The COMMONWEALTH FUND

Donald Trump's Health Care Reform Proposals: Anticipated Effects on Insurance Coverage, Out-of-Pocket Costs, and the Federal Deficit

TECHNICAL APPENDIX

INTRODUCTION

This appendix supports RAND's analysis of aspects of Donald Trump's health reform plan, including repeal of the Affordable Care Act, tax deductions for health insurance (including plans purchased on the individual market), providing states with federal block grants to support their Medicaid programs, and allowing insurance companies to sell plans across state lines. This document provides details on our modeling assumptions, as well as additional background on the policies modeled. We start with a general overview of COMPARE. Details on each of Trump's proposals modeled can be found toward the end of the document.

OVERVIEW OF COMPARE

We used the COMPARE microsimulation model to estimate how the Affordable Care Act and Trump's health policy proposals would affect health insurance enrollment, individual out-of-pocket spending, the federal deficit, and several other outcomes. A complete description of the methods underlying COMPARE can be found in Cordova et al. (2013). Briefly, we create a synthetic population of individuals, families, health expenditures, and firms using data from the April 2010 cross-section of the 2008 Survey of Income and Program Participation (SIPP), the 2010 and 2011 Medical Expenditure Panel Survey (MEPS), and the 2010 Kaiser Family Foundation Annual Survey of Employer Benefits. These datasets are linked together using statistical matching on key demographic characteristics, such as self-reported health status and income. We assign each individual in the SIPP a spending amount using the spending of a similar individual from MEPS; we then augment spending imputations with data on aggregate spending levels from the National Health Expenditures Accounts (NHEA), as well as data on high-cost claims from the Society of Actuaries (SOA). The NHEA adjustment accounts for the fact that MEPS underestimates total medical spending levels, while SOA adjustment corrects the underrepresentation of individuals with high spending in the MEPS data.

We calibrate COMPARE to approximate the pre-ACA health insurance market that existed in 2010 as a basis for estimating the impact of health reforms. Calibration is a process by which we adjust the algorithms in the model so that estimates of pre-ACA health insurance enrollment and

premiums match actual health insurance enrollment data collected before the provisions of the law took effect. We calibrate the model to reflect enrollment data by insurance type, age group, income group, and self-reported health status from the SIPP, with additional adjustment to account for pre-ACA individual market enrollment levels reported to the Centers for Medicare and Medicaid Services (CMS) as part of regulatory requirements.

A key feature of the model is that premiums are calculated dynamically. Individuals sort into health insurance plans by choosing their preferred option. Next, premiums are calculated based on the profile of the enrolled pool. If premiums are too high, some enrollees will opt to drop an insurance option, while if premiums are low, additional individuals may enroll. This iterative process continues until the model achieves equilibrium, defined such that premiums and enrollment decisions are stable between model iterations. The model can detect a "death spiral" if enrollment approaches zero while premiums rise to a very large number. A death spiral is an extreme manifestation of adverse selection, in which younger and healthier enrollees may respond to high premiums by dropping out of the risk pool, leaving older and sicker enrollees with higher medical spending.

MODELING THE AFFORDABLE CARE ACT

To model individual and family health insurance enrollment decisions under the ACA, COMPARE uses a utility maximization approach, in which decision-makers weigh the costs and benefits of available options. The utility-maximization framework accounts for the tax penalty for not purchasing insurance, the value of health care consumption, premium costs, expected out-of-pocket health care spending, and financial risk associated with out-of-pocket spending. We scale each of these components of utility to dollars and assume that they are additively separable, following Goldman, Buchanan, and Keeler (2000). We further assume that individuals' utilities are separable in consumption and health. The health-related component of the utility function is modeled as follows:

$$(1)\ U_{ijk} = u(H_{ij}) - E(OOP_{ij}) - p_{ij}^{(H)} - \tfrac{1}{2}\, rVAR(OOP_{ij}) - Penalty_j + Calibration_{jk}$$

