



TECHNICAL REPORT  
**FEDERAL HEALTH CARE REFORM:  
EXCISE TAX ON HIGH-COST EMPLOYER PLANS**

Prepared by a joint work group of the  
American Academy of Actuaries and the  
Society of Actuaries

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## Further Information

This report was prepared by a joint work group of the Society of Actuaries' Health Section Council and the American Academy of Actuaries' Health Practice Council. The joint work group was created to provide detailed analysis of the estimated impact of the excise tax on high-cost employer health plan premiums (so-called "Cadillac Plans"), which is being discussed as part of ongoing health care reform efforts.

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The work group acknowledges and appreciates the contributions of data to support the modeling. Various data were provided by Hewitt Associates LLC (Hewitt), Mercer LLC and Ingenix. The premium-rate modeling relies primarily on a 2009 dataset provided by Hewitt.

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## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	4
Recommendations .....	7
INTRODUCTION.....	8
Background .....	8
Purpose and Scope .....	8
METHODOLOGY AND ASSUMPTIONS .....	11
Methodology .....	11
Assumptions .....	12
CAVEATS .....	15
RESULTS AND IMPLICATIONS OF THE EXCISE TAX .....	16
Results .....	16
Excise Tax Implications .....	18
Additional Analysis.....	19
RECOMMENDATIONS .....	23
Recommendations .....	23
Additional Analysis.....	23
EXHIBITS.....	24
Exhibit I.....	24
Exhibit II.....	25
Exhibit III .....	26
Exhibit IV .....	27
Exhibit V .....	28

## EXECUTIVE SUMMARY

As passed by the U.S. Senate, the *Patient Protection and Affordable Care Act* (PPACA, or “the bill” as it is referred to in this report) contains a provision that would impose a 40 percent excise tax on the cost of employer-provided health care coverage in excess of specified amounts per employee (\$8,500 for single coverage, \$23,000 for family coverage). The thresholds would be higher for retired individuals age 55 and older, for employees in high-risk occupations, and for employees living in 17 high-cost states. This provision is one component of the Senate proposal to help finance the cost of the health reform. This work group neither advocates for nor opposes the concept of such a tax. Nevertheless, if an excise tax on high-cost plans is included, certain actuarial issues must be considered. In particular:

- High-cost plans do not necessarily reflect overly generous benefits. As such, the proposed tax will likely result in reduced benefits for those plans that are high cost because of factors such as a less healthy population or higher-cost geographic areas, rather than plans with the most generous benefits.
- Revenue estimates from such a tax are subject to significant margins of error (i.e., actual results could be much higher or much lower than estimated) due to the leveraging impact of certain economic assumptions.
- Since health care premiums are projected to rise faster than the general rate of inflation, most employer-provided health insurance would eventually be subject to the excise tax, regardless of how efficiently it is provided.

In order to assist policymakers and the public in determining the implications of the proposed excise tax, a joint work group of the American Academy of Actuaries (Academy) and the Society of Actuaries (SOA) developed a model to estimate the revenue it would generate. This model also analyzes the possibility that employers would reduce or eliminate benefits in order to avoid paying the tax, which would reduce revenue from the excise tax but could also have other effects. These effects include reducing health care spending and increasing income and payroll taxes to the extent that compensation shifts from health benefits to wages.

The results presented in this report are estimates, and it must be noted that these estimates are highly sensitive to all assumptions. This is especially true of the assumptions for annual health care premium trend increases and for the impact of employer and employee actions as a result of the tax.

This sensitivity is demonstrated in Table 1. The table shows results of five scenarios generated by the work group’s model:

- *Scenario I* assumes an annual increase in premiums (trend) of 6 percent. It also assumes that there is no significant behavioral response to the excise tax (i.e., employers will continue offering and employees will continue enrolling in the plans and benefit levels that they currently have and will pay the tax).
- The *higher premium trend* scenario is similar to Scenario I, but assumes a premium trend of 7.5 percent instead of 6 percent.

- The *lower premium trend* scenario is similar to Scenario I, but assumes a premium trend of 4.5 percent instead of 6 percent.
- The *weak employer and employee behavioral response* scenario assumes a modest reduction in the enrollment in high-cost plans. This reduction in enrollment will cause the excess premiums (before the tax) to decrease by 20 percent for active employees and by 30 percent for retirees age 55 and over.
- The *strong employer and employee behavioral response* scenario assumes a more substantial reduction in the enrollment in high-cost plans. This reduction in enrollment will cause the excess premiums (before the tax) to decrease by 50 percent for active employees and by 75 percent for retirees age 55 and over.

The results of the work group’s modeling are summarized below. Projected excise tax revenues under Scenario I, which includes no behavioral response by employers or employees, would total \$107.5 billion. For the scenarios that include behavioral responses, the projected tax revenues include only the excise tax revenues and not any increases in income or payroll taxes resulting from a shift in compensation from health benefits to wages.

<b>Table 1: Ranges of Estimates of the Excise Tax <sup>a</sup></b>			
	<b>Excise Tax (billions)</b>		<b>Enrollees Affected by Tax in 2019 (millions)<sup>b</sup></b>
	<b>Cumulative 2013-2019</b>	<b>2019</b>	
<b>Scenario I—no behavioral response</b>	\$107.5	\$28.8	20.4
<b>Higher premium trend—no behavioral response</b>	\$226.2	\$68.1	40.1
<b>Lower premium trend—no behavioral response</b>	\$48.5	\$10.4	7.6
<b>Weak employer and employee behavioral response</b>	\$81.2	\$22.0	20.4
<b>Strong employer and employee behavioral response</b>	\$41.8	\$11.9	20.4

<sup>a</sup> Projected tax revenues include only excise tax revenues and not any increases in income or payroll taxes resulting from a shift in compensation from health benefits to wages.

<sup>b</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

These scenarios illustrate a wide range of revenue estimates for the tax—from \$41.8 billion to \$226.2 billion—over a seven-year period. Note that the tax does not go into effect until 2013, so there is no impact in the first three years (2010 to 2012).

This study uses the Hewitt Associates’ premium database,<sup>1</sup> which consists of premium rates and self-insured premium equivalent rates for primarily large employers and a few government plans. These data may differ from those used by the CBO (or others) in their analyses, which may account for some of the differences in revenue estimates.

Since the concept of an excise tax on excessive health plan premiums is relatively new, there is limited available data and analysis. For example, the distribution of premium costs (the number of enrollees whose cost of coverage falls within each particular dollar-amount range) has not been widely collected or studied, even though the growth of the *average* cost of coverage is studied at great length. Similarly, there is no actual experience regarding employer and employee response if faced with an excise tax on premiums above a particular threshold. The employer could pay the tax, modify or eliminate benefits to avoid the tax, or choose some combination of the two. Similarly, if the tax is eventually passed to employees, they may decide to pay the tax (through higher contributions for higher-cost plans), opt for a lower-cost option if available, or drop employer coverage altogether.

With this caveat, the estimated tax revenue from the model reflects the excise tax rate and an assumed premium distribution of employer-sponsored coverage, rates of medical and general inflation, and possible employer responses to the tax. The model also incorporates different taxation thresholds and other assumptions for high-cost states, high-risk occupations, and retirees (as stipulated in the current bill).

Table 2 outlines detail of **Scenario I** for four major categories of enrolled employees, where premiums increase at a rate of 6 percent annually, and employers hold their level of benefits over time (i.e., no employers reduce or drop benefits to avoid the excise tax).

