

Private Health Insurance Exchanges

Early Evidence and Implications for the Future

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Preface

Private exchanges are new mechanisms for offering employer-sponsored health insurance that combine online shopping, increased plan choice, benefit administration, and cost-containment strategies. While only a fraction of the current employer market purchases insurance through a private exchange, some estimates predict large growth in the next several years.

For this report, the authors conducted a literature review and environmental scan and held discussions with key informants to understand the current landscape of private exchanges and how they may affect small businesses. The authors also conducted simulation analyses to estimate how private exchanges could affect consumer out-of-pocket spending.

The U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE) asked the RAND Corporation to review the current state of the private exchange market and develop an understanding how private exchanges may affect the Affordable Care Act's Small Business Health Options Program (SHOP) Marketplaces. This report will provide policymakers within ASPE information on how the private exchanges may affect employers and their workers and on whether and how the private exchanges may affect the SHOPS. Other health researchers, employers, and businesses involved in these markets may also find our results useful.

ASPE sponsored this study, and RAND Health conducted the study. RAND Health is a division within the RAND Corporation. With an annual budget of more than \$70 million, it is one of the largest private health research groups in the world. Between 250 and 300 projects are currently under way, addressing a wide range of health care policy issues; the agenda emphasizes policy research that can improve the health of people around the world. The research staff of between 250 to 300 experts includes physicians, economists, psychologists, mathematicians, organizational analysts, political scientists, psychometricians, medical sociologists, policy analysts, and statisticians. The principal investigator for this report was Christine Eibner, PhD. Questions may be directed to either Christine Eibner (eibner@rand.org; (703) 413-1100, x5913) or Christine Buttorff (buttorff@rand.org; (703) 413-1100 x5154). A profile of RAND Health, abstracts for publications, and ordering information can be found at <http://www.rand.org/health>.

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Summary

Overview

Private health insurance exchanges are relatively new mechanisms available for businesses to provide health insurance coverage to employees. Typically, businesses using a private exchange will offer employees a credit that can be applied toward the purchase of a health plan. Employees can then access a variety of health plans through an online portal and can choose and enroll in plans that meet their needs. While similar in structure to the Affordable Care Act's (ACA's) Small Business Health Options Program (SHOP) Marketplaces, private exchanges are run by insurance carriers or consultancies, rather than the states or the federal government. Plans offered on private exchange are regulated as group coverage, and employees shopping on these exchanges are not eligible for the ACA's tax credits or cost-sharing subsidies. Most employers currently using private exchanges are large; therefore, most private exchange plans are regulated as large group coverage and are not part of the ACA's single risk pool. However, to the extent that smaller employers participate in private exchanges, they are subject to the ACA's small-group rating regulations and risk-pool requirements.

One of the main features of private exchanges is that they enable employees to comparison shop among multiple health insurance plans. This represents a significant difference from typical employer insurance, in which one-half of all employees have only one plan option, and the vast majority have fewer than two options (Kaiser Family Foundation/Health Research and Educational Trust, 2014). Employers offering coverage through private exchanges may also be more likely than other employers to use a "defined contribution" or "reference pricing" approach to set their contribution level. Under the defined contribution approach, the employer sets a fixed dollar contribution amount and lets the contribution increase annually at a predetermined rate of inflation (e.g., based on the Consumer Price Index). With reference pricing, the employer contributes a percentage of a low-cost plan. Under both approaches, employees pay proportionately more toward premiums if they enroll in higher-cost health plans. Private exchanges also frequently combine benefit administration functions, online shopping for health insurance, and decision-support tools for selecting plans (e.g., out-of-pocket cost calculators, sorting and filtering options) into a single package.

Recent tallies suggest that enrollment in private exchanges is currently low, but many analysts have predicted that enrollment could grow significantly over time. To date, we have little empirical evidence on the types of plans offered in private exchanges, the effects of private exchanges on workers, and the effects of private exchange on overall health care cost growth. In this report, we provide a literature review of existing evidence on private exchanges and summarize discussions with key experts on the implications of private exchanges for workers

and employers. Our discussions with experts also considered whether the growth of private exchanges could have implications for the ACA's SHOP exchanges. In addition to our literature review and discussion with experts, we conducted a modeling analysis with RAND's Comprehensive Assessment of Reform Efforts (COMPARE) microsimulation model to assess potential implications for consumer spending if private exchanges encourage enrollment in low-actuarial value (AV) health plans.

Landscape of Private Exchanges

Comprehensive data on the magnitude of the private exchange market are limited, and the landscape is constantly changing because of mergers, acquisitions, and new entrants. As of 2014, there were approximately ten major private exchange operators (excluding small, regional operators) and roughly 2.5 million enrollees in private exchanges, including both active employee and retiree populations. Surveys of employers have revealed wide variation in the share of employers reporting that they might consider moving to a private exchange model in the future, with some surveys reporting that nearly one-half of all employers are considering such a move, and other surveys reporting that fewer than 15 percent of employers are considering private exchanges. To date, much of the interest in private exchanges has focused on large employers, with some exchange operators focusing exclusively on the large-employer market. However, despite the heavier focus on large employers, it is also possible for small employers to use private exchanges.