where $u(H_{ij})$ is the utility associated with consuming health care services for individual i under insurance option j, and k represents an individual's demographic group based on age, health status, and income. OOP_{ij} is the out-of-pocket spending expected, $p^{(H)}$ is the premium and r is the coefficient of risk aversion. Possible health insurance enrollment choices (j) under the ACA may include employer coverage, Medicaid or CHIP, an ACA-compliant individual market plan (including plans available on and off the marketplaces), or another source of coverage.[1] Individuals can also choose to forgo insurance. Not all individuals will have access to all forms of coverage. For example, access to Medicaid is contingent on eligibility, and individuals will only have access to employer coverage if they (or their spouse or parent) work for a business that offers insurance. The penalty term represents the penalty associated with insurance status j, and is 0 for all but the uninsured insurance status. The term "$calibration_{jk}$" is a factor that adjusts utilities to match enrollment patterns observed in pre-ACA data; the term accounts for nonpecuniary factors that may influence preferences for different types of insurance, such as convenience associated with enrolling in employer coverage, or access constraints associated with Medicaid. Specific modeling strategies for each source of coverage j are described below.

Small-Group Employer Coverage

Small employers in the model choose whether to offer coverage based on workers' preferences and a small set of other factors including industry and whether workers are unionized. Under the ACA,

all small firms are part of a single risk pool with guaranteed issue, 3-to-1 rate banding on age, and restrictions that preclude insurers from charging different premiums to different groups other than based on geography, family size, tobacco use, and plan generosity. In the current version of the model, small-group market regulations apply to all firms with 50 or fewer employees, regardless of year. Earlier versions of the model expanded the small-group market to include firms with 100 or fewer workers after 2015, as originally intended by the ACA. We revised the definition because the Protecting Affordable Coverage for Employees (PACE) Act, signed into law in late 2015, amended the ACA's definition of small employer to include firms with one to 50 employees in perpetuity, unless states opt to extend the small-group market to firms with up to 100 workers. Small firms in the model are permitted to purchase a 60 percent, 70 percent, 80 percent, or 90 percent actuarial value plan on the ACA's regulated small-group market, which includes the Small Business Health Insurance Options (SHOP) marketplaces. Small firms in the model may retain grandfathered status, which exempts them from the ACA's rating regulations, although we assume that a certain percentage of small firms will lose grandfathered status each year.

The ACA also offers a small business tax credit to small firms with low-wage workers who obtain coverage through the SHOP marketplaces. Because firms can take advantage of these credits for only two years, we assume all small firms will have exhausted their tax credit eligibility by 2018 (the year modeled in this analysis).

Large-Group Employer Coverage

Like small employers, large employers choose whether to offer coverage based on worker preferences and several other characteristics including union status and industry. We allow large firms that offer coverage to choose between four different plans, which are distinguished by plan generosity and rated based on enrollees' expected health expenditures. We estimate premiums for the market based on a regression. The firm's decision to offer is modeled using structural econometric techniques; more details are provided in the appendix of Eibner et al. (2011).

Medicaid

We model state Medicaid expansion decisions as of June 22, 2015 (Kaiser Family Foundation 2015).[2] We assume that, under the ACA, states with Medicaid eligibility thresholds that exceeded 138 percent of the federal poverty level before 2014 will roll back their eligibility thresholds to 138 percent due to federally funded tax credits and cost-sharing subsidies that become available to this group. In states that did not expand Medicaid, individuals who would have qualified for Medicaid expansion and have income above the federal poverty line can obtain tax credits on the marketplaces. However, those with incomes below the federal poverty line are ineligible for tax credits. Through our calibration process, the model accounts for the fact that not all Medicaid-eligible individuals chose to enroll, perhaps due to stigma, lack of information, or transaction costs associated with enrolling.