<b>Table 2: Scenario I Results by Category</b>				
<b>Category</b>	<b>Cumulative 2013-2019</b>			<b>Enrollees Affected by Tax in 2019 (millions)<sup>a</sup></b>
	<b>Total Projected Premiums (billions)</b>	<b>Premiums Subject to Tax (billions)</b>	<b>Excise Tax (billions)</b>	
<b>17 high-cost states</b>	\$2,240.2	\$75.1	\$30.0	8.1
<b>High-risk professions</b>	\$771.2	\$30.6	\$12.2	2.5
<b>Retirees 55+</b>	\$548.6	\$119.8	\$47.9	3.0
<b>All others</b>	\$3,675.2	\$43.2	\$17.3	6.7
<b>Total</b>	<b>\$7,235.3</b>	<b>\$268.7</b>	<b>\$107.5</b>	<b>20.4</b>

<sup>a</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

In the course of this study, the work group noted features of the proposed legislation that may result in unintended consequences. Briefly, these are:

- **Premium as a measure of comprehensiveness of benefits**—The concept of a dollar-amount threshold is based on the assumption that premiums are an appropriate measure of plan richness and

<sup>1</sup> Hewitt Associates, Hewitt Health Value Initiative™ (database of 325 large-employer plans covering more than 13 million members).

that higher-cost plans necessarily provide more generous benefits. However, an employer's plan may have a high premium for a number of reasons—for example, it may have an older or less-healthy population or enroll larger families and not necessarily because it has generous benefits.

- ***Unequal allocation and the pass-through of the tax***—The tax is to be paid by the insurer or plan administrator, in the case of a self-funded plan. However, the tax would be calculated based on the sum of the cost of several types of coverages (medical, prescription drug, dental, vision, health savings accounts, etc.) that could be covered by different insurers or administrative vendors. This will lead to complications when the tax must be allocated among the different carriers of coverage. It can also lead to inequities if some, but not all, carriers or programs are limited in their ability to pass the tax on to the employer (e.g., due to state or federal regulations).
- ***Multi-tier family premium structures applied against two-tier thresholds***—The Senate-passed bill specifies one threshold for family coverage, but many plans distinguish different types of family coverage, such as within a so-called “four-tier” premium structure that would include separate rates for employee-only, employee-plus-spouse, employee-plus-children and employee-plus-family. Using one overall family threshold may unfairly penalize employers who already employ such a structure since more families may exceed a threshold when the costs are spread out among these categories. Alternatively, it may lead employers to adopt a two-tier structure that might be viewed as less equitable by many employees.
- ***Incentives to terminate retiree coverage***—The bill might encourage employers to cease providing pre-65 retiree coverage, since the adjusted higher threshold for this group may not fully reflect the true difference in cost. This would be especially likely if related reform provisions make individual coverage more accessible for pre-65 retirees.
- ***Small employer groups***—The Senate bill could have a disproportionate impact on small groups. Small-group premiums might be more likely to exceed the threshold because of higher administrative costs and the possibility of adverse selection. In addition, small groups with predominantly older employees have high premiums as a result of age rating. Small employers may end up subject to the tax for reasons other than rich benefits.

## **Recommendations**

Changes should be made to the proposed legislation if policymakers wish to alleviate some of the unintended consequences described above. Some changes that might be considered include:

- The tax could be based on a measure of actuarial value rather than a dollar threshold. Alternatively, the dollar threshold could be adjusted for risk factors that would allow it to more accurately reflect the cost differences due to benefit levels rather than other factors beyond the control of the employer, such as industry, geographic area or firm size.
- The tax could be charged directly to employers or employees to more directly affect their purchasing decisions.
- Small employers could be exempt from the tax, taxed at a lower rate, or subject to a higher threshold.

# INTRODUCTION

## Background

The *Patient Protection and Affordable Care Act*, as passed by the U.S. Senate, contains a provision imposing a 40 percent excise tax on the cost of employer-provided health care coverage in excess of specified amounts per employee (\$8,500 for single coverage, \$23,000 for family coverage). Cost is generally defined in the bill as the premium or implied premium for all health benefits, whether paid by the employer or the employee. The cost includes ancillary health benefits, such as dental, vision, and certain account-based benefits such as Health Reimbursement Arrangements (HRAs), Health Savings Accounts (HSAs), or Flexible Spending Accounts (FSAs). The single and family coverage thresholds would be higher for retired individuals age 55 and older, employees in high-risk occupations, and for employees living in 17 high-cost states. The threshold amounts would be indexed to the Consumer Price Index (CPI) plus 1 percent.

The joint work group of the Academy and SOA has developed a model that estimates the revenue—as well as other impacts on the financing and provision of health care—of this excise tax. This report describes the model, the key drivers of the projections and the projected revenue, and discusses other qualitative considerations of this excise tax provision.

## Purpose and Scope

This report is intended to be used by policymakers and the public in consideration of the health reform legislation currently pending. In particular, the intent of the work group in producing this report is to:

- Describe at a very high level the role of tax policy, including the proposed excise tax, in the design and funding of current or proposed structures for health coverage;
- Provide estimates of the amount of excise tax revenue under various scenarios;
- Provide estimates of the change in employer-provided coverage under various scenarios and describe the characteristics of the employers that would be most affected;
- Explain the possible relationships between the excise tax and other decisions about employer coverage;
- Describe the effects of the tax over time;
- Identify the key drivers of tax revenue; that is, the assumptions and variables having the greatest effect on revenue or other results;
- Discuss instances in which a change in the design of the tax might be considered.

The model and the results presented in this report address revenue obtained and other possible responses in employer-provided health coverage as a result of an excise tax on the cost of employer-provided health benefits in excess of threshold amounts. Throughout this report, the term “premium” is intended to represent both fully insured premium rates and insured premium-equivalent cost rates commonly used



by self-insured employers (both types of rates are included in the Hewitt medical-premium database used in the model). In addition, the term “employer” is intended to represent companies that sponsor health care benefits for their employees, as well as other plan sponsors such as labor unions and trade associations.

### *Employer-provided health coverage*

Employer-provided health coverage is the most prevalent form of coverage in the U.S. According to U.S. Census Bureau statistics from the Current Population Survey (CPS) for 2008, 163 million people under age 65, or about 75 percent of the population under 65 who have health coverage, receive coverage through an employer. About half, 83 million, receive this coverage as employees or retirees; the other 80 million are covered as dependents. Coverage through employment does not mean that the employer pays the full cost of the plan; the employee may contribute from 0 percent (non-contributory) to 100 percent (fully contributory) of the cost of coverage. Employer-provided coverage ranges from self-funded plans of large employers, unions, or government entities to insured coverage, which is more common for smaller groups.

Benefits usually include coverage for hospitalization, outpatient facilities, physicians and other medical professionals, and prescription drugs. They may also include dental and vision benefits, as well as various forms of employer-paid savings arrangements to fund expenses not covered within the other benefit plans. At the federal level, employers are not required by law to provide coverage, and there are relatively few requirements on the benefits if coverage is provided. At the state level, there may be numerous minimum benefit requirements (often characterized as mandates) for insured plans not preempted by self-funded plans as specified by Employee Retirement Income Security Act (ERISA).

Current federal tax law is generally favorable to employer-provided health coverage, and thus provides an incentive for providing this benefit. The cost of the coverage to the employer is a tax-deductible cost of doing business, similar to any other allowed form of employee compensation.

In addition, health benefits are not taxable to the employee as income, thus differentiating health benefits from most other forms of compensation. This tends to make health benefits a relatively economical form of compensation, and may encourage the utilization of health benefits. Furthermore, the cost of coverage applies to benefits that the employee elects and pays for, to the extent that these benefits can be funded by pre-tax salary reductions.

