

MILLIMAN RESEARCH REPORT

# Minimum Dental Loss Ratios: Considerations and Industry Analysis

A Discussion of Potential Implications of Massachusetts Initiative Petition  
for a Law to Implement Medical Loss Ratios for Dental Benefit Plans

Commissioned by the National Association of Dental Plans

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## Scope and Purpose

Initiative Petition 21-13, “For a Law to Implement Medical Loss Ratios for Dental Benefit Plans” would implement an 83 percent minimum loss ratio on dental benefit plans providing dental care to Massachusetts enrollees. The proposal would also require dental insurers to issue rebate payments to enrollees should loss ratio requirements not be met and permits the insurance commissioner to disallow premium rate increases above a particular threshold. To provide independent research related to this proposal, the National Association of Dental Plans (NADP) engaged Milliman to review prevailing dental loss ratios, both nationally and in Massachusetts in particular, based on publicly available information as well as a dental carrier survey conducted by NADP. In addition, NADP asked Milliman to summarize considerations and potential effects associated with implementation of a dental minimum loss ratio provision in Massachusetts for various stakeholders including dental plans, policyholders, and providers.

## Executive Summary: Key Findings

Milliman documented prevailing industry dental loss ratios from two sources:

- 2021 and 2019 statutory financial statements for all U.S. life or health insurers with a dental line of business; and
- 2019 Massachusetts dental insurer financial results compiled via a carrier survey conducted by NADP in April 2021.

We used this information to estimate Dental Loss Ratios (DLRs) consistent with the methodology in the Massachusetts proposal, and to model the potential effect of a minimum loss ratio on dental premiums and on the likely magnitude of rebates. Key findings from this work are as follows:

### DLRs for Individual/Small Group and Large Group Dental Lines of Business

- The Massachusetts carrier survey, which included financial data for individual/small group segments as well as large group, indicated that DLRs for individual/small group business were lower than large group DLRs, and at approximately 68%, they average well below the 83% proposed threshold.
- With a smaller average case size, fixed administrative expenses must be allocated among fewer policyholders, which tends to result in larger administrative expenses as a proportion of premium than for blocks of larger cases. Higher administrative expense ratios lead to lower DLRs, and as such, a minimum loss ratio threshold is more likely to affect the individual and small group markets than the large group market.
- Notably, the average large group segment loss ratio from the Massachusetts carrier survey, at 79.3%, was also below the 83% proposed threshold. Large group business tends to have higher loss ratios than for blocks of smaller sized cases, but even the large size segment’s prevailing average loss ratio would not comply with the proposal.
- The Massachusetts data is corroborated by broader nationwide financial data, which suggests that 78% of carriers would have group dental DLRs below the 83% threshold.

### DLRs by Carrier Size

- Smaller companies (as defined by revenue) tend to have lower DLRs and would have a relatively more difficult time meeting the 83% minimum threshold. From the Massachusetts survey respondents, the largest three insurers averaged almost a 77% DLR, while the smallest three averaged 60%. Similar to the differentials by line of business just described, smaller dental insurers have fewer policyholders over which to allocate any fixed costs required to operate the business.
- There is significant overlap in Massachusetts between smaller dental insurers and those focused in the individual/small group markets. These insurers are the most likely to struggle with the proposed minimum DLR rule.
- National group dental DLRs indicated a similar relationship between carrier size and DLR, with DLRs ranging from an average of 81% for the largest 5 reporting carriers down to an average of 65% for the 61<sup>st</sup> through 85<sup>th</sup> largest companies.

### Modeling of Premiums and Rebates under Massachusetts Initiative Petition

- Under a representative scenario, a smaller carrier or small group and individual market focused carrier would need to increase premiums by almost 38%, from \$35 to over \$50, and increase claims by over 60%, to meet the DLR threshold while retaining enough revenue to administer the business. Increasing premiums in order to comply could be particularly difficult under the proposal, which allows the state insurance commissioner to disapprove rate increases above particular thresholds.
- Claims would need to be increased by either:
  1. Increasing the plan's benefits -- potentially beyond what is competitively offered and/or beyond what consumers desire or want to pay for. Consumers could derive value from increased benefits if they are interested in paying more for such plans, but otherwise the potential reduction in availability of more affordable plans could reduce consumer choice.
  2. Increasing reimbursement to providers. Paying higher fees to providers alone would increase provider revenue but dilute the overall value of the dental benefit to consumers due to the corresponding premium increase.
- Carriers may also eliminate lines of business, such as individual and small group, as administrative expenses as a percent of premium are higher in these segments, making it harder to meet minimum DLR thresholds. Another option would be for carriers to discontinue leaner benefit options with lower premiums if the administrative expenses cannot be funded. These leaner, lower premium options may be appealing to price-driven consumers who would potentially be left with fewer affordable options.
- Rebates associated with a DLR rule are likely to be small, in some cases below the \$20 de minimis threshold set for medical plans under the ACA. As a comparison, 2020 rebates associated with the commercial age <65 medical market averaged \$205 per person nationwide and \$117 per person in Massachusetts<sup>1</sup>.
- The cost of the process required to calculate, track, and distribute rebates could outweigh the value of the rebates themselves and could have the effect of pushing DLRs lower due to the increased administrative burden.