Individual Market

Under the ACA, the individual market consists of two components: 1) the insurance marketplaces where individual can receive tax credits, and 2) off-marketplace plans that comply with the ACA's rating requirements. Because the ACA requires all plans in the individual market to be rated together, we model on- and off-marketplace plans that are ACA-compliant as a single risk pool. Hence, we do not distinguish between enrollment in on-marketplace plans and in off-marketplace plans that comply with the ACA. In the ACA-compliant individual market, modeled individuals and families can

purchase plans with a 60 percent, 70 percent, 80 percent, or 90 percent actuarial value corresponding to bronze, silver, gold, and platinum plans on the marketplaces. We do not model catastrophic plans, which are available only to those who are under 30 or who qualify for a hardship exemption from the individual mandate. According to a 2015 fact sheet published by the Centers for Medicare and Medicaid Services, less than 1 percent of all marketplace enrollees have selected catastrophic coverage (CMS 2015).

ACA-compliant individual market premiums are calculated endogenously in the model based on the health expenditure profile of those who choose to enroll. The total, unsubsidized premium is based on enrollees' age, smoking status, and the market rating reforms implemented under the ACA. We model 3-to-1 rate banding on age for adults ages 21 and over, with a separate age-band for children and young adults under the age of 21. We also account for the ACA's risk-adjustment requirements, which transfer funds from plans with lower-than-average actuarial risk to plans with higher-than-average actuarial risk. We found that COMPARE, which uses average enrollee spending to compute premiums, slightly overestimated premiums relative to prices actually reported in the marketplaces for 2015. These differences may be due to factors that influence premiums but cannot be modeled, such as cross-subsidization among an insurer's plans, competitive market forces between insurers, and imprecise insurer forecasting. To account for this issue, we applied a ratio adjustment to modeled premiums based on the ratio of actual-to-modeled premiums in 2015.

Under the ACA, the actual premium that an enrollee pays is adjusted to account for tax credits available to qualifying individuals with incomes between 100 percent and 400 percent of the federal poverty level (FPL) who do not have affordable offers of insurance from another source (e.g., employer coverage, Medicaid). We apply the ACA's subsidy formula using the benchmark silver premium and the individual's income. Eligible individuals who have income between 100 percent and 250 percent of FPL can also receive cost-sharing reductions (CSRs) that help to lower out-of-pocket spending. As required in the ACA, individuals receiving CSRs in COMPARE must purchase a silver plan (70% actuarial value), and out-of-pocket spending is reduced to an equivalent of 94 percent, 87 percent, or 73 percent actuarial value plan if the individual's income is between 100 percent and 150 percent, 150 percent and 200 percent, or 200 percent and 250 percent of FPL, respectively. Note that out-of-pocket spending enters the individual's utility function, and hence individuals receiving CSRs are more likely to purchase coverage.

ADJUSTMENTS TO REFLECT POST-ACA EXPERIENCE

Because the major insurance coverage reforms of the ACA took effect in 2014, it is now possible to compare model estimates to actual empirical data on health insurance enrollment. In doing so with the penultimate version of the model, we found that, like other models (Glied, Arora, and Solís-Román 2015), COMPARE overestimated enrollment on the health insurance marketplaces and underestimated enrollment in Medicaid. The Medicaid underestimate appears to stem from the fact that earlier versions of the model had not accounted for the so-called "woodwork effect," which describes the possibility that previously eligible individuals might newly enroll in Medicaid due to increased publicity, awareness of the law, enrollment outreach, and other factors. In the current version of the model, we address this issue by adding an "awareness" factor to the Medicaid utility calibration in model runs for years 2014 and later. In 2018, the awareness factor that reproduces post-ACA Medicaid enrollment totals reported in the Current Population Survey is $200.[3]

To address the overestimate of nongroup enrollment, including enrollment in subsidized plans on the ACA's marketplaces, we reduced the effective value of the individual mandate penalty by a factor of 0.8. We chose this value based on the observation that tax compliance in the U.S. hovers around 80 percent, according to the Internal Revenue Service (US IRS 2016). Our adjustment, therefore, accounts for the likelihood that some individuals will fail to pay their individual mandate penalties, which are collected by the IRS as part of the income tax collection process.

