



National Cadillac Tax Estimates

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EXECUTIVE SUMMARY

This report, commissioned by the Pharmaceutical Research and Manufacturers of America (PhRMA), provides an analysis of the impact on employer sponsored plans of one of the most controversial provisions of the Affordable Care Act (ACA)¹ - the so called “Cadillac Tax”². In its simplest form, the Cadillac Tax creates an excise tax for plans whose cost per employee exceed certain dollar thresholds. Although multiple studies have been published on this topic, these studies have presented estimates based on sources such as surveys or consultants’ books of business. To our knowledge, this is the first national-scale quantitative report that shows, by year, how many employers will be affected by the Cadillac Tax. Our study is based on analyzing the claims experience of about 22 million lives or 20% of all employees and their dependents enrolled in a large employer (200 or more employees) health plan.

We estimated the percent of employees and their dependents enrolled in large employer health plans that will be subject to the Cadillac Tax over the first 10 years of the tax implementation. Our study shows that about 12 million people, or 11% of all employees plus their dependents will be enrolled in plans that will be subject to the tax in 2020. That increases to 54%, or almost 59 million, in 2029. We also estimated that 16% of large employer groups will be subject to the tax in 2020 and 51% in 2029.

In this study, we examined both single (employee only) and non-single (employee plus dependents) coverage and adjusted the Cadillac Tax thresholds for demographic differences. The demographic adjustment (which many other studies did not apply) provides relief to about 3% to 4% of groups who otherwise would have been impacted in 2020, the first year of the Cadillac Tax. We note that the actual impact of the demographic adjustment will depend on final regulations.

Of course, many employers will make changes to their benefit plans between now and 2020, and, for the purpose of this study, we assumed that those changes would be the typical annual changes intended to reflect medical inflation rather than to avoid the Cadillac Tax.

We note that the proposed Cadillac Tax methodology does not allow any adjustments for high cost due to the following:

- Geographic area
- Health status

We evaluated an alternative methodology that could help plans avoid the tax if their costs are high for reasons other than plan design. This methodology would provide a safe harbor for plans whose ratio of plan paid amount to total cost, or actuarial value, is lower than a certain level. This will give some relief to plans in high cost areas whose plan designs are not particularly rich.

This work was done in June 2016. If changes in law or regulation occur, our findings may no longer apply.

¹ The “Affordable Care Act” refers to the Patient Protection and Affordable Care Act (enacted March 23, 2010, Pub. L. No. 111-148) (PPACA), as amended by the Health Care and Education Reconciliation Act of 2010 (enacted March 30, 2010, Pub. L. No. 111-152) (HCERA), and as further amended by the Department of Defense and Full-Year Continuing Appropriations Act, 2011 (enacted April 15, 2011, Pub. L. No. 112-10).

² Section 49801 of the Internal Revenue Code, as amended by §1401 of HCERA and §1401 of HCREA. It was most recently amended by the Consolidated Appropriations Act, 2016.

THIS STUDY

One of the most contentious components of the ACA is the excise tax on high cost employer-sponsored health plans, the so called “Cadillac Tax”, which is intended to serve a dual purpose: to provide additional revenue to the federal government to fund the ACA and to encourage employers that sponsor employee health coverage and health insurance companies to reduce the cost of health care benefits. This tax is a 40% excise tax on the value of applicable medical coverage that exceeds certain annual thresholds. A two-year delay to the tax, part of the Consolidated Appropriations Act, 2016, was signed into law on December 18, 2015, postponing the effective date of the tax to January 1, 2020. In addition to the delay, the amended law stipulates that the excise tax will be tax deductible to the employer (initially it was not).

Beginning in 2020, both fully insured and self-funded employer plans will be subject to the excise tax on the value exceeding annual limits. As the law stands, health benefits subject to the tax include the medical premiums for active and retired employees, employer and employee contributions to health care flexible spending accounts, health savings accounts, and health reimbursement accounts. Long term care, worker’s compensation, disability insurance, dental and vision benefits provided under separate policies will be excluded from the value of the benefits.