The remainder of this report discusses these findings in more detail and presents the methodologies and assumptions used in developing the results.

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<sup>1</sup> <https://www.cms.gov/files/document/2020-rebates-state.pdf>

## Background

### LOSS RATIO BASICS

Conceptually, a loss ratio represents the proportion of premium directed toward patient care; i.e., how much of each premium dollar is used to pay health providers for services to plan enrollees. The “traditional” loss ratio calculation is simply the ratio of claims cost to premium; this general insurance concept is used broadly across all types of insurance. The Affordable Care Act (ACA) introduced a modified Medical Loss Ratio (MLR) concept for health plans, allowing taxes and fees to be subtracted from the premium used in the denominator, and allowing quality improvement expenses to be added to the numerator. ACA MLR reporting occurs using a three-year experience period, in order to enhance the credibility and stability of the calculation and smooth year-to-year fluctuations. After an initial phase-in period, the ACA established minimum MLRs of 80% for individual and small group medical plans and 85% for large group medical plans. Health insurers were required to pay rebates to policyholders within a line of business whenever the MLR was less than the minimum threshold. Other types of coverage, such as those with a lower premium basis and those without the obvious quality improvement activities for which managed medical plans can receive MLR credit, require different loss ratio constructs. In fact, the ACA recognized special lines of business, such as coverage for citizens living abroad and mini-med plans, as having unique cost structures warranting a customized or transitional MLR formula. Recognizing the relatively low benefit costs relative to administrative expenses, and in order to maintain the viability of these products, lower minimum MLR criteria were adopted for these types of plans<sup>2</sup>.

The ACA did not establish loss ratio minimums for dental plans. In the years since, some states have considered Dental Loss Ratio (DLR) regulations, notably California’s 2014 law<sup>3</sup> which requires dental carriers to publicly report annual loss ratio data according to an ACA-style MLR calculation but does not explicitly set a minimum DLR threshold. In 2021, the state of Maine considered a proposal to implement a DLR, which was ultimately modified to require dental insurers to provide informational financial reporting instead of implementing a minimum DLR<sup>4</sup>. In theory, minimum DLR rules should recognize the key differences between dental coverage and medical: the significantly lower premium base off which to recoup the costs of administering the business, the difficulty in defining measurable quality improvement activities that would count in the DLR numerator, and the voluntary nature of dental coverage necessitating a range of price points and coverage levels depending on consumer desires.

### MASSACHUSETTS INITIATIVE PETITION BASICS

In the state of Massachusetts, residents may propose initiative petitions for statewide law and constitutional amendments. The process for submitting an initiative petition differs from the traditional legislative process in that ultimately the decision to implement the proposed change is voted on by Massachusetts residents during a general election. Massachusetts procedures require that the Attorney General certify the petition complies with the state’s constitutional petition requirements. This report discusses the requirements of the Initiative Petition as certified by the Attorney General and submitted by the Secretary of State to the Clerk of the house of representatives on January 28, 2022<sup>5</sup>.

The Massachusetts initiative petition contains the following key provisions, based on the January 28, 2022 version provided to the Clerk of the Massachusetts House of Representatives by the Secretary of the Commonwealth:

- An 83% minimum DLR requirement for plans providing dental care services to enrollees in the state, for plans issued or renewed on or after January 1, 2024.
- A rebate provision under which carriers must rebate members of individual and group dental plans if the loss ratio is lower than 83%. Rebates must be made to the enrollee for the amount of premium revenue received by the difference between the minimum loss ratio and the carrier’s DLR.

<sup>2</sup> To ease the transition to higher MLR standards for mini-med plans, their MLR numerators were multiplied by 2.00 in 2011, 1.75 in 2012, 1.50 in 2013, and 1.25 starting in 2014, making it easier to pass the minimum MLR. For expatriate plans, the numerator is multiplied by 2.00 in recognition of their higher administrative costs.

<sup>3</sup> [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140AB1962](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1962)

<sup>4</sup> <http://legislature.maine.gov/legis/bills/getPDF.asp?paper=SP0417&item=1&snum=130>

<sup>5</sup> <https://www.mass.gov/doc/21-13-initiative-petition-for-a-law-to-implement-medical-loss-ratios-for-dental-benefit-plans/download>

- The petition language states that the DLR shall be calculated following the formula below. This methodology differs from that proposed in other states and from the formula used for MLR calculation under the ACA as it does not allow for the subtraction of federal and state taxes, licensing, and regulatory fees from the denominator. Without the ability to subtract these items in the calculation, carriers will have relatively more difficulty reaching the proposed 83% loss ratio. One consequence of this formula is that future increases in taxes and fees would leverage fully onto the amount of revenue available for dental plan administration expense while meeting the minimum DLR.

$$\frac{\text{reimbursement for clinical dental services}}{\text{premium revenue}}$$

## Research and Summary of Findings

### PREVAILING DENTAL LOSS RATIOS

To understand the potential impact of this bill, Milliman documented prevailing industry dental loss ratios from two sources:

- 2021 and 2019 statutory financial statements for all U.S. life or health insurers with dental specific financial data available<sup>6</sup>;
- 2019 Massachusetts dental insurer financial results compiled via a carrier survey conducted by NADP in April 2021