Definition of Private Exchanges

In both our literature review and our discussions with experts, we found a lack of consensus on the precise definition of a private exchange. Broadly, private exchanges are online portals for obtaining employer insurance that include multiple plan choices. Frequently, private exchanges are coupled with ancillary services, such as benefit administration, decision support, and assistance with ACA compliance issues. But there is no consensus on the number and type of plans that must be included for a health insurance portal to be considered a private exchange, and no standardized suite of ancillary services must be included. While employer contributions in private exchanges are often set using defined contribution or reference pricing approaches, this is not a requirement or defining characteristic of private exchanges. In fact, defined contribution and reference pricing can be used outside private exchanges.

In discussions with experts, two specific areas arose in which there was disagreement on how private exchanges should be defined. First, one multicarrier exchange operator felt strongly that having multiple issuers participate in exchanges is critical to the business model because of a perception that competition across issuers and a wide diversity of plan choices is necessary to achieve the goals of the exchanges. However, this view is not shared by all, and single insurance companies, or *carriers*, can and do offer private exchanges. Second, one multicarrier exchange

argued that only fully insured health plans should be offered on private exchanges because they allow employers to reduce their exposure to high claims. Not all respondents agreed, however, that minimizing risk was necessarily a goal of private exchanges, and a high percentage of employers report that the ability to offer self-insured plans in private exchanges would be a critical factor if they were to move in this direction.

Employer Motivation for Joining Private Exchanges

Employers have cited opportunities for cost containment and hence the potential to avoid the ACA's "Cadillac tax" (a 40-percent excise tax on high-premium plans that takes effect in 2018) as motivators for joining private exchanges. However, as described below, it is unclear whether private exchanges offer unique opportunities to reduce costs. These exchanges simply provide a convenient platform for implementing existing cost-containment strategies or a new way to market insurance products. Employers may also be motivated by the possibility that private exchanges combine several attractive services, including benefit administration, online shopping, decision support, and assistance with regulatory compliance, into a single package. Another potential benefit of the exchanges is that they may make it easier for employers to offer multiple insurance plans to employees.

Much of the literature and several discussion respondents argued that a central goal of private exchanges, and hence motivation, is to reduce employers' health insurance spending. Both experts and the literature indicate that, in some cases, savings may occur because employees migrate to lower-cost plans on private exchanges. Moving to low-cost plans might be particularly likely if employers use a defined contribution or reference pricing approach, in which employees must pay the full marginal cost associated with enrolling in a more-expensive plan. However, employers could offer low-cost plans or change their contribution approaches without moving to a private exchange. Some have also argued that private exchanges may reduce costs by encouraging competition across insurance carriers, increasing employers' negotiating power in dealing with insurance companies (e.g., if a private exchange negotiates with insurance carriers on behalf of several participating employers), or providing economies of scale in benefit administration. However, these reports are largely anecdotal and have not yet been confirmed with empirical analyses.

Potential Consequences for Employees if Employers Move to Private Exchanges

From the employees' perspective, it is likely that the biggest benefit associated with private exchanges is the ability to select from multiple plan options. Under the traditional model of employer coverage, relatively few employees have access to more than one or two plans. The ability to choose among multiple plans offered in private exchanges may enable employees to

select plans that better suit their individual health needs. At the same time, there is growing recognition that increased plan choice may be confusing and will not necessarily lead to better outcomes if enrollees have trouble understanding the strengths and weaknesses of the available options. Most private exchanges include decision support tools designed to help employees comparison shop and make better choices. However, few data are available to determine how well these tools work.

Some discussion participants raised the concern that, if employees select low-AV plans on private exchanges, they could end up with unexpectedly high out-of-pocket costs because of these plans' high cost-sharing requirements. Further, if employers move to a defined contribution approach or otherwise cut their contribution level when they move to private exchanges, employees could face higher premium contributions. However, reductions in the generosity of employer coverage could occur with or without private exchanges. In fact, existing data suggest that employer premium contributions have been gradually declining for years, particularly for family coverage.

Implications of Private Exchanges for ACA's SHOP Marketplaces

In general, discussion respondents believed that private exchange enrollment was unlikely to have a substantial effect on SHOP premiums. Some small employers might view private exchanges as an alternative to SHOP Marketplaces. However, all fully insured small-group plans are regulated as part of a single risk pool regardless of whether they are offered through SHOP Marketplaces, private exchanges, or traditional employer insurance. As result, premiums in the small-group market should be largely unaffected by employers' choice of how to offer coverage.