Appendix Table A.1 compares the current COMPARE insurance estimates for 2018 to those of the Congressional Budget Office (CBO), which also recently updated its model to account for observed enrollment (CBO 2016). The two models are very close, except that COMPARE has about 8 million fewer Medicaid enrollees than CBO. We believe this difference stems from the fact that CBO allows people in their model to have more than one source of coverage, while COMPARE assigns each individual a primary insurance category. Our estimates of the share of the population without insurance are similar.

Appendix Table A.1. COMPARE and Congressional Budget Office Insurance Estimates for 2018 (in Millions)

	COMPARE	CBO
Employer coverage	156.3	153
Medicaid and CHIP*	60.3	68
Individual market, including the marketplaces	22.6	26
Subsidy-eligible on the marketplaces	13.1	15
Other	12.3	14
Uninsured	24.9	26
Total population under age 65	276.4	274
Share without insurance	9.0%	9.5%

* For the CBO column this row includes the basic health plan, which COMPARE does not model. CBO allows for double-counting across insurance categories, while COMPARE assigns each individual to a primary insurance category.
Data: RAND COMPARE microsimulation model and CBO (2016).

In addition to the updates to align the COMPARE model with post-2014 enrollment data, we also updated the most recent version of the model to incorporate the latest population growth trends published by the U.S. Census Bureau.

MODELING THE PROPOSED REFORMS

Repeal of the ACA

In evaluating each of the three reforms, we first assume that all provisions of the ACA are fully repealed. Among the most notable provisions, we assume that the individual and employer mandates; financial assistance, including advance premium tax credits and cost-sharing reductions; funding for Medicaid expansion; and market-rating reforms, such as guaranteed renewability are eliminated. Under the ACA, many individuals who were eligible for Medicaid under pre-ACA rules enrolled in the program, a phenomenon often referred to by policymakers as the "woodwork" effect. We assume that previously eligible individuals who enrolled as a result of the ACA remain enrolled even if the ACA is repealed, and hence Medicaid enrollment will be higher if the ACA is repealed than if the law had never been enacted.

Tax Deduction

To estimate the effect of the tax deduction, we first calculate families' marginal income tax rates using the National Bureau of Economic Research's (NBER's) TaxSim model. This approach takes into account various deductions and tax credits that modeled individuals may be receiving, such as the earned income tax credit and child care tax credits; it also adjusts for the alternative minimum tax.

We then calculate the value of the deduction as the product of an individual's marginal tax rate and the plan premium. We subtract this amount from the plan premium in equation (1), reducing the plan's cost to the enrollee. Note that the value of the tax deduction increases if a plan with a higher premium is selected and if the individual has a higher marginal tax rate.

We assume that the tax deduction only affects health insurance expenditures that were not covered by deductions that existed under pre-ACA law. These preexisting deductions include:

- employer spending on health insurance is excluded from income and payroll tax liability, as are employee premium contributions if firms offer Section 125 cafeteria plans
- self-employed individuals can deduct individual-market health insurance expenditures from their taxes
- individuals can deduct spending in excess of 10 percent of income from their taxes (assuming these expenses aren't covered by other deductions).

As a result, the tax deduction affects individual market enrollees who are not self-employed, with adjustments to account for the fact that people with spending in excess of 10 percent of income would receive some tax relief even in the absence of the proposed deduction.[4] We assume that the tax deduction is applied against federal income taxes but not payroll taxes; state income taxes remain unchanged.

We further assume that individuals with incomes below 200 percent of the federal poverty level will not enroll in individual market coverage unless they did so under pre-ACA policy, regardless of the deduction. This approach addresses the fact that low-income individuals face liquidity constraints that may preclude them from paying for health insurance up front, even if they expect to receive a deduction later. In practice this assumption has little effect, because lower-income individuals have low marginal tax rates and therefore do not benefit substantially from the deduction.