There are several effects of the current tax treatment of employer-sponsored health plans. For example, it reduces the effective price of health care relative to other consumable items, which could encourage overconsumption of health care services. In addition, the impact of the benefit to covered individuals might depend on their income level through the impact of the marginal tax rate (i.e., tax-free status may provide more tax benefit to someone at a higher income level).<sup>2</sup>

One purpose of the excise tax outlined in the PPACA is to raise revenue from insurance companies and plan administrators. Another purpose of the tax is to reduce health spending by taxing a portion of the cost of comprehensive benefits, thereby making them a less attractive form of compensation.

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<sup>2</sup> T. Bachmueller and A. Monheit, “Employer-Sponsored Health Insurance and the Promise of Health Insurance Reform.” *Inquiry* 46: 187 – 202 (Summer 2009).

This report does not directly address the following:

- Except to a limited extent, the characteristics of the plans and beneficiaries that would be affected by the tax, beyond cost per employee. For example, closed-panel HMO plans are not distinguished from generally more expensive PPO plans.
- Other tax revenue effects. If an employer reduces coverage to avoid the excise tax, for example, the work group did not model how those funds might be spent (e.g., on the employee as additional compensation). Depending on this decision and the tax status of the employee and employer, there may be additional individual or payroll tax revenues offsetting the excise tax reduction.
- Adverse selection in the purchaser's choice as to whether to pay the excise tax or discontinue benefits. Purchasers (employers or employees) with greater expected health risk (and therefore higher costs) may be more likely to accept the price increase (pay the tax) since their higher risk implies a greater need for benefits.
- Precise effects of the design of alternative coverages and reform components including Medicaid expansions, individual market reform, and small-group market reform.
- Changes in dependent coverage (e.g., an individual who chooses not to cover children or a spouse) because of a mismatch between the family-coverage tier structure of the participant plan and the aggregate tax threshold for a family included in the bill.

# METHODOLOGY AND ASSUMPTIONS

## Methodology

The quantitative results in this report were generated by a projection model developed by the work group; additional qualitative insights are presented as well. In the course of developing the model, it was necessary that the work group make certain assumptions about how the law might be interpreted and administered.

This section of the report describes the general methodology and basic assumptions. One goal of the model was to estimate revenue under the proposed tax based on the current structure of the market, assumptions about future growth of health care spending and inflation, and assumptions about purchaser response.

The model also estimates the impact on enrollment in employer-provided health care coverage, as well as the cost of such coverage. However, it does not quantify the secondary impact on other taxes or other proposed systems, such as individual coverage through exchanges.

The major elements of the model include:

- ***Definition of the population that would be directly affected by the excise tax***—This includes insurers and third-party administrators (TPAs), employers and other sponsors (such as labor unions or trade associations), and employees participating in employer-provided health coverage. Certain subgroups have been analyzed separately in the model because they have varying cost distributions, could respond more strongly to the tax, or have different thresholds as specified by the bill.
- ***Description of the amount of premium subject to excise tax***—“Premium distribution” refers to the percentage of covered employees whose premiums are in a particular range of dollar amounts (for example the percentage of employees with single coverage whose premium is between \$3,000 and \$4,000). As described in more detail in the *Assumptions* section, premium distributions for each subgroup and coverage tier were constructed from health insurance premium data provided by Hewitt.<sup>3</sup> The Hewitt data was adjusted to reflect ancillary benefits such as dental, vision, and reimbursement accounts.
- ***Calculation of the excise tax that would be collected based on the projected premium distribution and threshold***—Based on the distribution of premiums in each future year (projected forward using assumed premium trend), the projected threshold (projected to future years at a rate of CPI plus 1 percent), and projected enrollment, the model estimates the amount of premium in excess of the threshold and therefore subject to the tax. It also estimates the tax itself as a flat percentage of affected premiums.
- ***Adjustment of the calculations to reflect possible behavioral response by employers and employees to reduce or avoid the tax (such as a reduction of benefits)***—Examples of the behavioral response of employers or employees include: increasing cost sharing (e.g., deductibles); eliminating benefits; eliminating high-cost plan options to reduce the premium below the threshold; or eliminating

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<sup>3</sup> Hewitt Associates, Hewitt Health Value Initiative™ (database of 325 large-employer plans covering more than 13 million members).

coverage altogether. The extent of this response may depend on the degree to which the tax is ultimately paid by the insurer or administrator, the employer or plan sponsor, or the covered employee. Depending on the options for coverage available in the individual insurance market, the employer could end benefits entirely or the employee might choose not to elect contributory benefits. Specific responses are not modeled. Instead, behavioral response is modeled in the aggregate by an assumed reduction in the amount of premiums that exceed the threshold.

## **Assumptions**

### *Covered population*

The population receiving employer-provided health coverage under age 65 is assumed to be 163 million lives (including dependents), provided through 83 million employees and retirees. This population is based on the Current Population Survey (CPS) of the U.S. Census Bureau for 2008 and includes both self-funded and insured employer-provided coverage. The covered population was assumed to remain constant in the scenarios in this report.

### *Distribution of premiums*

The model assumes a distribution of premiums, that is, a specification of the percentage of covered employees whose premium is in a particular dollar range. For simplicity, the model assumes that each premium amount within a particular range is equally likely (a distribution that could be described as “piecewise-uniform”), although other assumptions are possible.

The Hewitt dataset provides the percentage of employees with premiums in \$1,000 increments, as well as the average premium within each of these increments. These data include fully-insured premiums and self-insured premium equivalents for 2009, separately for single coverage and three different family tiers (couple, one parent plus children, and two parents plus children). This distribution represents the experience of over 300 large employers and almost 6 million employees. The average 2009 premium/premium equivalent for this distribution is \$4,600 per year for employees with single coverage and \$11,700 for employees with one of the three types of family coverage.

Cost relativity factors for various subgroups (e.g., the 17 high-cost states and retirees) are then applied. The distributions also change over time due to the premium-increase assumption. This particular form of the premium distribution was chosen to facilitate computation; however, the group tested other methods and statistically fitted models and other methods were seen to give similar results.

### *Adjustment for other benefits*

The Hewitt data includes only medical and prescription-drug benefits. However, the bill specifies that additional benefits are to be included in the amount subject to the excise tax, such as dental, vision, and reimbursement accounts. Premium amounts in the Hewitt distribution were adjusted by an incremental flat dollar amount in each coverage tier, estimated as 15 percent of the cost of medical and prescription drug benefits across all groups.

### *Thresholds for higher-cost subgroups*

The bill identifies higher thresholds for certain population groups:

- Covered individuals living in the 17 highest-cost states—thresholds are 20 percent higher in 2013, or \$10,200 for single coverage and \$27,600 for family coverage; 10 percent higher in 2014; 5 percent higher in 2015; and ultimately set to the same threshold as other states in 2016.

- High-risk occupations—thresholds are \$1,350 higher, or \$9,850, for single coverage, and \$3,000 higher, or \$26,000, for family coverage.
- Retirees 55 and over—thresholds are \$1,350 higher, or \$9,850, for single coverage, and \$3,000 higher, or \$26,000, for family coverage.

#### *Indexing of thresholds and premiums*

The bill specifies that the thresholds will increase at a rate equal to the CPI plus 1 percent. The scenarios presented assume that the CPI increase will be 1.5 percent in 2014, 1.8 percent in 2015, and 2.0 percent in subsequent years; therefore, the thresholds increase at 2.5 percent in 2014, 2.8 percent in 2015, and 3.0 percent in subsequent years.<sup>4</sup>

Scenario I assumes that premiums and premium equivalent costs grow at 6 percent per year.<sup>5</sup> Note that this trend is intended to include normal changes in benefit provisions due to employers' attempts to manage healthcare benefit costs.