Some respondents raised the possibility that low enrollment on the SHOP Marketplaces could make it difficult for states and the federal government to recoup the fixed operating costs associated with running these marketplaces. Potentially, private exchanges could contribute to this problem if they siphoned enrollment among employers that might have otherwise used SHOP. However, while SHOP enrollment has been low to date, it is not clear that private exchanges are the cause. Private exchanges represent only a small fraction of the employer health insurance market, and—anecdotally—uptake of private exchanges has been concentrated among large rather than small employers. Discussion respondents noted that SHOP faced many challenges in its first year, including a limited number of plan options and substantial technical difficulties. However, despite these limitations, the SHOP Marketplaces launched on HealthCare.gov on November, 15, 2014, as expected. Brokers play a large role in helping small businesses choose coverage and may have steered small businesses away from the SHOP Marketplaces, especially if commissions in other segments of the market were higher than

commissions available through SHOP.¹ It is likely that these challenges had a larger influence on SHOP enrollment than competition from private exchanges.

Microsimulation Analysis

We used RAND's COMPARE microsimulation model, a computer program that estimates how individuals and employers will respond to health policy changes, to analyze how employees' total spending might change if employers moved to private exchanges. We considered two scenarios in which employers implemented private exchanges and simultaneously moved to a defined contribution approach. In the first scenario, the defined contribution amount was based on employers' current contribution levels; in the second scenario, the defined contribution amount was pegged to the price of a low-AV plan (and represented a reduction in generosity relative to current levels). We also considered a scenario in which employees and employers used private exchanges as a mechanism for avoiding the Cadillac tax, by selecting the most generous plan available that had a premium under the Cadillac tax threshold (\$10,200 for single plans in 2018, \$27,500 for family plans in 2018).

Our results suggest that moving to low-AV plans on private exchanges does not necessarily lead to higher total spending for the average worker. When employees chose low-AV plans, spending on out-of-pocket costs increases, but spending on premiums falls. On balance, we estimate that the typical employee spends less on a low-AV plan. However, if employers cut contributions significantly when moving to private exchanges, employees' total spending will likely increase, regardless of plan AV.

Our analysis also suggests that cutting contributions significantly when moving to private exchanges may be a problematic strategy for some employers, given the ACA's minimum premium contribution requirements. These requirements can lead to penalties if workers must contribute more than 9.5 percent of income to enroll in a minimally generous (60-percent AV) employer plan.² If employers set defined contribution amounts based on a percentage of a 60-percent AV plan in 2014 and index this amount to general inflation, more than 20 percent of single workers and approximately 5 percent of family workers would be required to pay more

¹ Centers for Medicare and Medicaid Services regulations stipulate that issuers offering plans through the federally facilitated marketplaces must provide the same compensation to brokers whether for enrollment in qualified health plans through the marketplaces and enrollment in similar, nonmarketplace plans. However, commissions could be different for issuers that are not selling insurance through the marketplaces or for enrollment in plans that are dissimilar to marketplace plans.

² This percentage increases over time and was 9.56 percent as of June 2015 (26 CFR 601.105).

than 9.5 percent of income to enroll by 2024. In turn, employers could be penalized by more than \$3,000 per worker.³

We also considered the implications for workers if the Cadillac tax causes a reduction in plan generosity, for example, if employers (or workers themselves) switch to lower-AV plans to avoid the tax, potentially through the use of a private exchange. Our analysis suggests that most employers can avoid the Cadillac tax by switching to a lower-AV plan. While more than 20 percent of employers would hit the Cadillac tax in 2024 if they offered plans with a 90-percent AV, fewer than 1 percent of employers would hit the Cadillac tax in this time frame if they offered a 60-percent AV plan.

Given current benefit generosity levels, we estimate that, by 2020, 4 to 7 percent of employees would have to migrate to less-generous plans to avoid the tax. For an average worker at a firm that may be affected by the Cadillac tax, we estimate that total spending will fall if the worker switches to a lower-AV plan. While out-of-pocket spending increases with a lower-AV plan, this increase in spending is more than offset by the drop in premium associated with moving to a lower-AV plan. This drop in spending occurs even relative to a baseline scenario in which the Cadillac tax is not implemented, suggesting that some individuals in high-premium plans may be overinsured.⁴ However, an important caveat with this result is that we considered the effects only for the average and median worker. The ACA mandated limits on annual and lifetime maximum out-of-pocket spending, so people with the very highest spending are protected from excessive variation in out-of-pocket costs regardless of which plans they enroll in. However, workers with specific health spending patterns—such as those who have spending levels close to the deductible—will likely spend more on total health care costs if they enroll in plans with lower AVs.

Conclusion

Private exchanges, typically online portals for buying and selling employer-sponsored health insurance, are a new and evolving concept in the employer insurance landscape. Although uptake to date has been modest, some have argued that private exchanges could represent a significant share of the employer insurance market in future years. Private exchanges typically combine increased plan choice, online shopping, benefit administration, and decision support into a single package. However, there is no general consensus on what constitutes a private exchange. Discussion respondents had differences of opinion about whether single carriers can offer an

³ In 2015, the penalty was \$3,126 per year for each full-time worker receiving a marketplace tax credit, up to a maximum of \$2,084 per year, times the number of full-time employees minus 80. The penalty amounts increase over time.

⁴ *Overinsurance* refers to a situation in which an individual has a more-generous health insurance policy than would appear to be warranted given his or her expected spending patterns and risk of catastrophic expenditure.

exchange and whether self-insured plans can or should be included in the private-exchange model.