The excise tax is levied indirectly on individuals. The health insurance company is responsible for paying the tax for a fully insured plan, while the employer or plan sponsor is responsible for calculating and paying the tax for self-insured plans. In addition to health insurance plans provided by private companies, coverage offered by tax-exempt, governmental, and church employers, and coverage for self-employed individuals (if that coverage is tax deductible) will all be subject to the excise tax. It is expected that employers will either pass on the cost of the excise tax, at least in part, to their employees or will reduce benefits to avoid the tax for as long as possible.

The annual excise tax thresholds are currently defined as \$10,200 for single coverage and \$27,500 for coverage other than single coverage in 2018. For a multiemployer plan, the non-single annual limit for coverage will apply to any level of coverage (including self-only). For 2019, the thresholds will be adjusted for inflation using the Consumer Price Index (CPI) plus one percentage point and rounded to the nearest \$50. In 2020 and beyond, the annual thresholds will be adjusted for inflation using CPI and rounded to the nearest \$50. Because the annual limit will be adjusted using CPI (and not the health care rate of inflation, which is expected to be higher than CPI), the value of most health coverage is expected to exceed the annual limit at some point in the future.

An adjustment to the thresholds is allowed for pre-Medicare retirees who have attained the age of 55³. The law also permits increases to the thresholds for plans covering employees, the majority of whom are considered high-risk professionals, such as law enforcement, fire protection, construction, mining, and those who install electrical and telecommunications equipment⁴.

The ACA allows an adjustment to the thresholds to account for differences in the age and gender of the participants from those of the national workforce. The law does not accommodate adjustments for differences in health status or regional costs of the participants.

³ §49801(b)(3)(C)(iv)

⁴ Ibid.

FINDINGS

Modeled Impact of Current Legislation

We modeled the impact of the excise tax (as it is currently written in the most recent version of the law) on both single and non-single coverage for large employer groups⁵ (200 or more employees).

Table 1 below shows the percent of covered employees and total lives (employees and their dependents) estimated to be enrolled in plans that will exceed the excise threshold over the first 10 years of the tax. Our analysis shows that about 11% of all employees and their dependents will be enrolled in plans that exceed the threshold in 2020. That percentage increases to 54% in 2029.

Table 1: Percent Total Employees and Lives (Employees and their Dependents) Expected to be Subject to Excise Tax										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Employees	10%	13%	15%	20%	23%	29%	34%	40%	46%	52%
Lives	11%	14%	16%	21%	25%	30%	35%	42%	47%	54%

To put the percentages above in perspective, we estimate that in 2020 12 million lives enrolled in large employer plans nationwide will be subject to the excise tax. That number increases to almost 59 million in 2029.

Table 2: Total Lives (in Millions) Enrolled in Large Employer Plans Impacted by Excise Tax									
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
12.1	14.9	17.8	23.2	26.9	32.9	37.8	45.5	51.3	58.6

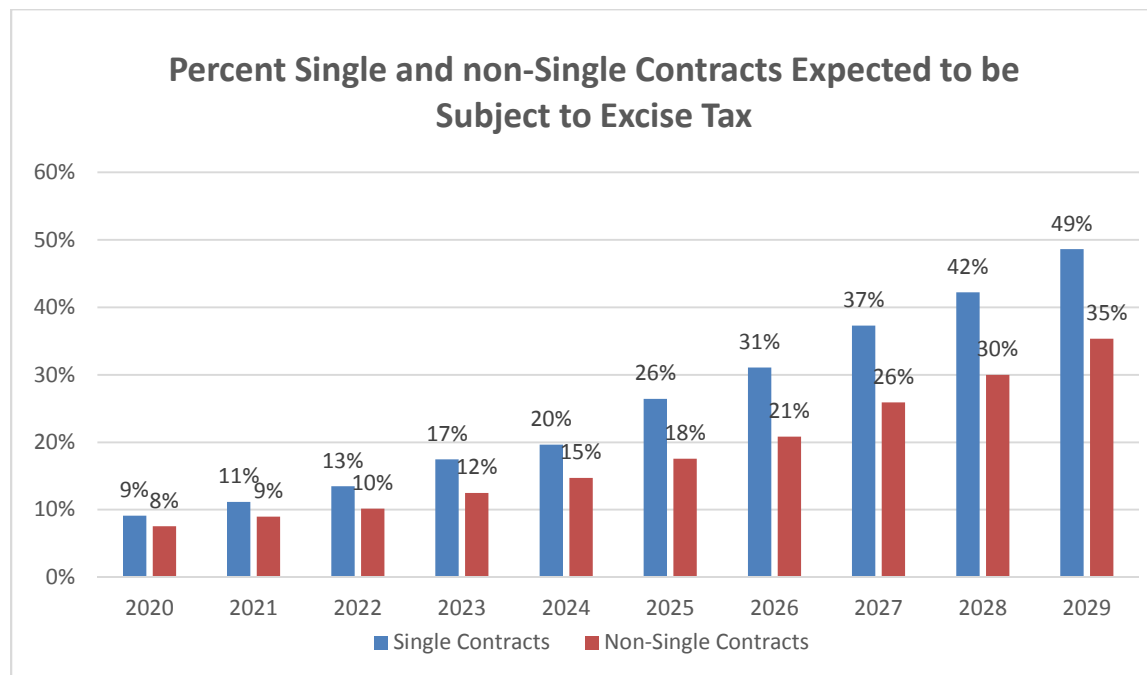
We also calculated the percent of covered large employer groups that will be subject to the excise tax (shown in Table 3 below). Note that since the contributors to our database may choose to report each plan as a separate group, the number of employers with at least one plan hitting the threshold may be slightly underestimated in the table below:

Table 3: Percent Groups Expected to be Subject to Excise Tax									
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
16%	20%	23%	27%	31%	34%	38%	43%	47%	51%

While our estimates are lower than reported in other industry publications, we should note a few important differences. Our study evaluates both single and non-single (two or more lives) coverage, while other studies have focused either on single or family (three or more lives) coverage only. We developed single and non-single premium rates based on available data (described in more detail in the Data Sources, Assumptions and Methodology section of this report). In practice, many employers have three or four tier premium rate structures, which makes the family (third or fourth tier) coverage more likely to hit the threshold than our estimates. In our study, single coverage tends to exceed the threshold

⁵ Groups in MarketScan data are defined by how the employers reported their data. For more information refer to Claims Data section on page 13.

earlier than non-single coverage. The chart below shows the percent of single contracts and the percent of non-single contracts that exceed the threshold in each year.



Another difference compared to most published studies is that our analysis adjusts the threshold for the age/gender distribution of each group which allows more groups to have costs below the thresholds. Without the demographics adjustment, we estimate that an additional 3% to 4% of total lives will be impacted each year. We applied adjustments based on the average age/gender factor of subscribers in each group relative to the overall average age/gender assumption from the Milliman Health Cost Guidelines (HCGs)⁶. Depending on how the age/gender adjustments will be determined under the final regulations, the age/gender adjustment may be more or less impactful than the percentages we quoted above.

Based on the expectation of their plans hitting the excise tax threshold, many plan sponsors will be making changes to their plans. These changes include, but are not limited to, shifting point of care out-of-pocket costs to employees, eliminating FSA or other account contributions, reducing the size of the provider network, and introducing additional cost containment programs. Plans have to balance the need to reduce benefits and be ACA compliant. In order for a plan to be ACA compliant, it needs to have a minimum actuarial value, or Minimum Value (MV), of 60% as calculated prospectively using the Minimum Value Calculator (developed by the US Department of Health and Human Services to determine if a plan provides MV, which is a proxy for the plan paid cost over total cost). Employers who do not offer this minimum required level of coverage may be subject to an Employer Shared Responsibility payment under the Employer Shared Responsibility provisions of the ACA. Table 4 below summarizes the change in actuarial value (expressed as percentage points) needed to avoid the excise tax in 2020, 2025, and 2029.

⁶ The HCGs are a cooperative effort of Milliman health actuaries and represent a combination of their experience, research and judgment. An extensive amount of data is used in developing the HCGs and that data is updated annually. The cost models consider utilization and average charge levels for roughly 60 benefit categories, and can provide relativities in per capita plan costs between programs of different design, demographics, or geography.