### Dental Insurer Financial Statement Filings

We used the S&P Global database to compile publicly available 2021 and 2019 statutory financial statements for all U.S. life or health insurers reporting results for the commercial dental line of business. The data is aggregated to entity levels (rather than statutory company levels), as defined by S&P Global. The financial information from these statements is national, not specific to Massachusetts. The financial data is shown separately for Group Dental and Individual Dental lines of business in Table 1. We have summarized results by descending dental book of business revenue, to illustrate the different DLRs by size of the insurer's dental block. Reading up from the bottom of each chart, you see that as plan size increases, DLR also tends to increase due to emerging economies of scale, reducing administrative cost as a percent of premium. In 2021, we observed that the largest company in the individual market appeared to allow that market segment to operate at a loss, which may not be sustainable for organizations with smaller scope of operations or a greater proportion of their business in the individual segment. Company-specific loss ratios vary widely; detail for all companies is shown as a scatterplot in Appendix 1. We included 2019 statutory financial results as confirmation that 2021 results were not significantly affected by the continuing COVID-19 pandemic.

<sup>6</sup> National data Source: National Association of Insurance Commissioners. Annual Statement Database, as delivered by S&P Global, Inc. All Rights Reserved.

**TABLE 1A. 2021 STATUTORY FINANCIAL RESULTS FOR COMMERCIAL DENTAL INSURERS – NATIONAL\*\***

2021 Group Dental Line of Business						
Company Size (based on revenue)	Totals (in 000s)			Dental Loss Ratio = Claims/Revenue	# Companies in Bucket	# with Estimated DLR < 83%
	Member- months	Revenue	Claims			
Total	400,531	\$11,834,005	\$9,474,344	80.1%	85	66
Top 1 to 5	207,395	\$5,960,946	\$4,828,327	81.0%	5	4
Top 6 to 10	42,964	\$1,599,712	\$1,212,617	75.8%	5	5
Top 11 to 20	68,293	\$1,869,700	\$1,493,147	79.9%	10	6
Top 21 to 40	63,409	\$1,862,543	\$1,525,795	81.9%	20	17
Top 41 to 60	14,749	\$462,325	\$363,165	78.6%	20	15
Top 61 to 85	3,721	\$78,779	\$51,293	65.1%	25	19

2021 Individual Dental Line of Business						
Company Size (based on revenue)	Totals (in 000s)			Dental Loss Ratio = Claims/Revenue	# Companies in Bucket	# with Estimated DLR < 83%
	Member- months	Revenue	Claims			
Total	127,381	\$3,118,770	\$2,796,377	89.7%	61	49
Top 1 to 5	102,936	\$2,157,437	\$2,125,248	98.5%	5	3
Top 6 to 10	9,132	\$376,092	\$257,294	68.4%	5	5
Top 11 to 20	8,958	\$353,398	\$253,457	71.7%	10	9
Top 21 to 40	4,527	\$205,507	\$138,842	67.6%	20	16
Top 41 to 61	1,829	\$26,336	\$21,536	81.8%	21	16

**TABLE 1B. 2019 STATUTORY FINANCIAL RESULTS FOR COMMERCIAL DENTAL INSURERS – NATIONAL\*\***

2019 Group Dental Line of Business						
Company Size (based on revenue)	Totals (in 000s)			Dental Loss Ratio = Claims/Revenue	# Companies in Bucket	# with Estimated DLR < 83%
	Member- months	Revenue	Claims			
Total	651,436	\$11,596,068	\$9,172,851	79.1%	78	61
Top 1 to 5	452,457	\$5,735,880	\$4,637,617	80.9%	5	4
Top 6 to 10	41,373	\$1,622,126	\$1,270,192	78.3%	5	5
Top 11 to 20	62,608	\$1,875,162	\$1,462,901	78.0%	10	7
Top 21 to 40	74,707	\$1,873,130	\$1,436,595	76.7%	20	15
Top 41 to 60	18,474	\$432,241	\$328,217	75.9%	20	17
Top 61 to 78	1,817	\$57,530	\$37,328	64.9%	18	13

2019 Individual Dental Line of Business						
Company Size (based on revenue)	Totals (in 000s)			Dental Loss Ratio = Claims/Revenue	# Companies in Bucket	# with Estimated DLR < 83%
	Member- months	Revenue	Claims			
Total	83,541	\$2,077,089	\$1,530,543	73.7%	55	45
Top 1 to 5	63,234	\$1,336,806	\$1,008,184	75.4%	5	4
Top 6 to 10	7,600	\$261,274	\$193,223	74.0%	5	5
Top 11 to 20	7,413	\$283,337	\$199,058	70.3%	10	7
Top 21 to 40	4,534	\$174,754	\$116,089	66.4%	20	17
Top 41 to 55	760	\$20,917	\$13,988	66.9%	15	12

\*\*National data includes carriers that are grouped at an entity level, as defined by S&P Global.