Private exchanges may offer several benefits to employers, including assistance with administrative functions, assistance with ACA regulatory compliance, and potential cost savings. Cost-reduction strategies could include reference pricing (setting employer contributions as a percentage of one plan benefit level and requiring employees to pay the difference), defined contributions (setting a fixed dollar amount), or including high-deductible plans. Some respondents also argued that private exchanges could increase competition among insurers or lead to economies of scale in benefit administration. To date, the empirical evidence on the extent to which private exchanges reduce employer spending is limited. However, most respondents believed that cost savings typically came from employees gravitating toward lower-cost plans in the exchanges.

For employees, potential benefits of private exchanges include increased plan choice, decision aids to assist with plan comparisons, and an improved shopping experience. While we did not evaluate how well these decision tools work, some respondents noted that the decision process likely remains difficult for many enrollees. A drawback from the employees' perspective is that, to the extent that employers are moving to defined contribution approaches or otherwise incentivizing less-generous plans, private exchanges may be associated with increased out-of-pocket spending. However, from our simulation analysis, it is not clear that switching to a lower-AV plan will necessarily increase total spending (out-of-pocket spending plus premium contributions). In fact, we estimate that total spending on health care could fall for many workers in lower-AV plans. Although out-of-pocket spending in low-AV plans is typically higher than in more-generous plans, the increase in out-of-pocket spending is more than offset by the reduction in premium contributions. An important caveat to this conclusion is that we did not consider the potential effects for workers with very high spending. Moreover, workers' spending may increase if employers reduce their contribution amounts when they move to private exchanges, regardless of the AV of available plans.

A final theme that emerged in our discussions is that many of the changes that are occurring in private exchanges reflect more-general trends in the health insurance landscape and might occur with or without these exchanges. For example, employers might consider defined contribution approaches or increased use of high-deductible health plans without using a private exchange. Nearly all respondents mentioned that concern over the Cadillac tax could motivate employers to consider private exchanges, but the methods for keeping premiums low enough to avoid incurring the tax can be done outside the private exchanges as well. Our modeling analysis suggested that both the Cadillac tax and the ACA's requirement that employees should not have to contribute more than 9.5 percent of their income toward a health insurance plan create incentives for employers to reduce the generosity of benefits offered. Lower-AV plans are less likely to hit the Cadillac tax over time, and—because lower-AV plans may require smaller

worker premium contributions—shifting to these plans reduces the chance that a worker will spend more than 9.5 percent of income on premiums.

The idea of introducing more price competition and requiring employees to pay more to access higher-premium health plans has been around for decades. Private exchanges in their current form seem to be taking advantage of the current attention focused on delivering health benefits through online shopping portals, possibly catalyzed by the ACA's introduction of exchanges for the individual and small-group markets. Private exchanges are gaining interest by conveniently packaging the exchange platform with online shopping technology, decision support, and benefit administration services. But, to date, enrollment in private exchanges is low, and there is a lack of systematic evidence to determine whether these exchanges will become prominent in the insurance market and how they will affect employers and their employees.

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Abbreviations

ACA	Affordable Care Act
ASPE	Assistant Secretary for Planning and Evaluation
AV	actuarial value
CBO	Congressional Budget Office
CMS	Centers for Medicare and Medicaid Services
COMPARE	Comprehensive Assessment of Reform Efforts
CPI	Consumer Price Index
ERISA	Employee Retirement Income Security Act
GAO	Government Accountability Office
HHS	Health and Human Services
HMO	health maintenance organization
HRET	Health Research and Educational Trust
KFF	Kaiser Family Foundation
MEPS	Medical Expenditure Panel Survey
MEPS-HC	Medical Expenditure Panel Survey—Household Component
PEEC	Private Exchange Evaluation Collaborative
PPO	preferred provider organization
SHOP	Small Business Health Options Program
SIPP	Survey of Income and Program Participation
TPA	third-party administrator

1. Introduction

Private health insurance exchanges are relatively new mechanisms for businesses to provide health insurance coverage to employees. Although designs vary, private exchanges typically involve multiple plan choices from one or more insurance carriers. Employers offering health insurance through private exchanges for active employees typically contribute a percentage of the lowest-cost health insurance premium, requiring the employee to pay for any differential cost for a more-expensive plan. In some cases, particularly in the retiree market, employers use a defined contribution mechanism (a flat dollar amount indexed to inflation) to contribute to premiums in the private exchange, an approach that makes the employers' premium contributions predictable over time. While the idea of an exchange model for delivering health insurance has been around for decades (e.g., Enthoven, 1993), the current form of private exchanges combines benefit administration functions, online shopping for health insurance, and decision-support tools into a single package. Roughly 2.5 million enrollees, including both active and retired workers, were estimated to be in private exchanges in 2014, out of the 156 million employees and dependents covered through employer insurance (Alvarado et al., 2014; Bureau of Labor Statistics, 2015).