It is possible that some individuals will fail to react to the deduction because they are unaware of the policy or because they discount future tax liability when making decisions. While lack of take-up has been observed for prior, smaller-scale health insurance tax credit programs, we anticipate that the publicity around Trump's proposal—which would involve repeal and replacement of a well-known and controversial law—would generate greater awareness than many previous tax policies. Also, proponents of repeal-and-replace proposals would have a stake in ensuring that insurance coverage enrollment did not decline substantially under Trump's plan, which could lead to outreach or other measures to encourage people to take-up the credit. As a result, we have not adjusted the model to account for lack of awareness or discounting of future tax liabilities.

Medicaid Block Grants

The ACA expanded the current Medicaid system where the federal government shares costs with state governments in funding their Medicaid programs. For those eligible for Medicaid prior to the ACA, the federal government's share varies between 50 percent and 75 percent of total costs. The federal

government funds a larger share of the costs for the ACA expansion population. Under a block-grant system, the federal government would instead give states a fixed amount. Generally, block-grant programs allow states more autonomy to manage their programs relative to current rules, for example, by developing payment innovations, cracking down on fraud and abuse, incentivizing the use of high-value services, and other means. It is possible that allowing states more autonomy to innovate and to discover efficiencies could yield savings and/or reduced per capita Medicaid costs. However, there is very little evidence base for such innovations, and hence we assume that per capita Medicaid costs remain constant.

Trump's plan does not offer detail on how the fixed block-grant amount would be set. We therefore assumed that the grants would be based on pre-ACA Medicaid spending levels, indexed for inflation as projected in CMS's National Health Expenditure Accounts, and adjusted to account for demographic change. We also assumed that, with repeal of the ACA, states would revert to pre-ACA Medicaid eligibility rules. Those made eligible by the ACA's Medicaid expansion, generally nondisabled childless adults and otherwise-ineligible parents with incomes up to 138 percent of the federal poverty level, would no longer be able to enroll. However, more than half of those who newly enrolled in Medicaid as a result of the ACA were eligible under preexisting rules (Frean et al., 2016). These previously eligible individuals would not necessarily disenroll even if the law were repealed. We assume that states would reduce enrollment of childless adults (and parents if necessary) who were previously eligible for Medicaid such that spending would not exceed the amount of the block grant. This step would be necessary for states to break even, because, at least as we have modeled the policy, the block grants would not cover the cost of previously eligible individuals who newly enrolled as a result of the ACA. It is possible that the block grants could be administered differently—for example, they could be set in a manner that accounts for ACA-induced enrollment among previously eligible individuals. Such an approach may permit states to avoid reducing Medicaid eligibility limits, but increase costs to the federal government.

Sales Across State Lines

Under existing law, insurers seeking to offer insurance coverage in multiple states must comply with each state's insurance regulations. While the ACA established minimum standards, prior to ACA, state insurance regulations varied widely, particularly with respect to underwriting, guaranteed issue, and coverage denials. By repealing the ACA, the plan would likely lead to regulatory variation across states similar to what existed previously. Although details have not been fully specified, we assumed that Trump's proposal would allow insurers based in one state to sell insurance to consumers in another state without having to comply with the other state's regulations.

Modeling the purchase of insurance across state lines is particularly challenging given the lack of available data on insurer entry decisions and strategic behavior. First, it is not clear that regulation is the key barrier to entry, as insurers selectively enter geographic markets within even a single state where regulation is uniform. In practice, insurance plans are not simply a financial contract, but also provide access to a network of providers. Although a plan sold in Texas may have an attractive price for a New York resident, it may have little utility if the plan only covers Texas providers. It is also not clear what legal implications the proposed reform would pose, as the ability to regulate insurance markets has traditionally been reserved by states. Instead of considering these broad economic, practical, and legal obstacles of "selling across state lines," we assume that these barriers can be overcome and consider the implications of insurers locating in states with the least restrictive regulations.

Based on the assessment of the National Association of Insurance Commissioners and others (NAIC n.d.; Blumberg 2016), we assume that allowing sales across states lines would lead to adverse selection in states with regulations that enforce risk pooling between sick and healthy populations. As a result, there would be a trend toward regulatory liberalization including an increase in the premium variation between younger and older enrollees and high denial rates for preexisting conditions. Further, we assume that the elimination of risk adjustment, minimum actuarial value requirements, and essential health benefits mandates would lead insurers to offer only catastrophic-type plans.