### **NADP Survey of Dental Carriers in Massachusetts**

We also compiled loss ratio statistics specific to Massachusetts based on a survey of dental insurers operating in the state conducted by NADP in April 2021. Ten carriers operating in Massachusetts including major national as well as smaller regional dental insurers responded to the survey, and NADP provided Milliman anonymized results for analysis. Respondents summarized financial metrics separately for the large group, small group, and individual dental markets; we calculated estimated DLR (claims/premium). The compiled results for large group and combined small group/individual markets are shown in Table 2.

**TABLE 2. 2019 FINANCIAL RESULTS FOR COMMERCIAL DENTAL INSURERS - MASSACHUSETTS**

#### 2019 Commercial Dental Financial Results, Massachusetts

Line of Business	Enrollment	Premium	Claims	Taxes and Fees	Admin and Commission	Profit/ Surplus	Profit % of Premium	Dental Loss Ratio
<b>Total</b>	<b>1,022,255</b>	<b>\$457,431,480</b>	<b>\$347,027,787</b>	<b>\$8,990,794</b>	<b>\$74,965,513</b>	<b>\$26,447,386</b>	<b>5.8%</b>	<b>75.9%</b>
Large Group	716,825	\$316,438,353	\$250,845,135	\$5,947,917	\$39,685,683	\$19,959,618	6.3%	79.3%
Small Group/Individual	305,431	\$140,993,127	\$96,182,652	\$3,042,877	\$35,279,829	\$6,487,768	4.6%	68.2%

Similar to the above national statistics, we also summarized DLRs, using methodology consistent with the Massachusetts proposal, according to the size of the carrier's book of business as measured by premium revenue in the state.

**TABLE 3. 2019 DLRs FOR MASSACHUSETTS COMMERCIAL DENTAL INSURERS, BY CARRIER SIZE**

Carrier Size (2019 Premium)	DLR
Carriers 1-3 (Premium > \$15M)	76.7%
Carriers 4-7 (Premium \$3M-\$15M)	66.7%
Carriers 8-10 (Premium < \$3M)	60.4%

### **COMMENTARY ON COVID-19**

We based our national market study on 2021 financial results. Because the COVID-19 pandemic continued into 2021, we also reviewed 2019 financial results for comparability, to ensure that 2021 results were a reasonable basis for analysis. We found that loss ratio levels as well as patterns by company size were broadly consistent between 2019 and 2021. The national statutory financial results from 2019 and 2021 are contained in the appendices to this report.

For the NADP carrier survey, 2019 data was collected and used in this report. 2020 data was not used because of the significant impact of COVID-19 on the dental market during that time period, and 2021 data was not available as of the time of the NADP survey request.

## Discussion and Implications

### WHAT DO THE DENTAL LOSS RATIO STATISTICS TELL US ABOUT POTENTIAL IMPACT OF THE MASSACHUSETTS INITIATIVE PETITION?

Both the national statistics from statutory financial statements and the Massachusetts-specific statistics from the NADP carrier survey tell a similar story.

1. **National industry DLRs for group dental insurers average around 80% in total, with results varying by insurer; few dental carriers operate at or above the proposed 83% minimum DLR.**

The nationwide financial data in Table 1 suggests that overall, 66/85 or 78% of carriers would have group dental DLRs below the 83% threshold. On average, smaller dental carriers and/or those focused on the individual/small group markets would be more likely to have difficulty attaining the minimum DLR, while larger, multi-line, or nationwide dental insurers, and insurers focused on the large group dental line of business, are less likely to have difficulty. That being said, there were carriers across the size spectrum with DLRs below 83%. Based on the Massachusetts data from the carrier survey, the prevailing average loss ratio is 75.9%, again with lower loss ratios for smaller companies and for companies focused on smaller case sizes.

2. **The majority of DLRs in the individual and small group dental market average well below the 83% threshold. Dental insurers with blocks of business more heavily focused in the small group and/or individual segments may have a more difficult time reaching an 83% DLR.**

The majority of national individual market participants also operate at dental loss ratios below the proposed threshold, and in Massachusetts specifically, the NADP carrier survey results suggest an average DLR of 68.2% for individual/small group markets, which is well below 83%. With a smaller average case size in the individual/small group markets, fixed administrative expenses must be allocated among fewer policyholders, which tends to result in administrative expenses comprising a larger portion of premium than for blocks of larger cases. This is borne out in the Massachusetts survey results; as shown in Table 4, the small group/individual lines of business show much higher administrative costs as a percentage of premium.

**TABLE 4. 2019 ADMINISTRATIVE EXPENSE RATIOS AND PROFIT MARGIN FOR COMMERCIAL DENTAL INSURERS - MASSACHUSETTS**

Line of Business	Administration % of Premium	Profit % of Premium
<b>Total</b>	<b>13.0%</b>	<b>5.8%</b>
Large Group	9.0%	6.3%
Small Group/Individual	21.4%	4.6%

Higher administrative expense ratios lead to lower DLRs, and as such, a minimum loss ratio threshold is more likely to affect the individual and small group markets. Furthermore, it does not appear that loss ratio minimums could be achieved in the individual or small group markets by reducing margin as profit margins are low across the board in Massachusetts.