Private exchanges are structured similarly to the public Small Business Health Options Program (SHOP) exchanges, although insurers or consultancies, rather than the state or federal government, run the private exchanges. The SHOP exchanges were created for small businesses as part of the Affordable Care Act (ACA). Choices available on private exchanges may differ from choices available on SHOP exchanges, and the options could vary substantially across geographic regions. Employers may find private exchanges attractive if they reduce the cost of health benefits over time or if they simplify the administrative aspects of offering health insurance. From the employee's standpoint, private exchanges may provide more choice than typical employer coverage or even the SHOPS. Walgreens, Petco, DineEquity Inc., and AT&T have all announced within the last two years that they are moving some or all active employees to a private exchange model (Japsen, 2013; Pinsker, 2013).

Private exchanges can be classified into those run by a single health insurance carrier and those integrating multiple carriers. In the second form, a third party, such as a benefit consultancy, will combine plans from several health insurers into one platform. Insurance companies may participate in more than one private exchange. Alvarado et al. (2014) found that some health insurers are both running their own exchanges and participating in other exchanges run by consultant groups. Technology firms, such as Bloom Health or Liazon, interface between employees and exchanges, designing websites to compare plans and decision-support tools to help employees select plans (Bloom Health, 2013). Some employers also offer benefit administration. In addition to offering more health plan choices than workers have under

traditional models of employer health insurance, some private exchanges offer other types of insurance, such as life insurance, or additional related products, such as discounts on wellness products, that can be purchased at the same time (Connolly and Gitlin, 2013; Haeder and Weimer, 2013).

Theoretically, exchange operators may offer fully insured plans, provide third-party administrator (TPA) services to enable employers to offer self-insured plans on private exchanges, or both. While the literature to date is not specific about how self-insured plans might be integrated into exchanges, surveys of employers indicate strong interest in using exchanges to offer self-funded plans. Most operators allow employers to customize the suite of plans available through their exchanges, which supports the possibility of allowing both self-funded and fully funded plans. Some exchange operators may provide TPA services to enable employers to seamlessly offer a mix of self- and fully insured products through a single exchange. This may be particularly true for insurance carriers who already offer TPA services to self-insured employers. Exchange operators may also work with outside vendors to provide TPA services. We found other examples of exchange operators using outside vendors to provide service enhancements, such as hiring technology companies to provide Web support and to assist with ACA compliance issues.

There can be varying incentives for insurers and consultancies to operate private exchanges, and some authors have speculated that private exchanges may become an increasing part of the health insurance landscape over time. Brown (2014), in a report for the Atlantic Information Service, argued that offering a private exchange may be necessary for issuers to gain or even maintain market share in the rapidly changing insurance market. In some cases, private exchanges may define their value-proposition by contracting with highly regarded providers, working with accountable care organizations, and offering care coordination programs or wellness programs. These innovations might lower costs and therefore keep premiums lower, particularly for employers participating in multipayer exchanges (Connolly and Gitlin, 2013; Provencal, 2013).

Countering adverse selection across plans in the private exchanges could also be important. *Adverse selection* describes a situation in which individuals with high health spending enter an insurance plan and cause premiums to rise. A *death spiral* occurs when premiums rise to the point where the plan becomes unstable—attracting only individuals with extremely high spending. This dynamic can cause the plan to lose money, and the insurer may opt to eliminate the plan. Some early studies of private-exchange type models found that healthier employees often gravitated toward low-cost, less-generous plans, leaving sicker, more-expensive employees in plans with richer benefits and tending to cause death spirals among the more-generous plans (Cutler and Reber, 1996; Royalty and Solomon, 1999).

To counter problems arising from adverse selection, risk adjustment methods can be used to transfer funds from plans with below-average costs to plans with above-average costs (Van de Ven and Ellis, 2000). Several industry reports argue that risk adjustment is needed in the

multicarrier exchanges, but there is no evidence for whether and how risk adjustment is being carried out (Cohen and Condeluci, 2012; Provanca, 2013). Private exchange operators would only need to conduct risk adjustment for large employers, which are not subject to the ACA's rating regulations. These regulations require a single risk pool with risk adjustment among all fully insured plans offered by employers with 100 or fewer workers. States or the federal government will conduct the risk adjustment for the small-business risk pool.

There is also a concern about whether private exchanges might discourage small businesses with healthy workers from entering the SHOP exchanges, opting instead to offer private exchange coverage. Some have argued that this behavior could then cause adverse selection in the SHOP market, destabilizing SHOP premiums (Fronstin, 2012b; Block, 2013; Haeder and Weimer, 2013). However, these concerns appear to overlook the fact that the same regulations governing premiums apply to all small-group plans, including plans offered through private exchanges. Specifically, the ACA requires that all fully insured plans offered on the small-group market are part of a single risk pool with guaranteed issue, modified community rating, and risk adjustment (U.S. Department of Health and Human Services, 2013).