The specific assumptions that we use to model the plans available under this policy are as follows:

- Insurers can charge older adults up to five times as much as younger adults; this is slightly more favorable to young adults and less favorable to older adults than the age-gradient in insurance premiums that existed prior to the ACA (Blumberg and Buettgens 2013).
- Insurers deny coverage to 30 percent of enrollees due to preexisting conditions or other factors, such as unhealthy lifestyles. This figure is based on the upper bound of pre-ACA individual market denial rates, which reached up to 33 percent in states such as Ohio, North Carolina, and Kentucky (Levitt et al. 2013). We allow the denial rate to scale with age. So, while on average 30 percent of the population is denied coverage, older adults are more likely to be denied than younger adults.
- Plans sold on the individual market will be structured like the catastrophic plans available to young adults under the ACA, with deductibles that reach the IRS-specified health savings account contribution limit. The elimination of risk adjustment and consumer protections such as minimum benefit levels could make inexpensive, low-benefit plans available and potentially attractive to younger and healthier consumers, causing adverse selection. In their classic study of Harvard University employees, Cutler and Reber (1998) found that if adverse selection is exacerbated, more generous plans death spiral, resulting in only less-generous plans being offered. We assume that these less-generous plans may have actuarial values that are lower than that of a bronze plan on the health insurance marketplaces. Gabel et al. (2012) estimated that the bottom 50 percent of individual-market health plans that existed prior to the ACA had actuarial values that were less than that of a bronze plan.

As in the tax deduction scenario, we assume that low-income individuals (i.e., incomes under 200 percent of FPL) who did not enroll in individual-market insurance before the ACA took effect would not enroll even if sales across state lines were permitted. This assumption reflects the likelihood that lower-income individuals face budget constraints that would prevent them from spending thousands of dollars on a health insurance policy, even if the benefits in terms of reduced risk of catastrophic future spending were substantial.

COMBINED SCENARIO

In addition to modeling each of the three proposals separately, we also modeled the proposals together.[5] In general, we find approximately the same results as for the individual scenarios considered in the main brief. If the ACA were repealed and all three proposals were implemented, we find that total coverage would decline by 20.3 million individuals relative to the ACA (Table A.2).

If implemented individually, the tax deduction policy and allowing insurers to sell across state lines resulted in coverage declines of 15.6 million and 17.5 million, respectively, while the Medicaid block grant reduced coverage by 25.1 million. Hence, our estimates suggest that the combined impact of the three policies is about the same as full repeal alone. The Medicaid block-grant program has a negative effect on coverage, while the tax deduction and sales across state lines proposals have positive impacts on coverage.

Appendix Table A.2. Distribution of Insurance Under Trump's Proposed Reforms by Source of Coverage (in Millions), 2018

Insurance group	ACA	Repeal	Tax deduction	Medicaid block grants	Sales across state lines	*All three* replace proposals
Total insured	251.6	231.9	236.0	226.5	234.1	231.3
Employer	156.3	158.6	156.6	158.6	157.5	155.3
Exchange/Individual	22.6	9.6	15.3	9.6	12.9	17.6
Medicaid	60.3	51.5	51.8	46.1	51.5	46.2
Other	12.3	12.2	12.2	12.2	12.2	12.2
Uninsured	24.9	44.6	40.5	50.0	42.4	45.1

Note: Includes marketplace plans in the ACA scenario.
Data: RAND COMPARE microsimulation model.