Alternate scenarios model the impact of higher and lower annual increases. Arguments that support the assumption of higher trend rates include, among other things, induced demand for coverage due to a reduction in the number of uninsureds and increased coverage levels for those currently with insurance, as well as requirements to cover certain conditions or services or limitations on utilization management. Arguments that support the assumption of lower trend rates include, among other things, reductions in fraud and abuse, comparative effectiveness efforts, and the potential for employers to reduce benefits due to the effect of the excise tax.

It should be noted that the differential between the CPI-based threshold index and the annual increase in premiums is significant but consistent with historical trends.

#### *Behavioral response variable*

The behavioral response variable represents the reduction in premiums that exceed the threshold by employers or employees in response to the tax. Benefits purchased with premiums above the threshold would experience an effective 40 percent price increase as result of the tax. Such price increases could lead to a reduction in the amount spent on health coverage.

There are various ways that employers (and employees) can reduce costs to avoid the tax. Possible methods include enrollee cost-sharing increases (i.e., copayments, deductibles, coinsurance, benefit limits), reduction of benefits covered, or elimination of high-cost plan options. An employer may choose to discontinue coverage entirely, although that decision must be evaluated in the context of any prescribed mandates that require coverage (regulatory or collectively bargained) or the availability and affordability of coverage that is made available in the individual insurance market. The model does not distinguish between the various ways that premiums can be reduced; it simply assumes that the premiums above the threshold are reduced.

Scenario I assumes no behavioral response. It assumes that premiums, including premiums in excess of the threshold, increase at an assumed percentage per year. It is important to emphasize that on an annual

<sup>4</sup> These rates were taken from *The Budget and Economic Outlook: Fiscal Years 2009 to 2019* issued by the Congressional Budget Office updated August 2009.

<sup>5</sup> Based on Hewitt's HHVI database, premiums increased by an average rate 6.3 percent per year from 2005 to 2009. The *Mercer National Survey of Employer-Sponsored Health Plans* reports average trends between 6.1 percent and 6.4 percent per year from 2005 to 2009.

basis, many employers reduce benefits to moderate premium increases. Those reductions, which take place whether or not there is a tax, are included in Scenario I as part of the premium growth assumption.

There are also scenarios that assume a “weak” behavioral response and a “strong” behavioral response. The weak response assumes that employers reduce premiums in excess of the threshold by 20 percent for all subgroups, except the retiree subgroup (i.e., ages 55 or older), where premiums are reduced by 30 percent. In the strong response scenario, employers reduce premiums in excess of threshold by 50 percent for all subgroups other than the retiree subgroup, which is reduced by 75 percent.

The “weak” response assumption is consistent with a linear price elasticity of 0.5; that is, an assumption that each 1 percent increase in the price will lead to a 0.5 percent reduction in demand. By that reasoning, a 40 percent increase in the premium for some benefits would lead to a 20 percent reduction in demand. The “strong” response assumption is consistent with a recent survey<sup>6</sup> in which a high percentage of employers indicate they would reduce or eliminate benefits to avoid the tax. The relatively higher response for retirees age 55 and older reflects the fact that some employers may currently provide coverage only to protect pre-Medicare retirees who would otherwise find coverage in the individual market unavailable or unaffordable in the pre-reform environment.

For those scenarios that include behavioral response, the projected tax revenues reflect the excise tax only and not any increase in income and payroll tax revenues resulting from a shift in compensation from health benefits to wages.

#### *Retiree benefits*

Hewitt’s distribution is primarily made up of active employees; therefore, the distribution for retirees age 55 to 64 (i.e., pre-Medicare retirees) is adjusted by a factor of 200 percent of the baseline distribution. The 200 percent assumption is based on data from Hewitt and from other consulting firms, and reflects that a typical pre-Medicare retiree population has higher expected costs due to age, as well as overall poorer health (many employees choose to retire due to poor health).

#### *Family tiers*

The Hewitt premium data contains premium rates structured into several categories of what is commonly referred to as “coverage tiers.” Today, many employer-sponsored health plans offer coverage for a variety of family types in order to equitably allocate premium costs among employees and their dependents. For example, under a typical coverage tier structure that includes four tiers, employees can select coverage for employee only, employee plus spouse, employee plus child or children, or employee plus family. Employer-sponsored plans also offer coverage in three tiers or two tiers.

The bill specifies thresholds in only two tiers (single coverage and family coverage). For purposes of the model, the work group assumes that all coverage tiers covering dependents (e.g., employee plus spouse, employee plus child or children, and employee plus family in the four-tier example above) qualify under the bill as family coverage and are subject to the family threshold.

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<sup>6</sup> Survey of 465 employer health plan sponsors performed by Mercer, LLC in November 2009.

## CAVEATS

Assumptions incorporated into this model include the trend of medical premiums/costs and health coverage purchasing behavior. Actual premium trends will be affected by other provisions of the bill, such as mandated or subsidized coverage by employers or individuals.

The work group makes assumptions about the percentage of benefits that are reduced over time, due to the expected response of employers or employees who are directly or indirectly payers of the tax. This assumption is intended to incorporate several possible responses, while only quantifying the response overall and not specific reasons. Possible responses incorporated into the assumption include paying the tax, reducing benefits to reduce or eliminate the tax, or eliminating employer-provided coverage altogether. In addition, employers may adjust employee compensation. These responses could also be affected by collective bargaining agreements or other commitments to provide health coverage, penalties on employers who do not provide health care plans, or opportunities for employees to purchase coverage on a community-rated and/or subsidized basis.

The model requires assumptions about the distribution of health care plan premiums. Distribution assumptions are based on a Hewitt dataset for large employer plans, adjusted for supplemental benefits, such as dental, vision, and health care accounts. The actual ultimate distribution of plans subject to the tax may differ from this distribution. The Hewitt data has a disproportionately high number of larger employers and a disproportionately low number of small employers and retirees. However, the work group believes the dataset represents a reasonable proxy for a statistical distribution of premiums and reflects the net effect of various adjustments that might be made to enhance it.

The work group developed and summarized a wide range of possible scenarios. The group urges caution against accepting any one scenario as most likely. Actual events may lead to values that fall outside the range of the scenarios considered in this report.

# RESULTS AND IMPLICATIONS OF THE EXCISE TAX

## Results

The work group modeled several scenarios to demonstrate the sensitivity of results to key variable assumptions. The detailed results for these scenarios are shown in the *Exhibits I* through *V*. The results are summarized in Table 3 below.

The scenarios are described as follows:

- Scenario I assumes that premiums will increase 6 percent per year and that employers' behavioral response is to hold coverage at the current level of benefits and pay the tax.
- Scenario II is calibrated to Scenario I, but assumes that premiums will increase at 7.5 percent per year instead of 6 percent. Detail for Scenario II is shown in *Exhibit II*.
- Scenario III is calibrated to Scenario I, but assumes that premiums will increase at 4.5 percent per year instead of 6 percent. Detail for Scenario III is shown in *Exhibit III*.
- Scenario IV is calibrated to Scenario I, but assumes that employer/employee behavioral response will be to reduce premium amounts above threshold by 20 percent for non-retiree subgroups and 30 percent for the retiree subgroup. Detail for Scenario IV is shown in *Exhibit IV*.
- Scenario V is calibrated to Scenario I, but assumes that employer/employee behavioral response will be to reduce premium amounts above threshold by 50 percent for non-retiree subgroups and 75 percent for the retiree subgroup. Detail for Scenario V is shown in *Exhibit V*.