Because self-insured plans avoid the ACA's rating requirements and single risk pool, it is possible that private exchanges could cause adverse selection in the SHOP exchanges if private exchanges made it easier for small businesses to self-insure. Research from the Center for Studying Health System Change and the RAND Corporation suggests that a desire to avoid the ACA's rating requirements could encourage small businesses with relatively healthy employees to offer self-insured plans but only if self-insured small employers can obtain affordable reinsurance for catastrophic claims (Yee, Christianson, and Ginsburg, 2012; Eibner et al., 2012). It is unclear whether private exchanges would assist small businesses in self-insuring. In fact, much of the industry literature is predicting a shift toward fully insured models among large employers (Brown, 2014). While we discussed the possibility that private exchanges might lead to increases in self-insurance among small employers with our key experts, we did not find support for this hypothesis.

Objective

In this report, we consider the implications of private exchanges for employers and their workers. In addition, we consider whether increasing uptake of private exchanges could have unanticipated consequences for the ACA's SHOP exchanges. Our analysis includes three components. First, we conducted a literature review and environmental scan to provide a view of the rapidly evolving private health insurance exchange landscape, and to discuss potential implications of the private exchange market for plans offered through SHOP. Second, we conducted discussions with key informants to get their perspectives on private exchanges and the major challenges and successes for companies operating in these markets. We also asked informants to describe the potential implications for employers, employees, and the ACA's

SHOP Marketplaces. Finally, we used RAND’s Comprehensive Assessment of Reform Efforts (COMPARE) microsimulation model to estimate the how a continued shift toward lower-cost plans may impact consumers, regardless of whether their employers use private exchanges. We also estimated how the ACA’s “Cadillac tax” on high-cost plans may affect businesses and their workers.⁵ While both the Cadillac tax and continued movement to low-cost plans could affect employers and workers regardless of whether they use private exchanges, private exchanges have been suggested as a mechanism to contain cost growth and to avoid the Cadillac tax.

This report is organized as follows: Section 2 describes our methodology. Section 3 describes the results of our literature review and environmental scan, along with the results of our discussions with experts. Section 4 describes the methodology for the microsimulation portion, and the results of these simulations. Section 5 summarizes and discusses the implications of our findings.

⁵ The Cadillac tax, which takes effect in 2018, is a 40-percent excise tax levied on employer-provided health plans with high premiums. In 2018, single premiums above \$10,200 and family premiums above \$27,500 will trigger the tax.

2. Methodology

We used three methodologies to conduct this study: literature review, discussions with key experts, and microsimulation modeling. This section details the methods for the literature review and discussion components. Section 4 sets forth the modeling methodology.

Literature Review

We searched four online databases as part of the peer-reviewed literature search: JSTOR, PubMed, National Bureau of Economic Research, and EconLit. Search terms included “private exchanges*” and “health insurance” or “small group” or “large group” or “Cadillac tax”; “health insurance exchanges*” and “small group” or “small employer”; and “private insurance exchanges*” and “small employer” or “small group.”

Prominent topics in the literature include analyses of the utility, advantages, and disadvantages of private exchanges for businesses; strategies for developing effective private exchanges (for exchange operators) or adopting private exchanges (for employers); and current trends in the adoption of private exchanges. Any peer-reviewed literature that contained the phrase “private exchange” or something similar was considered as part of this review.

We searched the grey literature using the Google and Grey Literature search engines (New York Academy of Medicine, undated). The GreyLit engine was searched using terms such as “health insurance exchange” and “defined contribution health benefits.” We ran Google searches using such terms as “private exchange” and “small business.”

Much of the grey literature consisted of advertising or promotional pieces from companies associated with offering private exchanges, news articles relating to earnings reports for companies offering exchanges, and news articles about large employers who have announced they are moving to private exchanges. Only the most relevant and informative grey literature pieces have been selected for inclusion here.

Key Informant Discussion Methodology

We held a series of phone conversations with expert discussants we selected based on conversations with ASPE and our literature review and environmental scan (Table 2.1). Discussion participants included exchange operators, technology companies that operate online shopping and decision-support tools for private exchanges, employers, and other stakeholder organizations (e.g., groups representing employers, employees, and insurers). We spoke with one individual or organization at a time, although in some cases more than one representative from the same organization was present on the phone call. We had one discussion leader (Buttorff or Eibner) and one note taker (Buttorff or Syme) present on each call. After obtaining consent from

Table 2.1. Participating Organizations

Category	Discussants	
	Number	Type
Insurers	2	Large national insurers
Consultancies	3	Large national consultancies
Technology companies	3	Technology companies
Employers	1	Midsized (<1,000)
	1	Small (<50)
Employer groups	3	Business advocacy organizations
Employee group	1	Employee advocacy group
Experts	3	Academic researchers
	2	Business research groups
Insurance groups	2	National insurance groups
Total	21	

participants, we also recorded conversations to ensure accuracy. Once we had completed all discussions, we compiled notes and reviewed the recordings to analyze the findings. We limited the focus of our conversations to the active employee market, rather than the retiree health insurance market, because we are particularly interested in how private exchanges interact with programs and requirements created by the ACA, such as the SHOP Marketplaces, the Cadillac tax, and the ACA’s minimum essential benefits requirements. Because the ACA mandates that employers offer qualifying coverage to active workers but not retirees, these ACA provisions are less directly relevant to the retiree health insurance market.