Table 4: Change in Actuarial Value Needed to Avoid the Excise Tax						
Required Percentage Point Decrease in Actuarial Value	2020		2025		2029	
	% Group Distribution	% Employee Distribution	% Group Distribution	% Employee Distribution	% Group Distribution	% Employee Distribution
< 1	1.0%	0.7%	1.6%	3.1%	1.5%	3.1%
1-2	1.1%	0.6%	1.7%	1.2%	1.8%	2.4%
2-3	1.0%	0.7%	1.5%	2.7%	2.1%	3.0%
3-4	0.8%	0.4%	1.8%	1.1%	2.5%	1.5%
4-5	1.2%	0.6%	1.7%	1.1%	2.7%	2.1%
5-10	4.4%	5.0%	9.5%	8.6%	10.9%	14.8%
10-15	2.2%	0.8%	5.5%	6.7%	9.0%	10.7%
15-20	1.5%	0.6%	4.3%	2.2%	7.4%	5.6%
20-25	1.4%	0.5%	2.1%	0.6%	5.3%	6.1%
25-30	0.5%	0.1%	0.9%	0.3%	1.7%	0.5%
30-35	0.1%	0.0%	0.2%	0.0%	0.4%	0.2%
Total With Allowable Decrease in AV	15.3%	10.0%	30.8%	27.7%	45.2%	50.1%
No Allowable Value*	1.2%	0.4%	3.4%	1.3%	6.2%	2.1%
None Needed	83.5%	89.6%	65.8%	71.0%	48.6%	47.8%

* No Allowable Value – the required decrease in actuarial value will result in the plan not being ACA compliant (a MV of less than 60%).

Groups are considered to hit the excise tax thresholds if at least one of the single or non-single per contract costs are projected to exceed their respective thresholds. In general, plan design changes will similarly impact both single and non-single contracts, which is why the costs and thresholds of both must be considered simultaneously. Hence, the % Employee Distribution in the table above represents all contracts (single and non-single) in the corresponding groups projected to be subject to the excise tax in 2020, 2025 and 2029.

While in 2020 only 10.1% of the groups that hit the excise tax (7% of the employees) will have to make substantial changes in plan designs (a change in actuarial value of 5 percentage points or more) in order to avoid the tax, this number rises significantly to 22.5% (18.5%) in 2025 and 34.7% (37.9%) in 2029.

We also estimated that 1.2% of the groups that hit the excise tax in 2020 and 6.2% in 2029 are projected to pay the excise tax in 2020 even if their actuarial value decreased to 60%. Sponsors of these plans will either have to pay the excise tax or potentially be subject to the Employer Shared Responsibility payment.

Factors Impacting Claims Costs

Trends

These baseline projections are based on our best estimate of future healthcare costs. The assumed claims trend has a significant impact on the number of lives subject to the excise tax. Reducing the projected medical trend by 200 basis points each year results in significantly fewer plans hitting the threshold. The table below summarizes the results.

Table 5: Low Trend Scenario - Percent Total Lives (Employees and their dependents) Expected to be Subject to Excise Tax									
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
3%	3%	3%	4%	4%	4%	8%	9%	9%	10%

We are not expecting such prolonged periods of low trends for any health insurance plans. However the table above demonstrates how the difference in trends compound over time. Under the low trend scenario, by 2029 10% of total lives are expected to hit the excise compared to our best estimate of 54% (Table 1). These results are also indicative of the impact of trending the thresholds by the medical trend as opposed to the general CPI. Many critics of the excise tax provision contend that general CPI is a poor indicator of the change in medical claims costs as medical inflation has consistently exceeded the CPI over the years.⁷

On the other hand, almost all plans will hit the annual thresholds within the first 10 years of introducing the Cadillac tax if our projected medical claims costs trends were 200 basis points higher each year than in the baseline scenario.

Table 6: High Trend Scenario - Percent Total Lives (Employees and their dependents) Expected to be Subject to Excise Tax									
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
26%	34%	44%	54%	63%	69%	80%	86%	89%	93%

Tables 5 and 6 demonstrate the material impact trend assumptions can have on reported results.

Region

The ACA does not allow adjustments to the thresholds for regional cost differences. Many industry articles have documented significant health spending variations throughout the country driven by cost of living, practice differences, malpractice liability, availability of providers, and other factors. This means that there will be situations where two similarly situated employees residing in different geographic areas covered by plans featuring similar plan designs will have substantially different premiums with one hitting the annual prescribed threshold, while the other stays below the threshold.

Table 7 displays for each state, the average costs per life and actuarial values (ratio of plan paid amount to total cost), from highest to lowest cost. The table shows that the highest cost state does not have the highest actuarial value (richest benefit plan) and the lowest cost state does not have the lowest actuarial value (poorest benefit plan). This demonstrates how regional differences in health care costs can impact employer-sponsored plans. The excise tax can potentially be imposed on some moderate benefit plans and fail to be imposed on some rich benefit plans.