**Table 3: Ranges of Estimates of the Excise Tax <sup>a</sup>**

Scenario	Excise Tax (billions)		Enrollees Affected by Tax in 2019 (millions) <sup>b</sup>
	Cumulative 2013-2019	2019	
<b>Scenario I: 6% premium increase, no behavioral response</b>	\$107.5	\$28.8	20.4
<b>Scenario II: 7.5% premium increase, no behavioral response</b>	\$226.2	\$68.1	40.1
<b>Scenario III: 4.5% premium increase, no behavioral response</b>	\$48.5	\$10.4	7.6
<b>Scenario IV: Employer behavioral response 20% for actives, 30% for retirees</b>	\$81.2	\$22.0	20.4
<b>Scenario V: Employer behavioral response 50% for actives, 75% for retirees</b>	\$41.8	\$11.9	20.4

<sup>a</sup> Projected tax revenues include only excise tax revenues and not any increases in income or payroll taxes resulting from a shift in compensation from health benefits to wages.

<sup>b</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

Each scenario consists of results from four separate groups of enrollees, as specified in the bill. These groups—17 high-cost states, high-risk occupations, retirees age 55 and older, and all other enrollees—are subject to different premium thresholds and are described in more detail in the *Assumptions* section of this report. These results for Scenario I are shown below in Table 4 (cumulative results over seven years) and Table 5 (results by year).

**Table 4: Scenario I Results by Category**

Category	Cumulative 2013-2019			Enrollees Affected by Tax in 2019 (millions) <sup>a</sup>
	Total Projected Premiums (billions)	Premiums Subject to Tax (billions)	Excise Tax (billions)	
<b>17 High-cost states</b>	\$2,240.2	\$75.1	\$30.0	8.1
<b>High-risk professions</b>	\$771.2	\$30.6	\$12.2	2.5
<b>Retirees 55+</b>	\$548.6	\$119.8	\$47.9	3.0
<b>All others</b>	\$3,675.2	\$43.2	\$17.3	6.7
<b>Total</b>	<b>\$7,235.3</b>	<b>\$268.7</b>	<b>\$107.5</b>	<b>20.4</b>

<sup>a</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

**Table 5: Scenario I – Tax Revenue by Year (billions)**

<b><u>Category</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>	<b><u>2017</u></b>	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>Cumulative 2010-2019</u></b>
<b>17 High-cost states</b>	\$0.0	\$0.0	\$0.0	\$0.2	\$0.9	\$1.9	\$4.2	\$5.6	\$7.5	\$9.7	\$30.0
<b>High-risk professions</b>	\$0.0	\$0.0	\$0.0	\$0.6	\$0.8	\$1.1	\$1.5	\$2.0	\$2.7	\$3.5	\$12.2
<b>Retirees 55+</b>	\$0.0	\$0.0	\$0.0	\$4.1	\$4.9	\$5.7	\$6.7	\$7.7	\$8.8	\$10.1	\$47.9
<b>All others</b>	\$0.0	\$0.0	\$0.0	\$0.6	\$1.0	\$1.4	\$2.0	\$2.8	\$4.0	\$5.5	\$17.3
<b>Total</b>	\$0.0	\$0.0	\$0.0	\$5.5	\$7.5	\$10.2	\$14.4	\$18.2	\$22.9	\$28.8	\$107.5

### **Excise Tax Implications**

The work group estimates that, under the Scenario I assumptions, the revenue the tax would raise is approximately \$108 billion over the seven-year period (i.e., 2013 to 2019.) The critical assumptions in Scenario I are that the distribution of premiums remains the same, that the relationship between premium increases and CPI remains at low levels, and that employers and employees do not reduce benefits in order to avoid the tax.

In Scenario I, the excise tax revenue grows from \$5.5 billion in 2013 to \$28.8 billion in 2019. The increase is due not only to a growth in premium of 6 percent per year, but also to the growth in the differential between premiums and CPI-based threshold amounts; consequently, the percentage of enrollees with premiums in excess of the threshold increases each year. (The exhibits show the number of affected enrollees in each year.)

The bill allows higher thresholds for the 17 highest-cost states and certain specified high-risk occupations. The higher thresholds applied to these cohorts initially decreases their share of the overall tax amount, but the advantage disappears over the model period as the cohorts eventually pay a greater share of the tax amount.

The amount of excise tax revenue is sensitive to the relative growth of medical premium compared to CPI. For example, if premium growth is assumed to be 7.5 percent rather than 6 percent, and the assumed CPI remains below these increases (1.5 percent in 2014, 1.8 percent in 2015 and 2.0 percent thereafter), then the total tax revenue increases to approximately \$226 billion. If premium growth is assumed to be 4.5 percent, the tax revenue decreases to \$49 billion.

The work group assumes that employers do not adjust their family-coverage tier structures in order to avoid the tax. Tax revenue may be lower than the modeled results if employers adjust the form of family coverage to minimize or eliminate taxable premiums.

Excise tax revenue estimates will be lower if employers and employees adjust their purchasing behavior to reduce or avoid the excise tax. As discussed elsewhere, there are a number of actions that employers

or employees can take to reduce or eliminate their tax. The actions include the elimination of a benefit option, such as a health reimbursement or other savings account; increasing deductibles or other cost-sharing provisions; and elimination of high-cost options or coverage, especially in the case of retirees. A 20 percent reduction in premiums (30 percent for retirees) would reduce anticipated revenue to \$81 billion over the seven-year period. A 50 percent reduction in premiums (75 percent for retirees) would reduce anticipated revenue to \$42 billion over the seven-year period. Although not included in the projection model, income and payroll taxes would increase to the extent that compensation shifts from health benefits to wages.

The bill specifies that the excise tax is imposed upon carriers (for insured plans) and administrators (for self-funded plans). However, an implicit assumption is that the employer (or employee) would ultimately be responsible for paying the tax. This will almost certainly be the case for large, self-insured employers, where the expense-load structure is transparent. There is less flexibility in the expense structure for small- and medium-sized (and usually fully insured) employers, but the rates are likely to reflect the excise tax over time in order for insurers to continue to provide these products. If it is assumed that the tax reaches the employer, then an assumption of an employer behavioral response is reasonable.

An additional consideration is the case in which the employer is taxed and passes this tax fully or partially on to employees through higher employee contributions. In this case, the tax would still be collected, but the number of covered employees on which the tax is collected is expected to fall because some employees will drop coverage rather than pay the increased employee contribution.

### **Additional Analysis**

As a supplement to the results of the quantitative modeling provided in this report, several prominent actuaries working in the health care and employee benefits industry provided qualitative analyses of possible implications that the proposed tax might bring to employers and the health care system in general. The actuarial viewpoint is of value in policy discussions in terms of a technical analysis of policy provisions.

These qualitative analyses are summarized in this section.

#### **Taxation of employer-provided coverage has potential benefits as well as pitfalls.**

For many years, actuaries and economists have discussed the potential effects of a tax on employer-provided health benefits. A typical proposal is to tax benefits (or a portion of them) as income to the employee, the same as any other compensation. The goal of this type of proposal is to raise revenue, encourage more efficient (i.e., lower) health care spending, or both. In many proposals, the revenue raised by such a tax would be essentially redistributive; that is, it would be spent elsewhere in the system on tax credits or direct subsidies for the purchase of health coverage. The downside of the tax is that necessary health benefits become more expensive and health coverage becomes less affordable. Another downside is that with a behavioral response to the tax (i.e., reducing the coverage), less tax is collected, which could produce funding shortfalls for the proposal. The decision of whether or not to tax benefits is largely one of public policy, not of economics. The economics and financing can be set to be revenue-generating, revenue-neutral, or expense-generating.

The excise tax proposal is theoretically consistent with the concept of taxing employer-provided benefits as income, although its application is different. The excise tax applies only to a portion of the benefits, with that portion based on the real-dollar cost to the employer. And, although the excise tax is levied on

insurers and plan administrators, it will ultimately be paid by employers and employees. The fact that the tax is somewhat removed from the benefit decision makers (i.e., employers and employees) may hinder any increased efficiency in health care spending.