We created a discussion guide that included separate topic areas for each respondent group. We asked about a variety of topics, including the mechanics of the marketplaces, benefits and drawbacks for employers, benefits and drawbacks for employees, and tax and regulatory concerns. The full list of topics can be found in the appendix.

We identified the operators and employers from press reports about private exchange enrollment. The three consultancies and the two insurers we spoke with represent roughly two-thirds of the current market (Table 2.2).

It should be noted that accurately gauging the size of the current private exchange market is difficult at this point because many of the exchange operators do not disclose the number of employers and employees participating. Furthermore, the exchange operators who do release numbers may not separate the numbers between active employees and retirees, nor by covered employees and dependents. Accenture (2014) listed the size of the 2014 exchange market at 3 million active enrollees, and predicted rapid growth between 2014 and 2018; however, this and other reports of private exchange growth have come from industry-related sources. Accenture’s own estimates for 2015 range from 6 million active to 9 million with retirees (Accenture, 2013; Accenture, 2015). A Kaiser Family Foundation (KFF) study on private exchanges estimated the

Table 2.2. Estimated Size of 2014 Private Exchange Market Relative to Study Sample

	Estimated 2014 Participation	Estimated Number Covered by the		
		Three Operator Discussants	Two Insurer Discussants	Two Employer Discussants
Firms	~2,500	~2,000	Undisclosed	2
Active workers	1.7–3 million	1.5–2 million	Undisclosed	~1,050

NOTE: The estimates for the 2014 participation of active workers are from Alvarado et al. (2014) (1.7 million) and Accenture (2015) (3 million). The range for the estimates of 2014 employer and employee participation was tallied from news reports and press releases. We approximated the likely coverage among our three operator discussants based on their self-reports of market share. These are estimates only because many exchange operators do not release the number of employers, covered workers versus dependents, or information on active versus retiree numbers. Further, there is no comprehensive census of private exchange participation.

active employee market to include about 1.7 million enrollees for 2014 and the total private exchange market (including retirees) to include about of 2.5 million enrollees (Alvarado et al., 2014).

3. Results from Literature Review and Discussion with Experts

Definition of *Private Exchange*

One of the challenges that we identified both in our literature review and discussions is that there is no shared definition of exactly what the term “private exchange” means. One discussant said:

I think one issue is that the word *exchange* has been liberally used. There are insurers who offer exchanges with their own products, consulting groups who might run their own with multiple insurers, and then there are agent/broker firms that run exchanges with multiple definitions.

In general, private exchanges involve Web portals through which employees can shop for health insurance, usually with more options than are typically available through traditional employer coverage. The websites often include advanced decisionmaking tools, such as benefit calculators, and Web shopping features, such as the ability to sort and filter options. A representative from a single carrier exchange said that, at their core, private exchanges are really a shopping experience, which is a new phenomenon in health insurance. The representative said that online enrollment, decision-support software, and consumer engagement add additional value for employers. A technology company representative likened the current private exchange market to travel websites, which can include aggregators (Kayak, Orbitz), sites that provide information (TripAdvisor), and sites operated by airlines (Southwest, United). But there is a lack of consensus on the defining features of private exchanges. Many discussants also said that exchanges are really just a rebranding of benefit administration: “A group private exchange is really just benefit administration, services, and technology with a few interesting twists.”

In some cases, private exchanges enable employers to make a defined contribution with a fixed dollar amount to workers’ health insurance benefits, potentially limiting the employer’s exposure to unpredictable health care cost inflation. Under a defined contribution model, the employer would provide workers with a fixed credit that could be applied toward health insurance coverage in the exchanges. This credit could be indexed to the rate of general inflation, which would make employers’ health insurance expenses relatively predictable.

While both the Private Exchange Evaluation Collaborative (PEEC) surveys (e.g., PEEC, 2013) and our discussions with experts confirmed that there is interest in offering self-insured plans through private exchanges, the defined contribution approach is not consistent with self-insurance. Although self-insured employers can offer a fixed credit to employees to enroll in private exchange plans, a self-insured employer cannot, in general, completely cap its financial liabilities because the employer is responsible for covering employees’ health insurance claims (net of enrollee cost-sharing). That is, the self-insured employer is ultimately responsible for paying employees’ claim costs and acts as the risk-bearing entity for claims that are expensive

and unpredictable. Potentially, self-insured employers can mitigate this risk by purchasing stop-loss insurance, a type of reinsurance for self-insured employers. However, the degree of risk protection stop-loss insurance offers will vary depending on the details of the plan.

An additional concern with the defined contribution approach, noted by at least one discussion participant, is that indexing a defined contribution to general inflation may be at odds with the ACA's requirement that, if employees pay more than 9.5 percent of their household income to enroll in single-employee coverage, the employer can be subject to employer mandate penalties. Especially among employers with low-wage workers, it may be necessary to adjust the contribution amount each year to ensure that the employees' required contribution does not exceed the 9.5 percent threshold.