Please note that Table 7 is for illustrative purposes only. Due to low sample size, some of the results shown for specific states may not be credible.

⁷ Department of Commerce (Bureau of Economic Analysis) <https://www.gpo.gov/fdsys/pkg/ERP-2013/pdf/ERP-2013-table16.pdf>; Department of Commerce (Bureau of Economic Analysis) <https://www.gpo.gov/fdsys/pkg/ERP-2013/pdf/ERP-2013-table60.pdf>

Table 7: Average Cost and Actuarial Value, by State			
State	Per Life Per Month (PLPM) Cost	PLPM Cost Ratio to Nationwide	Actuarial Value
AK	\$526	1.40	82%
NY	\$451	1.20	91%
CT	\$444	1.18	88%
WY	\$436	1.16	86%
WV	\$430	1.14	86%
WI	\$425	1.13	86%
NH	\$424	1.13	88%
ME	\$414	1.10	89%
DE	\$410	1.09	89%
MA	\$409	1.09	91%
NJ	\$408	1.08	87%
PA	\$407	1.08	90%
TX	\$406	1.08	85%
WA	\$401	1.06	88%
RI	\$394	1.05	89%
IN	\$393	1.04	86%
FL	\$383	1.02	87%
VT	\$382	1.02	86%
IL	\$379	1.01	85%
Nationwide	\$376	1.00	86%
TN	\$373	0.99	87%
MN	\$373	0.99	88%
OH	\$372	0.99	86%
XX	\$371	0.99	88%
CO	\$369	0.98	87%
NE	\$362	0.96	85%
SD	\$362	0.96	85%
CA	\$360	0.96	85%
NC	\$360	0.96	85%
GA	\$358	0.95	83%
OR	\$353	0.94	86%
MO	\$353	0.94	85%
KY	\$351	0.93	85%
VA	\$350	0.93	85%
MI	\$348	0.92	89%
LA	\$347	0.92	82%
SC	\$341	0.91	82%
AZ	\$340	0.90	85%
NM	\$339	0.90	87%
MS	\$337	0.90	82%
KS	\$337	0.90	85%
DC	\$333	0.88	86%
OK	\$332	0.88	83%
MD	\$324	0.86	86%
AL	\$321	0.85	84%
NV	\$314	0.83	80%
MT	\$313	0.83	83%
ND	\$311	0.83	83%
IA	\$310	0.83	84%
UT	\$300	0.80	82%
ID	\$287	0.76	85%
AR	\$279	0.74	82%
HI	\$272	0.72	86%
Nationwide	\$376	1.00	86%

AN ALTERNATIVE APPROACH USING ACTUARIAL VALUE

In this section, we present an alternative threshold to define when a plan would be subject to the Cadillac Tax. In addition to a defined cost per employee threshold as defined by the ACA, we examine a threshold that uses actuarial value, which is a measure of plan richness. This alternative seems to accommodate some of the disadvantages of the ACA approach.

The ACA does not consider that non-plan design factors such as poor health status or a high cost locale could push plan costs into the excise tax zone. Plan design changes can help influence spending and utilization; for example, high levels of cost sharing can discourage the use of certain kinds of services, such as emergency room. However, even modest benefit designs could cross the Cadillac Tax threshold because of locally high costs or because of the poor health of a covered population.

Actuarial value (AV) is a ratio of plan-paid amounts to the sum of plan-paid and employee-paid amounts. There are many variations in how AV can be calculated, but for the purpose of this section, the AV would be calculated prospectively and would not take into account network composition or differences in provider reimbursement. It would also be calculated in a way that uses a “standard” population distribution. While AV can be calculated prospectively based on benefit design using standard actuarial tools, we used a simpler, retrospective approach – actuarial value as the ratio of paid to allowed claims. We note that the prospective approach is used to define Metallic levels for ACA-compliant individual and small group plans sold on or off Exchanges.

In the table below, we provide results of the alternative approach to the excise tax dollar threshold. In this case groups that have costs projected to be at or above the excise tax dollar threshold but have an AV below the AV threshold would not be taxed. Any group that has costs projected to be below the excise tax dollar threshold, regardless of their actuarial value, would also not be taxed. We modeled AV thresholds from 70% to 88% actuarial value (representing Silver to Platinum plan designs in the individual and small group market).