3. **Smaller companies (as defined by revenue) tend to have lower DLRs and would have a more difficult time meeting the 83% minimum threshold.**

While some large national dental carriers operate closer to an 83% DLR, Table 1 and Table 3 clearly show that smaller dental companies operate at lower DLRs on average, both on a nationwide basis and in Massachusetts' dental market. National group dental DLRs show a downward trend as company size (measured by revenue) declines. From the Massachusetts survey respondents, the largest three insurers averaged a 76.7% DLR, while the smallest three averaged 60.4%. Similar to the differentials by line of business just described, smaller dental insurers have fewer policyholders over which to allocate any fixed costs required to operate the business.

4. **There is significant overlap in Massachusetts between smaller dental insurers and those focused in the individual/small group markets. These insurers are the most likely to struggle with a minimum DLR rule.**

Table 5 shows that Carriers 8-10 in the survey, the smallest 3 responding carriers by revenue, generate more than half of their dental revenue from the individual and small group lines of business and a far greater proportion than larger insurers.

**TABLE 5. OVERLAP BETWEEN CARRIER SIZE AND PROPORTION OF REVENUE FROM INDIVIDUAL AND SMALL GROUP MARKET**

Carrier Size (2019 Premium)	% of Revenue from Individual/Small Group
Carriers 1-3 (Premium > \$15M)	28.6%
Carriers 4-7 (Premium \$3M-\$15M)	56.0%
Carriers 8-10 (Premium < \$3M)	59.9%

The insurers most affected by a minimum loss ratio provision may determine that protective actions such as increasing premiums, exiting unprofitable segments, or exiting the Massachusetts dental insurance market are necessary. Options for compliance with minimum DLR requirements may be more limited for locally focused insurers that lack presence in other states, other dental lines of business, or other insurance lines, with premium increases being the most obvious option. Raising premiums may not be a viable option for insurers in Massachusetts under the current proposal. Section (d) of the initiative petition directs the insurance commissioner to disapprove any filed rate increase above a certain percentage. This provision could effectively prohibit insurers from obtaining premium increases to maintain administrative capabilities and achieve the proposed 83% loss ratio threshold.

#### **WHY MIGHT A MINIMUM DLR RULE RESULT IN PREMIUM INCREASES ON SOME DENTAL POLICIES?**

As demonstrated above, dental insurers in Massachusetts, across all markets (large group, small group, and individual) and of varying sizes (large and small insurers based on revenue) are not currently operating at the proposed DLR and will be affected by a minimum DLR requirement. To continue operating, dental carriers must generate enough in dental premium dollars to pay dental claims and administer the policies while complying with the minimum DLR. With the DLR minimum significantly above the prevailing level for the smallest insurers or those operating in the individual and small group markets, they will have to make cost structure changes in order to comply. Given that large savings in administrative expenses are unlikely, carriers could lower their profit margins or increase claims payments to providers, either via greater covered services for policyholders or increases in provider fees, in order to achieve the required relationship among claim costs, administrative and other non-claims costs, and premiums which a minimum DLR implies. Furthermore, dental coverage is a voluntary benefit that currently includes a wide variety of benefit levels to meet the preferences of different individuals and employers. A potential outcome of a high minimum DLR is that lower premium plans with leaner benefits may no longer be offered, potentially reducing consumer choice in dental plans designs.

We illustrate these counterbalancing effects with a simple example using a representative medium dental insurer focused on smaller groups and individual coverage, with an assumed current DLR of 70%, an administrative expense ratio of 23%, profit of 5%, and average premiums of \$38 per member per month (PMPM). This insurer currently spends  $23\% \times \$38 = \$8.75$  PMPM on administration.

Table 6 illustrates potential financial outcome scenarios for this hypothetical insurer under the 83% DLR proposed by the Massachusetts Initiative Petition.

**TABLE 6. 83% DLR IMPACT ANALYSIS ON SAMPLE MEDIUM DENTAL INSURER**

	Assumed Prevailing Values	Scenario 1: 83% DLR No Change in Admin \$	Scenario 2: 83% DLR 10% Decrease in Admin \$	Scenario 3: 83% DLR 10% Decrease in Admin \$ Increase Claim Costs to Achieve Breakeven Profit
Premium PMPM	\$38.00	\$32.05	\$32.05	\$52.50
Claims PMPM	\$26.60	\$26.60	\$26.60	\$43.58
Dental Loss Ratio	70.0%	83.0%	83.0%	83.0%
Profit %	5.0%	-12.3%	-9.6%	0.00%
Taxes and Fees %	2.0%	2.0%	2.0%	2.0%
Administration & Commissions PMPM	\$8.75	\$8.75	\$7.88	\$7.88

The scenarios summarized in Table 6 are as follows:

- In Scenario 1, we simply apply the 83% DLR with no other changes to the insurer's cost structure. Compliance with the higher DLR requires the carrier to reduce premiums but leaves them with a loss of 12.3%.
- Scenario 2 assumes that the insurer is able to improve administrative efficiency by 10%, reducing the PMPM administration cost to \$7.88 PMPM. Once the 83% DLR is applied, this scenario results in a loss of 9.6%, indicating that even with measurable efficiency improvements, the carrier may find it impossible to operate under the proposed threshold.
- In Scenario 3, we assume that the insurer increases premiums enough so that after claims payment, \$7.88 PMPM administrative expenses, and taxes and fees, the insurer breaks even. In order to make this happen, premiums must increase by 38%, from \$35 to over \$50, and claims must be increased by over 63%, from \$26.60 to \$43.58. Claims would need to be increased by either increasing the plan's benefits -- potentially beyond what is competitively offered and/or beyond what consumers desire or want to pay for -- or by increasing reimbursement to providers. This potential result of premium increases via higher than necessary benefits or higher payments to dentists seems counter to the intent of the DLR regulation to "increase the value of dental insurance".