There is a possibility that the excise tax could lead to more efficient health care spending as payers respond to the tax. Theoretically, an effect might be a reduction in spending for those health care costs that provide the least benefit for their cost, although it is difficult to identify the specific costs. Another effect might be increased cost sharing by covered employees which, in turn, could lead to a reduction in benefit health care spending. A common example is very high cost-sharing for non-generic or non-formulary drugs. A third and indirect effect of the tax is the leverage it creates for carriers that negotiate with providers of services to reduce costs in order to avoid the excise tax.

**An excise tax based on dollar premium thresholds may not be equitable or economically effective.**

The cost of health benefits, whether purchased from an insurer or self-funded, depends on more than the benefits provided. Age, gender, location, and health condition of the covered population also play a large role in the dollar amount of premium rates or self-insured premium-equivalent rates. Due to these other factors, the use of unadjusted dollar thresholds could result in taxation of many plans that, relative to typical or average plans (commonly referred to as “rich”), are not overly generous in benefit level by more objective standards (including the standards of actuarial value found elsewhere in this bill). Small-employer coverage is a special case, since it often has its own risk pool and decreased efficiency of administration that is reflected in higher premiums. Geographic variation demonstrates another special case in which the dollar thresholds could be unevenly applied; employers in more expensive locations will be disproportionately taxed. The phenomenon will be partially and temporarily offset by separate thresholds in years 2013—2015 for high-cost states.

In addition, the proposed index on dollar thresholds would likely cause the thresholds to grow more slowly than projected premium increases. This could mean more and more plans will become subject to the excise tax every year. There is even a possibility that, in the future, the average cost of the minimum required plan of benefits, as described elsewhere in the bill, would exceed the threshold. Given that recent trend levels have been higher, it is unlikely that premium increases can be managed to within 1 percent of CPI in the near future.

**Taxing the carrier or plan administrator may result in unintended consequences.**

Because the tax is levied on insurers or administrators, it might not affect the behavior of its intended targets—the employers who provide comprehensive benefits and the employees that receive them. The parties who pay the tax may not be the parties who need the incentive to reduce benefits.

In the case of self-funded plans, and most likely in the case of insured plans covering larger employers, the employer will indirectly pay the excise tax via the administrator or insurer. Uncertainty about the tax could cause administrators or insurers to prospectively increase fees and premiums.

In the case of small employers, current state rating rules and proposed federal rating rules would almost certainly prohibit directly passing the tax on to the small employer. As such, insurers of small employers would need to incorporate the anticipated financial affect of the tax into the expense load for all insureds. The insurers may be able to allocate the tax approximately by risk groups for more expensive plans, thus avoiding tax for some classes of insureds—most likely younger insureds. The uncertainty about the tax may be reflected in increased profit margin requirements. Ultimately, an increase in taxes, without the ability to directly pass it on to employers, may cause some insurers to stop offering health

insurance. This is especially true in high-cost states, or for high-cost groups, thus decreasing competition and employee options, especially for high-risk groups that may need the coverage the most.

### **Other unintended consequences**

The following paragraphs provide a qualitative analysis of other consequences of the excise tax that have not been discussed in the quantitative portion of this report.

#### *Retiree coverage*

The excise tax will further complicate an employer's decision to offer retiree coverage. Many employers find retiree health coverage an important part of their retirement plan strategy. In many cases, simply providing access to group coverage for pre-Medicare retirees can be as valuable as an employer subsidy of the coverage because many pre-Medicare retirees may be faced with individual market premiums that are perceived as unaffordable. If employers are required to pay an excise tax for expensive retirees, they may drop pre-Medicare coverage altogether.

The availability of affordable coverage in the individual market may further encourage employers to drop pre-Medicare retiree coverage. It is important for policymakers to consider the cumulative impact of these various health reform proposals on this segment of the population.

Current accounting rules for retiree health care programs provide further challenges. To help investors understand current expenses versus retiree obligations, accounting rules require the obligations to be estimated using retiree-specific costs, rated separately from active employees. The rules require an estimate of the total future costs of retiree coverage; therefore, any permanent increase in the cost of care, such as the impact of the excise tax, is reflected immediately as an expense even if the effect does not materialize for a number of years.

#### *Small groups*

Small-group coverage often has higher premium rates than large-group coverage for the same plan of benefits. This reflects the potential for adverse selection in the employer's choice of coverage, especially among very small employers with five or fewer employees. Small groups also have higher premium rates because of higher administrative costs. And a small group is more likely to experience extreme average ages due to the small number of employees. In the former case, the premium rate could be high due to the impact of age rating. Without an adjustment, the bill could disproportionately affect small employers, causing them to reduce or eliminate coverage.

#### *Additional administration costs*

Payment of the excise tax would be complicated in the common case in which an employer has multiple benefit plans, carriers, and administrators. An employee may be offered medical and prescription drug coverage under an insured HMO plan plus dental and vision coverage through self-insured plans administered by a variety of third-party administrators. (Further complications arise since some employees will choose single coverage for some benefits but family coverage for others.)

Employers will be required to calculate the total combined value of the coverage for each employee and, if there is an excess above the applicable threshold, allocate and report that excess to the various insurers and plan administrators. The additional administrative expense will encourage employers to reduce benefits or increase employee contributions for participation or even eliminate some secondary coverages, such as dental or vision benefits.

### *Unpredictable tax liabilities*

Insurers' and plan administrators' excise-tax liabilities will be affected not only by the cost of the plans for which they are responsible, but also by costs for plans over which they have no control and which they may not even have knowledge. In addition, the potential amount of excess cost and, therefore, insurers' and administrators' tax expenses, will depend on each individual employee's coverage choices.

In order for insurers/administrators to assure that premiums/fees adequately provide for all expenses associated with their services, it will be necessary for them to estimate the amount of tax they may be charged. Particularly in the first few years of the tax, the multiple sources of uncertainty will lead to conservative estimates for the expected tax amounts to be built into premiums/fees. The uncertainty could increase costs to employers and employees more than the actual amount of the tax, even for employers and employees who will not be subject to the tax.

Insurers and administrators will, legitimately, strive for agreements from employers to reimburse them for any excise-tax expense in exchange for lower premiums/fees. Such agreements will shift the uncertainty to employers, who in turn may be able to manage it by reducing the plan options to employees and increasing employee contribution formulas.

### *Spending accounts*

The bill stipulates that amounts paid by the employer toward health care spending accounts or flexible spending accounts must be included in the premium or premium equivalent cost for the calculation of excess over the threshold. Therefore, an employer has an incentive to reduce or eliminate contributions.

# RECOMMENDATIONS

## Recommendations

A tax on excess benefits, appropriately defined, could play a role in offsetting other costs of health reform such as expanding coverage for the uninsured. However, specific design elements of the tax may present additional issues. The elements include the following:

**The threshold could be based on the value of the plan of benefits, not on the dollar-premium amount.** This assumption may require assignment of a value or score to an overall combination of benefits. Under health reform, values or scores will be necessary to determine whether plans meet specified minimum benefit levels. This would avoid taxing a group simply because it is older or higher risk.

**If the threshold is based on dollar premium, the threshold or the premium amounts could be adjusted for risk factors such as age, gender, geographic area, health condition, or other pertinent factors.** As in the first suggestion, these adjustments could more accurately tax plans on the basis of their benefits rather than the cost characteristics (e.g., age, gender, or health status).