Table 8: Change in Actuarial Value Needed to Avoid 2020 Excise Tax												
Required Percentage Point Decrease in Actuarial Value	Current Methodology		70% Safe Harbor		75% Safe Harbor		80% Safe Harbor		85% Safe Harbor		88% Safe Harbor	
	Percent Groups	Percent Employees	Percent Groups	Percent Employees	Percent Groups	Percent Employees	Percent Groups	Percent Employees	Percent Groups	Percent Employees	Percent Groups	Percent Employees
< 1	1.0%	0.7%	1.0%	0.7%	1.0%	0.7%	1.2%	0.7%	2.0%	1.1%	1.7%	1.2%
1-2	1.1%	0.6%	1.1%	0.6%	1.1%	0.6%	1.2%	0.6%	1.8%	1.1%	1.5%	0.6%
2-3	1.0%	0.7%	1.1%	0.7%	1.1%	0.7%	1.2%	0.7%	1.8%	1.1%	1.3%	0.5%
3-4	0.8%	0.4%	0.8%	0.4%	0.8%	0.4%	1.2%	0.6%	1.4%	0.6%	1.4%	3.4%
4-5	1.2%	0.6%	1.3%	0.6%	1.3%	0.6%	1.5%	0.6%	1.2%	0.3%	1.1%	0.2%
5-10	4.4%	5.0%	4.4%	5.0%	5.0%	5.2%	5.9%	5.6%	4.4%	4.8%	2.1%	1.1%
10+	6.9%*	2.4%*	6.7%	2.3%	5.9%	2.1%	1.2%	0.7%	2.0%	1.1%	1.7%	1.2%
Total	16.5%	10.4%	16.4%	10.3%	16.2%	10.3%	1.2%	0.6%	1.8%	1.1%	1.5%	0.6%
None Needed	83.5%	89.6%	83.6%	89.7%	83.8%	89.7%	1.2%	0.7%	1.8%	1.1%	1.3%	0.5%

*Includes groups who are projected to hit the excise tax in 2020 even if their actuarial value were decreased to 60%.

This alternative approach could give some relief to employers and health insurers whose plan designs are not particularly rich (as determined by their actuarial value) but are still high cost and are projected to hit the dollar threshold.

DATA SOURCES, ASSUMPTIONS AND METHODOLOGY

Claims Data

We used 2013 Truven MarketScan Commercial Claims Research Database to obtain claims by group. This is an annual medical database that includes private sector health data from approximately 100 payers. The dataset contains more than 35 million commercially insured lives. It represents the medical experience of insured employers and their dependents for active employees, early retirees, COBRA continues and Medicare-eligible retirees with employer-provided Medicare Supplemental plans. The dataset consists of person-specific clinical utilization, expenditures, and enrollment across inpatient, outpatient, prescription drug, and carve-out services from a selection of large employers, health plans, and government and public organizations. The MarketScan databases link paid claims and encounter data to detailed patient information across sites and types of providers, and over time. This database has data for about 35 million covered lives and is nationally representative.

We made the following adjustments to the MarketScan data extract to ensure that the data is reasonable and appropriate for the analysis we were performing.

- Groups under 200 employees were not included. The claims experience of smaller groups tends to be more volatile and therefore may not be representative of what the plan's premiums would be.
- Groups with paid claims per life per month under \$200 were excluded from our analysis because these groups were considered to offer non-ACA compliant plans.
- Retirees have not been included in this analysis. We did not consider Medicare-eligible retirees for this analysis, and early retirees are expected to be only a small percentage of the total pre-Medicare covered population.

Groups in MarketScan data are defined by how the employers reported their data. A "group" may consist of one employer (multiple benefit options combined) or just one of the benefit options provided by an employer. We refer to each group in MarketScan as a unique "employer" throughout this report. Due to sometimes counting each benefit option as an employer, the number of employers in these results may be slightly overstated.

The table below shows a high level summary of the employer groups and lives included in our study. Our results are based on studying the enrollment and claims of 2,813 groups including almost 22 million lives.