The simplified scenarios do not account for other potential barriers to sustaining an 83% DLR. For example, we did not attempt to model potential loss of membership; if employer groups or individuals seek lower cost plans from other insurers in the market, affected companies could lose market share, further eroding their ability to spread fixed administrative costs, and deteriorating their competitive position. Based on these dynamics, we expect that the implementation of an 83% minimum DLR would primarily affect individual and small group dental plans, as well as smaller dental insurers focused on those markets.

#### Rate Increases under the proposal in Massachusetts

While rate increases via increased benefits or increased provider reimbursement are one potential response by insurers required to comply with a minimum loss ratio rule, section (d) of the initiative petition may make that difficult for insurers to implement. As mentioned above, section (d)'s language allows the commissioner to disapprove requested rate increases under certain conditions. This may leave carriers with fewer options for continuing to offer dental benefit to Massachusetts enrollees, and could result in carriers exiting the Massachusetts markets, thus decreasing consumer choice and/or leading to carrier consolidation.

Scenario 3 shown in Table 6 presumes that insurers are able to adjust premiums in order to comply with the minimum loss ratio. If insurers are not permitted to adjust premiums due to the provisions in section (d) of the initiative petition, then Scenario 3 would not be possible, and insurers would be more likely to be relegated to scenarios resembling 1 and 2, operating at a significant loss.

## VALUE OF REBATES COMPARED WITH ADMINISTRATIVE COST OF REBATE PROGRAM

Rebate provisions in minimum loss ratio rules are intended to ensure that the end consumer receives remuneration when insurers operate at a loss ratio lower than the minimum threshold. In recognition of the administrative burden associated with the rebating process, medical minimum loss ratio regulations include measures such as (1) a de minimis rebate threshold of \$20 below which policyholder rebates are not required, (2) the ability to credit the rebate toward future premium payments instead of issuing many small rebate checks, and (3) the ability to pay a lump sum rebate to the group policyholder instead of individual rebates to each employee.

The Massachusetts initiative petition contemplates rebates for individual and group dental plans if the loss ratio is lower than 83%; rebates must be made to the enrollee for the amount of premium revenue received multiplied by the difference between the minimum loss ratio and the carrier's DLR.

While 2020 rebates associated with the medical market in the commercial age <65 market averaged \$205 per person nationwide and \$117 per person in Massachusetts<sup>7</sup>, rebates associated with a DLR rule are likely to be small, often below the \$20 de minimis threshold set for medical plans. Furthermore, the cost of the process required to calculate, track, and distribute rebates could outweigh the value of the rebates themselves and could have the effect of pushing DLR lower due to the increased administrative burden.

To illustrate the potential magnitude of rebates under the Massachusetts initiative petition, we developed illustrative scenarios based loosely on the Massachusetts market results. We used two different assumed premium levels: (1) based on the assumptions for the sample medium dental carrier from Table 6, and (2) a lower premium representative of a larger carrier or large group focused carrier. We calculated annual rebates under various actual DLR scenarios that would necessitate a rebate under the proposal. Rebates are small, particularly compared to medical rebates, even for carriers with DLRs well below the 83% threshold; and, for carriers with a DLR above approximately 78%, the rebates are likely to fall below the ACA medical \$20 de minimis threshold. The de minimis rebate level was set to avoid undue administrative burden on health insurers. Dental insurers would face the same administrative tasks in managing a rebate program, with far greater administrative cost pressure due to the smaller premium over which to recoup those administrative costs, for considerably less financial benefit to consumers.

**TABLE 7. ILLUSTRATIVE REBATE CALCULATIONS**

Illustrative Rebate Calculation	@ 76% DLR	@ 78% DLR	@ DLR that produces \$20 annual rebate	@ 80% DLR	@ 82% DLR
PMPM Premium	\$38.00	\$38.00	\$38.00	\$38.00	\$38.00
Assumed DLR	76.00%	78.00%	78.61%	80.00%	82.00%
Minimum DLR	83.00%	83.00%	83.00%	83.00%	83.00%
Calculated Annual Rebate	\$31.92	\$22.80	\$20.00	\$13.68	\$4.56
PMPM Premium	\$33.00	\$33.00	\$33.00	\$33.00	\$33.00
Assumed DLR	76.00%	78.00%	77.95%	80.00%	82.00%
Minimum DLR	83.00%	83.00%	83.00%	83.00%	83.00%
Calculated Annual Rebate*	\$27.72	\$19.80	\$20.00	\$11.88	\$3.96

<sup>7</sup> <https://www.cms.gov/files/document/2020-rebates-state.pdf>

## Caveats and Limitations

This Milliman report has been prepared for the specific purpose of providing NADP with research and analysis related to dental loss ratios to aid in understanding the potential impact of minimum loss ratio legislation being considered in Massachusetts. This information may not be appropriate, and should not be used, for any other purpose.