**The tax could be directly paid by the employer or the employee.** Taxing the employer (or employee) directly would recognize that the employer makes the overall coverage purchasing decision and the employee shares in the cost of the decisions. In addition, the calculation of the tax for multiple insurers and/or administrative vendors is complicated and will require a high level of involvement from the employer. Finally, insurers of smaller employers may begin to exit the market if their profit margins are affected by a tax that they are unable to pass along in premium rates.

**Small employers could be exempt from the tax, taxed at a lower rate, or subject to a higher threshold.** For a number of reasons discussed above, such as higher per-capita administrative costs, small employers may have higher premiums for the same plan of benefits. Thus, they may be more likely than large employers to be subject to the tax even if their plan of benefits is less comprehensive. Using plan value-based thresholds instead of dollar-amount thresholds would reduce the disproportionate impact that small employers are likely to bear.

## Additional Analysis

The work group is ready to provide additional advice and calculations of the excise tax on high-cost employer health plans. Since such a tax is a complex subject, policymakers may want additional explanation, additional results modeled under alternative economic assumptions, or to adjust the results for different designs if the tax in the bill is amended.

The work group recommends full congressional deliberation on the structure of the excise tax and is available as appropriate to run additional scenarios of the model. Additional projections can be obtained by contacting Heather Jerbi, senior health policy analyst at the American Academy of Actuaries, or Sara Teppema, staff fellow for health at the Society of Actuaries.

## EXHIBITS

### Exhibit I

Scenario I assumes that premiums will increase 6 percent per year, and that employers' behavioral response will be to hold coverage at the current level of benefits and pay the tax.

Scenario I: 6.0% Premium Increase, No Behavioral Response				
Category	Cumulative 2013-2019			Enrollees Affected by Tax in 2019 (millions) <sup>a</sup>
	Total Projected Premiums (billions)	Premiums Subject to Tax (billions)	Excise Tax (billions)	
<b>17 High-cost states</b>	\$2,240.2	\$75.1	\$30.0	8.1
<b>High-risk professions</b>	771.2	\$30.6	\$12.2	2.5
<b>Retirees 55+</b>	548.6	\$119.8	\$47.9	3.0
<b>All others</b>	3,675.2	\$43.2	\$17.3	6.7
<b>Total</b>	<b>\$7,235.3</b>	<b>\$268.7</b>	<b>\$107.5</b>	<b>20.4</b>

<sup>a</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per "enrollee."

Scenario I: Tax Revenue by Year (billions)											
<u>Category</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Cumulative 2010-2019</u>
<b>17 High-cost states</b>	\$0.0	\$0.0	\$0.0	\$0.2	\$0.9	\$1.9	\$4.2	\$5.6	\$7.5	\$9.7	\$30.0
<b>High-risk professions</b>	\$0.0	\$0.0	\$0.0	\$0.6	\$0.8	\$1.1	\$1.5	\$2.0	\$2.7	\$3.5	\$12.2
<b>Retirees 55+</b>	\$0.0	\$0.0	\$0.0	\$4.1	\$4.9	\$5.7	\$6.7	\$7.7	\$8.8	\$10.1	\$47.9
<b>All others</b>	\$0.0	\$0.0	\$0.0	\$0.6	\$1.0	\$1.4	\$2.0	\$2.8	\$4.0	\$5.5	\$17.3
<b>Total</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$5.5</b>	<b>\$7.5</b>	<b>\$10.2</b>	<b>\$14.4</b>	<b>\$18.2</b>	<b>\$22.9</b>	<b>\$28.8</b>	<b>\$107.5</b>

Scenario I: Enrollees Subject to Tax (millions)										
<u>Category</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
<b>17 High-cost states</b>	0.0	0.0	0.0	0.3	1.0	2.3	4.4	4.9	7.7	8.1
<b>High-risk professions</b>	0.0	0.0	0.0	0.7	0.8	1.0	1.4	1.5	1.7	2.5
<b>Retirees 55+</b>	0.0	0.0	0.0	2.4	2.6	2.6	2.7	2.8	2.9	3.0
<b>All others</b>	0.0	0.0	0.0	1.1	1.6	2.3	3.1	4.1	5.3	6.7
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.5</b>	<b>6.0</b>	<b>8.1</b>	<b>11.6</b>	<b>13.4</b>	<b>17.5</b>	<b>20.4</b>



## Exhibit II

Scenario II is calibrated to Scenario I, but assumes that premiums will increase at 7.5 percent per year instead of 6 percent.

Scenario II: 7.5% Premium Increase, No Behavioral Response				
Category	Cumulative 2013-2019			Enrollees Affected by Tax in 2019 (millions) <sup>a</sup>
	Total Projected Premiums (billions)	Premiums Subject to Tax (billions)	Excise Tax (billions)	
17 High-cost states	\$2,481.4	\$182.2	\$72.9	13.5
High-risk professions	854.3	70.5	28.2	4.1
Retirees 55+	608.8	174.9	70.0	3.2
All others	4,070.2	137.9	55.2	19.4
<b>Total</b>	<b>\$8,014.7</b>	<b>\$565.5</b>	<b>\$226.2</b>	<b>40.1</b>

<sup>a</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

Scenario II: Tax Revenue by Year (billions)											
Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Cumulative 2010-2019
17 High-cost states	\$0.0	\$0.0	\$0.0	\$0.4	\$1.9	\$4.5	\$9.8	\$13.7	\$18.5	\$24.2	\$72.9
High-risk professions	0.0	0.0	0.0	1.0	1.6	2.4	3.5	4.8	6.5	8.4	28.2
Retirees 55+	0.0	0.0	0.0	5.3	6.6	8.0	9.6	11.4	13.4	15.6	70.0
All others	0.0	0.0	0.0	1.2	2.1	3.6	5.7	9.0	13.7	19.9	55.2
<b>Total</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$7.9</b>	<b>\$12.2</b>	<b>\$18.6</b>	<b>\$28.6</b>	<b>\$38.9</b>	<b>\$52.0</b>	<b>\$68.1</b>	<b>\$226.2</b>

Scenario II: Enrollees Subject to Tax (millions)										
Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
17 High-cost states	0.0	0.0	0.0	0.6	2.2	4.5	8.4	12.4	12.9	13.5
High-risk professions	0.0	0.0	0.0	1.2	1.4	1.6	2.6	2.7	3.9	4.1
Retirees 55+	0.0	0.0	0.0	2.6	2.8	2.9	3.0	3.1	3.2	3.2
All others	0.0	0.0	0.0	2.1	3.5	5.2	7.6	11.3	14.9	19.4
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>6.5</b>	<b>9.8</b>	<b>14.2</b>	<b>21.5</b>	<b>29.5</b>	<b>35.0</b>	<b>40.1</b>

## Exhibit III

Scenario III is calibrated to Scenario I, but assumes that premiums will increase at 4.5 percent per year instead of 6 percent.

