 2004 - 2017



Note: Reference Exhibit B3 for the data points underlying the chart.

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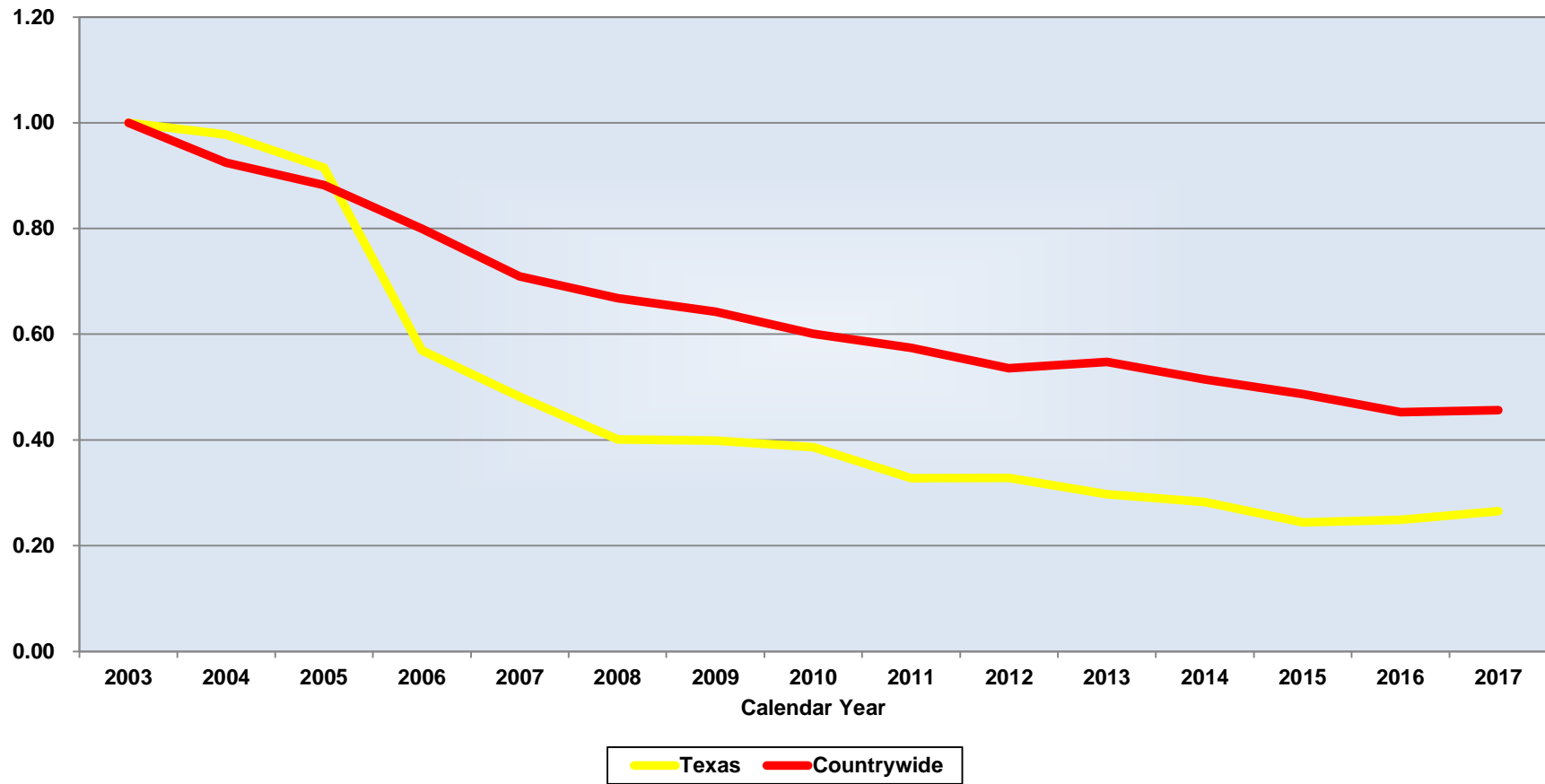
South Carolina Frequency Relative to Countrywide Frequency 2005 - 2017



Note: Reference Exhibit B3 for the data points underlying the chart.

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Texas Frequency Relative to Countrywide Frequency 2003 - 2017



Note: Reference Exhibit B3 for the data points underlying the chart.

**Milliman Analysis of Effect on Loss & ALAE Costs
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Frequency Defined as Closed With Indemnity Claims per Physician¹

Calendar Year	Frequency by State						Countrywide ²
	FL	MS	NV	OK	SC	TX	
2001	2.73%	2.56%	2.10%	2.08%	1.87%	2.39%	1.92%
2002	2.57%	2.78%	2.76%	1.86%	1.59%	2.17%	1.70%
2003	2.71%	1.92%	2.34%	2.09%	1.59%	2.15%	1.66%
2004	2.37%	1.75%	2.09%	2.42%	1.63%	2.10%	1.53%
2005	2.19%	1.55%	2.16%	2.62%	1.74%	1.97%	1.46%
2006	1.69%	1.82%	1.67%	1.91%	1.75%	1.22%	1.32%
2007	1.58%	1.64%	1.59%	2.35%	1.83%	1.04%	1.18%
2008	1.72%	1.43%	1.42%	2.05%	1.29%	0.86%	1.11%
2009	1.55%	1.28%	1.46%	2.22%	1.10%	0.86%	1.06%
2010	1.44%	1.17%	0.98%	1.59%	1.04%	0.83%	1.00%
2011	1.28%	1.18%	1.07%	1.62%	0.92%	0.71%	0.95%
2012	1.15%	1.58%	0.89%	1.27%	1.04%	0.71%	0.89%
2013	1.17%	1.05%	1.00%	1.77%	0.96%	0.64%	0.91%
2014	1.23%	1.21%	0.83%	1.52%	0.84%	0.61%	0.85%
2015	1.27%	0.72%	0.93%	1.31%	0.76%	0.53%	0.81%
2016	1.14%	0.78%	0.89%	1.14%	0.74%	0.54%	0.75%
2017	1.32%	0.73%	1.04%	1.29%	0.81%	0.57%	0.76%

¹ Claims are obtained from the NPDB's public use data file and counts of active physicians from the AMA's *Physician Characteristics and Distribution in the US*, multiple editions.

² Excluding tort reform impacted states: FL, MS, NV, OK, SC, TX, & OR.

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AM Best Survey of California MPL Insurers¹

<u>Survey Question</u>	<u>Survey Response</u>	<u>Midpoint of Range</u>
Anticipated Change in New Claim Yearly Average		
0%-10%	53.5%	5%
11%-20%	29.6%	15%
21%-30%	16.9%	25%
 Weighted Average Response of MPL Writers		 11%

¹ From Best's Briefing, titled "Potential Turbulence Ahead in the Wake of California's Proposition 46"