This report has been prepared for NADP. NADP may share this information with outside entities with Milliman's permission. Milliman does not intend to benefit, and assumes no duty or liability to, other parties who receive this work product. Any third party recipient of this work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs. Any releases of this report to a third party should be in its entirety. This report must be read in its entirety and specialized knowledge of the industry is necessary to fully understand the report and its conclusions.

The results presented herein are estimates based on carefully constructed actuarial models. Differences between our estimates 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 not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

The illustrations presented in this report do not mimic the actual experience of any particular dental plan. They are meant to demonstrate the mechanics of complying with minimum loss ratio rules while maintaining a specified administrative expense structure, and the implications to claim costs and premiums of doing so. It is important to note that results will differ if the starting assumptions differ, or if other levers aside from provider compensation or profit are adjusted (e.g. if commissions are altered in response to an increased loss ratio requirement).

In performing this analysis, we relied on data and other information provided by NADP. We have not audited or verified this data and other information but reviewed it for general reasonableness. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

The material in this report represents the opinion of the author and is not representative of the views of Milliman. Milliman is not advocating for, or endorsing, any specific views in this report related to minimum DLR requirements.

Milliman does not provide legal advice, and recommends that NADP consult with its legal advisors regarding legal matters.

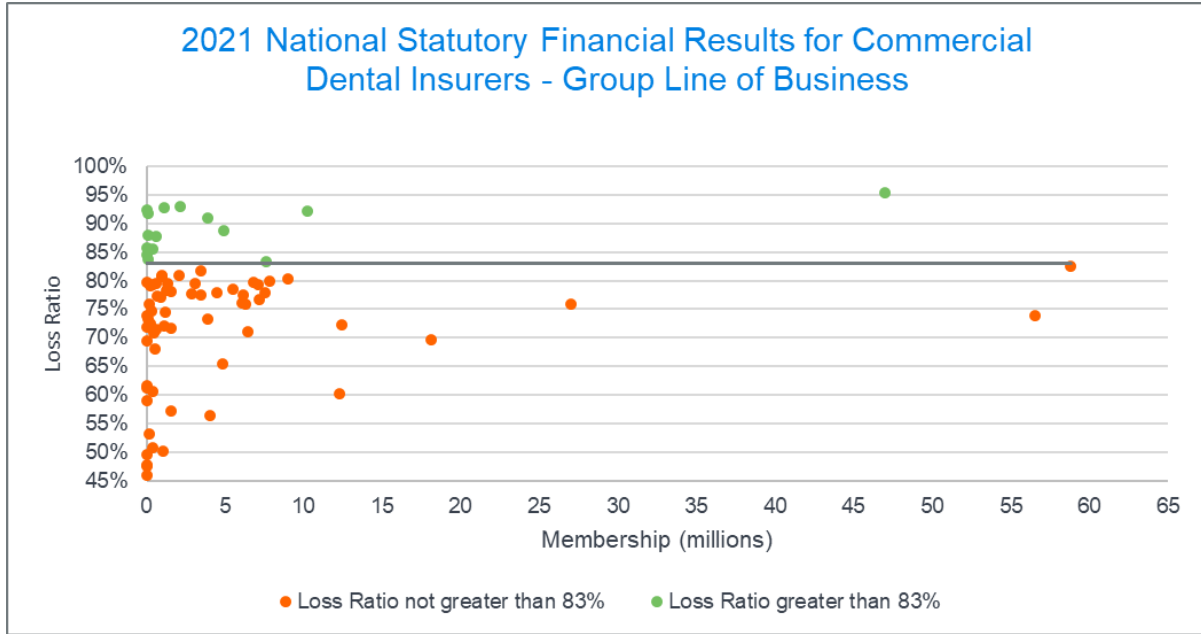
The terms of Milliman's Consulting Services Agreement with NADP signed on March 24, 2011 apply to this report and its use.