Scenario III: 4.5% Premium Increase, No Behavioral Response				
Category	Cumulative 2013-2019			Enrollees Affected by Tax in 2019 (millions) <sup>a</sup>
	Total Projected Premiums (billions)	Premiums Subject to Tax (billions)	Excise Tax (billions)	
17 High-cost states	\$2,021.5	\$23.5	\$9.4	2.6
High-risk professions	695.9	10.5	4.2	0.8
Retirees 55+	494.4	75.4	30.2	2.6
All others	3,316.6	12.0	4.8	1.6
<b>Total</b>	<b>\$6,528.3</b>	<b>\$121.3</b>	<b>\$48.5</b>	<b>7.6</b>

<sup>a</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

Scenario III: Tax Revenue by Year (billions)											
Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Cumulative 2010-2019
17 High-cost states	\$0.0	\$0.0	\$0.0	\$0.1	\$0.4	\$0.8	\$1.5	\$1.8	\$2.2	\$2.6	\$9.4
High-risk professions	0.0	0.0	0.0	0.3	0.4	0.5	0.6	0.7	0.8	1.0	4.2
Retirees 55+	0.0	0.0	0.0	3.0	3.4	3.8	4.3	4.7	5.2	5.7	30.2
All others	0.0	0.0	0.0	0.4	0.4	0.5	0.6	0.8	0.9	1.1	4.8
<b>Total</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$3.8</b>	<b>\$4.6</b>	<b>\$5.6</b>	<b>\$7.0</b>	<b>\$8.0</b>	<b>\$9.1</b>	<b>\$10.4</b>	<b>\$48.5</b>

Scenario III: Enrollees Subject to Tax (millions)										
Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
17 High-cost states	0.0	0.0	0.0	0.2	0.5	1.0	2.1	2.1	2.4	2.6
High-risk professions	0.0	0.0	0.0	0.4	0.4	0.5	0.6	0.7	0.8	0.8
Retirees 55+	0.0	0.0	0.0	2.1	2.0	2.1	2.1	2.2	2.5	2.6
All others	0.0	0.0	0.0	0.5	0.6	0.8	1.0	1.2	1.4	1.6
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.1</b>	<b>3.5</b>	<b>4.3</b>	<b>5.8</b>	<b>6.2</b>	<b>7.1</b>	<b>7.6</b>

## Exhibit IV

Scenario IV is calibrated to Scenario I, but assumes that excess premium rate amounts above the threshold will decrease to reflect employer behavioral response. The reduction is assumed to be 20 percent per year for all groups except retirees age 55 and over, whose reduction is assumed to be 30 percent.

<b>Scenario IV: Employer Behavioral Response—Reduction of 20% for Actives, 30% for Retirees <sup>a</sup></b>				
<b>Category</b>	<b>Cumulative 2013-2019</b>			<b>Enrollees Affected by Tax in 2019 (millions) <sup>b</sup></b>
	<b>Total Projected Premiums (billions)</b>	<b>Premiums Subject to Tax (billions)</b>	<b>Excise Tax (billions)</b>	
<b>17 High-cost states</b>	\$2,240.2	\$60.1	\$24.0	8.1
<b>High-risk professions</b>	771.2	24.4	9.8	2.5
<b>Retirees 55+</b>	548.6	83.9	33.5	3.0
<b>All others</b>	3675.2	34.6	13.8	6.7
<b>Total</b>	<b>\$7,235.3</b>	<b>\$203.0</b>	<b>\$81.2</b>	<b>20.4</b>

<sup>a</sup> Projected tax revenues include only excise tax revenues and not any increases in income or payroll taxes resulting from a shift in compensation from health benefits to wages.

<sup>b</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

<b>Scenario IV: Tax Revenue by Year (billions)</b>											
<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Cumulative 2010-2019</b>
<b>17 High-cost states</b>	\$0.0	\$0.0	\$0.0	\$0.2	\$0.7	\$1.6	\$3.3	\$4.5	\$6.0	\$7.8	\$24.0
<b>High-risk professions</b>	0.0	0.0	0.0	0.4	0.6	0.9	1.2	1.6	2.1	2.8	9.8
<b>Retirees 55+</b>	0.0	0.0	0.0	2.8	3.4	4.0	4.7	5.4	6.2	7.1	33.5
<b>All others</b>	0.0	0.0	0.0	0.5	0.8	1.1	1.6	2.3	3.2	4.4	13.8
<b>Total</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$4.0</b>	<b>\$5.5</b>	<b>\$7.6</b>	<b>\$10.8</b>	<b>\$13.8</b>	<b>\$17.5</b>	<b>\$22.0</b>	<b>\$81.2</b>

<b>Scenario IV: Enrollees Subject to Tax (millions)</b>										
<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>17 High-cost states</b>	0.0	0.0	0.0	0.3	1.0	2.3	4.4	4.9	7.7	8.1
<b>High-risk professions</b>	0.0	0.0	0.0	0.7	0.8	1.0	1.4	1.5	1.7	2.5
<b>Retirees 55+</b>	0.0	0.0	0.0	2.4	2.6	2.6	2.7	2.8	2.9	3.0
<b>All others</b>	0.0	0.0	0.0	1.1	1.6	2.3	3.1	4.1	5.3	6.7
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.5</b>	<b>6.0</b>	<b>8.1</b>	<b>11.6</b>	<b>13.4</b>	<b>17.5</b>	<b>20.4</b>

## Exhibit V

Scenario V is calibrated to Scenario I, but assumes that excess premium rate amounts above the threshold will decrease to reflect employer behavioral response. This reduction is assumed to be 50 percent per year for all groups except retirees age 55 and over, whose reduction is assumed to be 75 percent.

<b>Scenario V: Employer Behavioral Response—Reduction of 50% for Actives, 75% for Retirees <sup>a</sup></b>				
<b>Category</b>	<b>Cumulative 2013-2019</b>			<b>Enrollees Affected by Tax in 2019 (millions) <sup>b</sup></b>
	<b>Total Projected Premiums (billions)</b>	<b>Premiums Subject to Tax (billions)</b>	<b>Excise Tax (billions)</b>	
<b>17 High-cost states</b>	\$2,240.2	\$37.5	\$15.0	8.1
<b>High-risk professions</b>	771.2	15.3	6.1	2.5
<b>Retirees 55+</b>	548.6	29.9	12.0	3.0
<b>All others</b>	3675.2	21.6	8.6	6.7
<b>Total</b>	<b>\$7,235.3</b>	<b>\$104.4</b>	<b>\$41.8</b>	<b>20.4</b>

<sup>a</sup> Projected tax revenues include only excise tax revenues and not any increases in income or payroll taxes resulting from a shift in compensation from health benefits to wages.

<sup>b</sup> Those affected by the tax include those reducing benefits, opting into a less-costly plan, incurring higher premium contributions or dropping coverage altogether. There are approximately two individuals per “enrollee.”

<b>Scenario V: Tax Revenue by Year (billions)</b>											
<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Cumulative 2010-2019</b>
<b>17 High-cost states</b>	\$0.0	\$0.0	\$0.0	\$0.1	\$0.4	\$1.0	\$2.1	\$2.8	\$3.7	\$4.8	\$15.0
<b>High-risk professions</b>	0.0	0.0	0.0	0.3	0.4	0.6	0.8	1.0	1.3	1.7	6.1
<b>Retirees 55+</b>	0.0	0.0	0.0	1.0	1.2	1.4	1.7	1.9	2.2	2.5	12.0
<b>All others</b>	0.0	0.0	0.0	0.3	0.5	0.7	1.0	1.4	2.0	2.8	8.6
<b>Total</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$1.7</b>	<b>\$2.5</b>	<b>\$3.7</b>	<b>\$5.5</b>	<b>\$7.2</b>	<b>\$9.3</b>	<b>\$11.9</b>	<b>\$41.8</b>

<b>Scenario V: Enrollees Subject to Tax (millions)</b>										
<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>17 High-cost states</b>	0.0	0.0	0.0	0.3	1.0	2.3	4.4	4.9	7.7	8.1
<b>High-risk professions</b>	0.0	0.0	0.0	0.7	0.8	1.0	1.4	1.5	1.7	2.5
<b>Retirees 55+</b>	0.0	0.0	0.0	2.4	2.6	2.6	2.7	2.8	2.9	3.0
<b>All others</b>	0.0	0.0	0.0	1.1	1.6	2.3	3.1	4.1	5.3	6.7
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.5</b>	<b>6.0</b>	<b>8.1</b>	<b>11.6</b>	<b>13.4</b>	<b>17.5</b>	<b>20.4</b>