To more fully understand these results, we investigated how the three proposals interact. The Medicaid block-grant program has almost no interaction with the other two policies, which target the individual market, and results in coverage being reduced by 5.7 million. If the tax-deduction and sales-across-state-lines proposals were implemented together, the number of uninsured would be approximately 39.5 million, only slightly less than 40.5 million uninsured under the tax-deduction scenario. The modest impact of the combined policies may reflect the fact that none of the policies analyzed provides substantial support for low-income individuals, who are most likely to lose coverage if the ACA is repealed. Table A.3 reports the number of people who would be uninsured under each of the policies by income level. Proportional declines in the number of people without insurance are higher for those with incomes above 250 percent of the FPL when Trump's policies are adopted, relative to full repeal. However, relatively few people in the higher-income categories are uninsured in any of the scenarios. In addition, although the tax-deduction policy provides high-income individuals with the largest subsidies, some of those individuals may be unable to obtain insurance in the loosely regulated markets that we expect would emerge if sales across state lines were permitted, due to high denial rates for preexisting conditions. Hence, the tax-deduction and sales-across-state-lines policies do not appear to have an additive effect for high-income populations.

Appendix Table A.3. Number of Uninsured Individuals Under Trump's Proposed Reforms by Family Income Level (in Millions), 2018

Income group	ACA	Repeal	Tax deduction	Medicaid block grants	Sales across state lines	*All three* replace proposals
<100% FPL	12.0	21.7	21.6	26.2	21.7	25.5
100%–138% FPL	1.5	6.4	6.4	7.3	6.4	6.9
139%–250% FPL	4.0	8.9	8.0	8.9	8.3	7.1
251%–400% FPL	4.4	4.6	3.0	4.6	3.4	3.3
>400% FPL	2.9	3.0	1.7	3.0	2.5	2.4

Note: FPL = federal poverty level.
Data: RAND COMPARE microsimulation model.

In Table A.4, we consider the impact of the combined scenario on the federal deficit.[6] Relative to the ACA, we find that implementation of the three policies together would increase the federal deficit by $5.8 billion. This is significantly lower than the deficit impact estimated for either the tax deduction ($41.0 billion) or sales across state lines ($33.7 billion) if implemented alone. However, the lower price tag for the combined scenario is driven almost entirely by the Medicaid block-grant approach, which shifts the cost of the newly enrolled but previously eligible Medicaid population (approximately $33 billion) to the states. If we add back the cost of this population, the impact would increase to $38.8 billion, which exceeds the cost of sales- across-state-lines scenario but is lower than the cost of the tax deduction implemented alone. The modest savings relative to the tax-deduction scenario stem from the fact that premium subsidies (to fund the tax deduction) are lower when sales across state lines are permitted. This occurs because sales across state lines drive premiums and the value of coverage downward and some people are unable to exercise their tax deductions due to insurance denials.

Appendix Table A.4. Impact of Trump's Proposed Reforms on the Federal Deficit (in Billions) Relative to the Affordable Care Act, 2018

Changes to federal outlays and revenues, relative to ACA	ACA	Repeal	Tax deduction	Medicaid block grants	Sales across state lines	*All three* replace proposals
Additional federal outlays (negative values *reduce* the federal deficit)						
Premium tax credits and deductions	$0.0	–$46.0	–$39.3	–$46.0	–$46.0	–$40.7
Cost-sharing subsidies	$0.0	–$4.1	–$4.1	–$4.1	–$4.1	–$4.1
Medicaid/CHIP spending	$0.0	–$31.7	–$30.6	–$64.4	–$31.2	–$64.4
Medicare and other spending*	$0.0	$46.0	$46.0	$46.0	$46.0	$46.0
Total change in outlays	$0.0	–$35.9	–$28.0	–$68.5	–$35.3	–$63.2
Additional federal revenue (negative values *increase* the federal deficit)						
Individual mandate revenue	$0.0	–$7.1	–$7.1	–$7.1	–$7.1	–$7.1
Employer mandate revenue	$0.0	–$12.9	–$12.9	–$12.9	–$12.9	–$12.9
ACA taxes and fees	$0.0	–$49.0	–$49.0	–$49.0	–$49.0	–$49.0
Total change in revenue	$0.0	–$69.0	–$69.0	–$69.0	–$69.0	–$69.0
Net change to federal deficit	**$0.0**	**$33.1**	**$41.0**	**$0.5**	**$33.7**	**$5.8**