Counts by Group Size			
Group Size (Employees)	Groups	Employees	Lives
200-299	16%	1%	1%
300-399	11%	1%	1%
400-499	7%	1%	1%
500-999	22%	4%	4%
1,000-1,999	16%	6%	6%
2,000-4,999	14%	13%	13%
5,000-9,999	7%	14%	15%
10,000-24,999	5%	21%	22%
25,000-49,999	1%	14%	13%
50,000-99,999	0%	11%	10%
100,000+	0%	14%	13%

Premium Development

We developed expected annual single and non-single premiums for years 2013 – 2029.

Per single/non-single contract plan paid costs (medical and prescription drugs claims) were calculated for each group using the total 2013 plan paid costs split into single/non-single based on the number of single and non-single contracts, average number of lives per non-single contract, and tier factors from Milliman’s HCGs. These costs were projected forward using the following annual healthcare trend rates:

Annual Trend Assumptions						
2014	2015-2016	2017	2018	2019-2024	2025	2026-2029
7.5%	7.6%	6.9%	6.2%	5.5%	5.4%	5.5%

The above trend assumptions were based on a long-term healthcare trend model⁸ published by Society of Actuaries (SOA) based on detailed research performed by a committee of economists and actuaries, which included a representative from Milliman.

The baseline projections are based on the above best estimate of future healthcare costs trends. However, since healthcare trends are difficult to project over a long term period, the results are also provided by varying the projected medical trend by 200 basis points each year.

Health Insurer Fee (HIF) costs were calculated as 1.5% of plan paid claims in each year for groups assumed to have fully-insured coverage. Groups with at least 1,000 active employees and retirees were assumed to be self-insured and, therefore, were not given an additional cost for HIF. We assumed this fee will not be waived after 2017.

Administrative charge equal to 7% - 12.5% of the 2013 premiums was added depending on group size as follows:

Expense Ratio				
Group Size (Employees)				
200-499	500-999	1,000-4,999	5,000-9,999	10,000+
87.5%	88.0%	89.0%	90.5%	93.0%

Per contract expenses were projected forward using an annual trend rate of 2.8%. This expense ratio assumed to include all non-claim charges (unless listed separately), including but not limited to administrative expenses, taxes and fees, and a provision for profit.

⁸ Getzen Model of Long-Run Medical Cost Trends: <https://www.soa.org/research/research-projects/health/research-hlthcare-trends.aspx>

Reimbursement Accounts

Both employer and employee contributions towards HRA and HSA accounts count towards the annual threshold. The average expected HRA and HSA contributions were added to the total premium. The following assumptions have been made for groups that are assumed to offer a High Deductible Health Plan (HDHP):

- 33% of employees elect the HDHP with account options (HRA at 15% or HSA at 18%)⁹
- Average HRA 2013 employer contributions (single/family) of \$947/\$1,800¹⁰
- Average HSA 2013 employer contributions (single/family) of \$653/\$1,150⁸
- Average HSA 2013 employee contributions (single/family) of \$1,110/\$1,955¹¹

Contributions are trended at the same rates as per contract plan paid costs. Note that HRA / HSA contributions are spread over all employees whose employer offers a HDHP as one of their plan options. As such, account contributions are understated for employees enrolled in account base plans and overstated for employees enrolled in regular plans.

Flexible Spending Account (FSA) contributions have not been included in the analysis. We have assumed that employers will choose to limit or eliminate FSA contributions in order to avoid the excise tax.

Excise Tax Thresholds

Excise Tax thresholds are currently defined as \$10,200 for single contracts and \$27,500 for non-single contracts in 2018. We have projected the 2020 thresholds and beyond using 2018 levels and a CPI assumption of 2.3% in each year, with 2018 trended at CPI + 1%.

Excise Tax thresholds can be adjusted upwards to account for the age/gender mix of the health plan. We applied adjustments based on the average age/gender factor of subscribers in each group relative to the overall average age/gender assumption from the Milliman HCGs. However, regulations have not yet defined the specific adjustments to be used.

We did not make an adjustment to give multi-employer plans the non-single thresholds for all contracts. Such an adjustment is assumed to have an immaterial impact based on information received from 5500s, which suggest approximately 4% of all employers and 6% of employees are in a multi-employer plan.

Groups are considered to exceed the excise tax thresholds if at least one of the single or non-single per contract costs are projected to exceed their respective thresholds.