### **ACKNOWLEDGMENT OF QUALIFICATION**

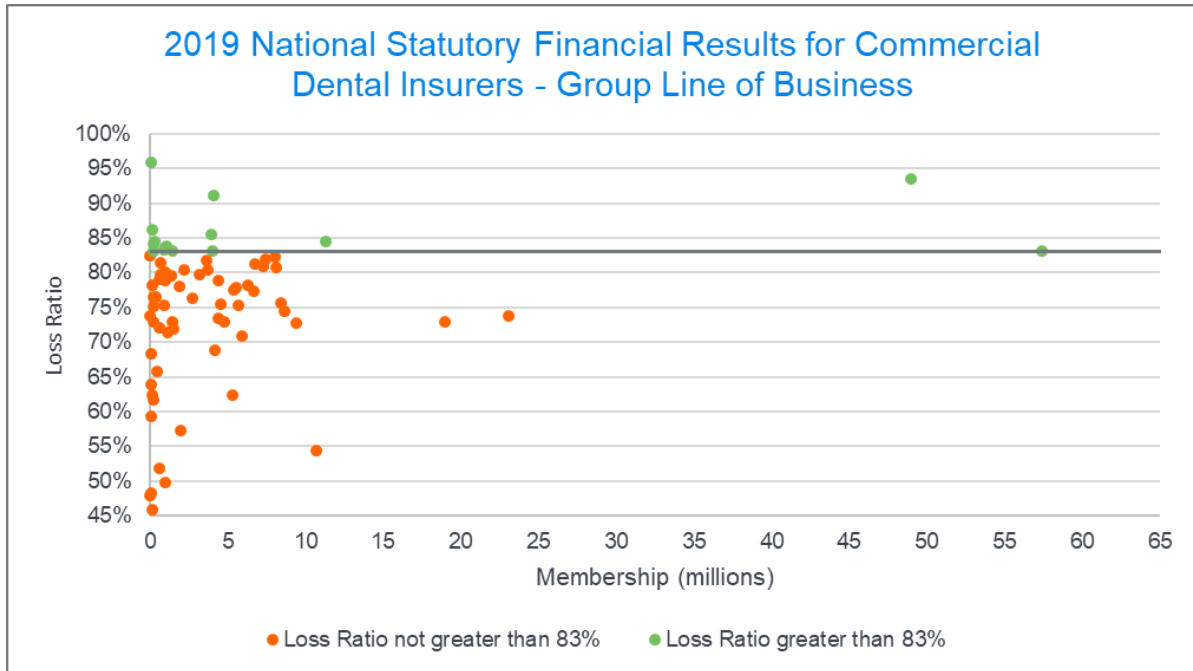
We, Joanne Fontana and Tory Carver, are actuaries for Milliman. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

## Appendix 1: 2021 and 2019 Statutory Financial Results, Group and Individual Dental Lines of Business<sup>8</sup>

**1A: 2021 National Statutory Financial Results for Commercial Dental Insurers – Group Line of Business**



**1B: 2019 National Statutory Financial Results for Commercial Dental Insurers – Group Line of Business**  
*(for display purposes one company's results with 304M members and 73.6% loss ratio was removed from graph)*

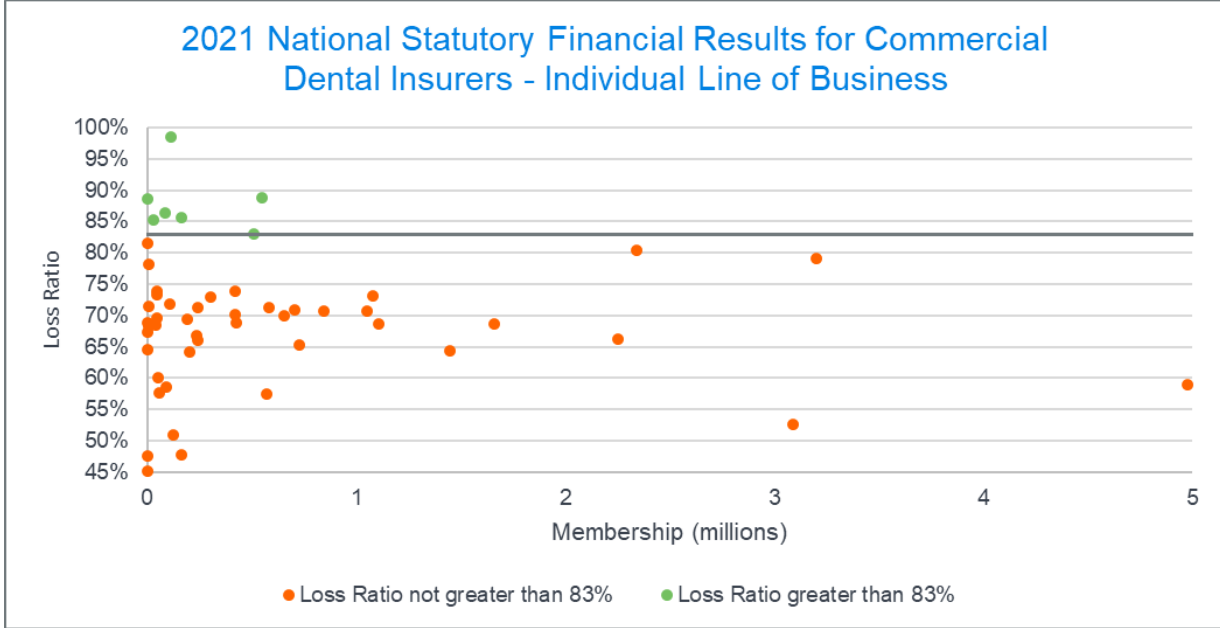


<sup>8</sup> National data Source: National Association of Insurance Commissioners. Annual Statement Database, as delivered by S&P Global, Inc. All Rights Reserved.

**1C: 2021 National Statutory Financial Results for Commercial Dental Insurers – Individual Line of Business**

for display purposes the following company results were removed from graph:

Membership (millions)	Loss Ratio
44.2	83.7%
42.4	129.9%
8.1	50.8%



**1D: 2019 National Statutory Financial Results for Commercial Dental Insurers – Individual Line of Business**

for display purposes the following company results were removed from graph:

Membership (millions)	Loss Ratio
46.5	83.0%
8.5	53.3%