Notes: The table considers the effect of the reforms relative to current law. Impacts that increase the federal deficit are shown in red, while those that decrease or have no effect on the federal deficit are shown in black. * We do not model the ACA's effect on taxes (including taxes on the medical device, insurance, and pharmaceutical industries, limits on health savings accounts, and surtaxes on high-income individuals) and Medicare spending, and instead take these numbers from the CBO (2015). We exclude revenues that may result from the possibility that firms drop coverage as a result of health reforms and pass savings back to workers in the form of taxable wages. Prior research has shown that, to date, employers do not appear to have dropped health insurance in response to the ACA (Claxton et al. 2015). Estimates are presented in 2018 dollars.
Data: RAND COMPARE microsimulation model.

COMPARISON TO PREVIOUS STUDIES

Two other studies have evaluated the impact of Trump's health plan: one by the Center for Health and Economy (CHE 2016) and one by the Committee for a Responsible Federal Budget (CRFB 2016). The former study takes an approach similar to ours, using a microsimulation model. In addition, the Center for Health and Economy models the same three proposed reforms that we consider in this study. In contrast, CFRB performs a rough extrapolation from modeling done by the Congressional Budget Office. In addition to the three reforms we consider, CRFB also considers the impact of allowing prescription drugs to be imported.

First, we consider how our estimates compare with those obtained by CHE. CHE estimates that total coverage would be reduced by 16 million in 2018 under Trump's proposal, somewhat lower than our estimate of 20 million. One important difference between our results and CHE's result is that we estimate that individual market enrollment will be lower under the proposed reform scenarios than under the ACA, while CHE estimates that individual market enrollment will modestly increase. CHE further estimates that Trump's proposal would decrease the federal deficit by $76 billion in 2018, whereas we estimate that Trump's provisions would increase the federal deficit by $5.8 billion in 2018. Note, however, that the CHE estimates do not account for the repeal of key revenue generators under the ACA, such as reductions in Medicare payment rates and new taxes and fees. The CBO estimates that repealing these provisions would increase the federal deficit by $95 billion in 2018. If

we add the loss of this revenue stream to the CHE estimate, the model predicts that Trump's proposal would increase the federal deficit by $19 billion, which is closer to our estimate.

CRFB projects that 22 million people would lose health insurance if the ACA were repealed and that the combined reforms proposed by Trump would increase coverage by approximately 1 million relative to full repeal. These estimates are nearly identical to our estimates. CRFB further estimates that Trump's proposal would increase the federal deficit by $330 billion to $550 billion over the next 10 years, excluding the impact of the Medicaid block-grant program. Our estimates are not directly comparable because we consider the deficit impact in only one year and we account for the cost savings that could stem from a Medicaid block-grant program.

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NOTES

[1] Other sources of coverage include Medicare for the nonelderly with qualifying conditions and military-related sources of coverage such as TRICARE.

[2] Our approach does not include two states, Alaska and Louisiana, which expanded their Medicaid programs more recently. This omission has little effect on the results given the relatively small size of the Medicaid-eligible populations in these states, and additional adjustments that we make to better match Medicaid enrollment totals reported by CMS.

[3] The 2015 Current Population Survey Annual Social and Economic Supplement estimates 58.4 million Medicaid and CHIP enrollees under the age of 65 in 2015.

[4] When modeling the deduction for health spending in excess of 10 percent of income, we take into account the fact that not everyone claimed this credit, using data from the Congressional Research Service (Lowry 2014).

[5] We did not model three additional reforms proposed by Trump, including expanding the use of health savings accounts, increasing transparency in health care pricing, and removing barriers to entry in drug markets. In addition, we did not model additional fiscal policy proposals offered by Trump, such as change in marginal tax rates, that would interact with the health care reforms considered in this brief.

[6] All dollar estimates are reported in 2018 dollars. We inflate price levels to 2018 values using data from the CMS National Health Expenditure Account (NHEA) projections.