Actuarial Value Determination

Actuarial value (AV) is defined as the ratio of expected total paid claims to expected total allowed claims. It is a proxy measurement of the richness of a plan. Actuarial value is usually determined prospectively based on covered plan benefits and required cost-share and should not be impacted by other factors such as reimbursement levels or demographics of the specific plan. U.S. Department of Health and Human Services (HHS) developed and maintains a Minimum Value calculator that employers can use to calculate their AVs.

⁹ Kaiser 2013 Employer Health Benefits Survey: <http://kff.org/report-section/ehbs-2013-section-8/> (exhibit 8.5)

¹⁰ Kaiser 2013 Employer Health Benefits Survey: <http://kff.org/report-section/ehbs-2013-section-8/> (exhibit 8.8)

¹¹ Calculated as employer contributions (\$653 / \$1,150 single / family) multiplied by a ratio of 1.7. The ratio was based on June 2014 Issue brief of the Employee Benefit Research Institute: https://www.ebri.org/pdf/briefspdf/EBRI_IB_400_June14.HSAs.pdf

Our database does not track the plan designs. Therefore, we could not use the HHS calculator to develop the AVs. The AV for each group not offering a HDHP plan option was approximated as the total 2013 plan paid costs as a percent of the total 2013 plan allowed costs. This calculation included all active claims (single and non-single contracts combined) for each group. The AV for groups offering HDHP plans was approximated as the total 2013 plan paid costs and the assumed total employer HRA/HSA contributions as a percent of the total 2013 plan allowed costs. Similarly to groups not offering a HDHP plan, the AV calculation included all active claims (single and non-single contracts combined) for each group.

We assumed that plan administrators will make cost sharing changes that keep plan costs in line with overall medical inflation, and this will keep the current AVs stable in the future years.

Utilization Adjustments

If a plan hits the threshold in 2020, we determine the magnitude of benefits reduction necessary to ensure that the plan will not be subject to the excise tax. Increases in cost sharing usually serve to impact utilization, as well as to lower net cost per service. Since we do not have access to the actual plan designs of each group, we apply induced demand adjustments to the allowed amounts to account for decreased utilization that would be expected to result from changes in plan design. These adjustments, based on the HHS's AV calculator are as follows:

Metal Tier	Actuarial Value Range	Induced Demand Factor
Bronze	< 65%	1.00
Silver	65% - 75%	1.03
Gold	75% - 85%	1.08
Platinum	> 85%	1.15

Alternative Approach Using Actuarial Value

Under the alternative methodology, groups that have costs projected to be at or above the excise tax dollar threshold but that have an average AV that is below the safe harbor would not be taxed. Any group that has costs projected to be below the excise tax dollar threshold, regardless of their AV, would still not be taxed. We modeled various AV thresholds ranging from 70% to 88% AV (representing Silver to Platinum plan designs in the Health Insurance Exchanges under ACA).

Total Population Impacted

We estimated the employees and lives that may be impacted in the total US population by applying the percentages obtained from MarketScan data to the total US population with employment based coverage from large employers (200 or more employees). US population with employment based coverage was obtained from a study by the congressional budget office¹². The percentage of employers that are large employers was based on Kaiser Foundation survey of employer sponsored health benefits¹³ and statistics from the US Census bureau¹⁴.

¹² <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/49892/49892-breakout-AppendixB.pdf>.

¹³ Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 1999-2015.

¹⁴ Number of Firms, Number of Establishments, Employment, Annual Payroll, and Estimated Receipts by Enterprise Employment Size for the United States and States, Totals: 2012

LIMITATIONS AND CAVEATS

The projections presented in this report are estimates based on historical data and depend upon many assumptions as to future experience. Differences between our projections and actual experience depend on the extent to which future experience conforms to the assumptions made in our projections. Random or non-random fluctuations could cause actual results to be different from those presented here.

The results are based on our current understanding of the ACA and the proposed and final regulations that have been released. The regulations are emerging and constantly changing, and consequently future results may need to be updated based on these changes.

This report was commissioned by PhRMA. This report should not be interpreted as an endorsement of any particular legislation by Milliman or the authors. Kalin, Asparouhova, and Balasinkam are members of the American Academy of Actuaries and meet its qualification standards to perform this work. The report reflects the authors' findings and opinions.