Another frequently cited feature of private exchanges is increased consumer choice. However, there is no consensus on the degree of choice required, and it is possible for single insurers to run their own exchanges, selling their own insurance products. Multicarrier exchanges, which are typically run by large consultancy or brokerage firms, have a structure similar to the public exchanges. Some of our discussants argued that single-carrier exchanges should not be considered private exchanges because they are selling their own products. A representative from a multicarrier exchange said the very nature of exchanges should be to spur competition between insurance carriers. Many of the single-carrier operators are participating as carriers on the multicarrier exchanges as well.

Size of Exchange Market

Operators

In the private exchange market overall, there are approximately ten key operators of multicarrier exchanges (Alvarado et al., 2014), although this number is difficult to accurately pin down because the market is changing rapidly with mergers and acquisitions. Additionally, numerous health insurers operate their own, single-carrier exchanges. The health insurers operating their own exchanges range from some of the large, multistate insurers to smaller, regional BlueCross BlueShield plans. bSwift, Liazon and Bloom Health all ran their own exchange platforms but have been bought by large consultancies or insurers. For example, Aetna purchased bSwift; Towers Watson purchased Liazon; and WellPoint and two other insurers purchased Bloom Health (Aetna, 2014; Towers Watson, 2013; PRNewswire, 2011).

The number of insurance carriers participating in each multicarrier exchange varies widely and depends on the given market in which the exchange is operating. One multicarrier exchange operator, for example, has about 55 carriers, with roughly one-half of them being health insurance carriers and the others offering ancillary benefits, such as life insurance, travel insurance, and critical care coverage. One exchange carrier likened it to building a mall:

You start with your anchor stores to bring foot traffic into your mall. And once you have established foot traffic, then you can add, kind of, specialty stores that provide additional value but don't detract from the foot traffic in the mall. So we started with the national carriers—so Aetna, Cigna, United, and the various regional Blue Cross plans. We added Kaiser and Health Net as strong regionals, especially in California because that's such a unique market. And then, over time, we have been contacting select regional health plans to fill in access and quality gaps that we have in—that we might see in particular markets.

Most private exchanges focus on groups of over 100 employees, with the exception of Aetna, which is running a small-group exchange in conjunction with Sam's Club for its member businesses with two or more employees (Halzack, 2014; Sam's Club, 2015).

Employers

According to Alvarado et al. (2014), 1.7 million active workers were enrolled in private exchanges in 2014. Given that there are approximately 156 million workers in the United States, private exchange participation appears to be relatively small (Bureau of Labor Statistics, 2015). Some reports indicate the number of employees choosing benefits in private exchanges could rise to 40 million by 2018, although estimates vary (Carrns, 2014). Accenture has estimated that there were 3 million enrollees in 2014 and, more recently, estimated that 6 million active employees will be enrolled in private exchanges in 2015, although the methodology for the estimate is unclear (Accenture 2015; Accenture, 2014).

Estimates of the share of employers that may move to private exchanges in the future range from 3 percent to 45 percent, with most estimates above 28 percent (Table 3.1). For comparison, PEEC surveys administered in 2013 and 2014 found that 15 percent to 16 percent of employers were considering public, government-run exchanges (including both SHOP and individual exchanges) for active full-time employees (PEEC, 2013; PEEC, 2014). An Aon Hewitt survey of 562 employers found that cost, improved access to quality health plans, enhanced health and wellness programs, and reduced employer risk were employers' primary reasons for considering the private exchange model for delivering health benefits (Aon Hewitt, 2012).

Surveys are inconsistent regarding the proportion of employers considering moving to private exchanges in the future and report different time trends for employers' level of interest in private exchanges. For example, the 2014 PEEC survey reported that 47 percent of employers will move to a private exchange by 2018, while the 2014 KFF and Health Research and Educational Trust (HRET) survey reported that only 13 percent of large employers were considering such a move. Further, while the PEEC surveys indicate a small increase in interest in private exchanges between 2013 and 2014, the KFF/HRET surveys indicate a decline in interest among employers with more than 5,000 workers (Claxton, Rae, Panchal, Damico, et al., 2014).

Some surveys have found that employers are particularly interested in using private exchanges as a means of offering coverage to retirees. A KFF/HRET survey in 2014 found that 4 percent of large employers (200 or more employees) were offering retiree benefits through

Table 3.1. Estimates of Current and Future Use of Private Exchanges

Survey	Sample Size (employers)	Current Employer Participation (percent)	Future Employer participation
Aon Hewitt (Provancal, 2013)	837	5	28% large employers to move to defined contribution next 3–5 years
Aon Hewitt (Aon Hewitt, 2012)	562	4	44% believe private-exchange model will be preferred approach to offering benefits in next 3–5 years
Society for Human Resource Management and Employee Benefit Research Institute (Fronstin, 2014)	≈ 3,300	N/A	3.1% Employers with < 750 FTE 3.8% of Employers with ≥ 750 FTE (3.2% total) plan move to PE in 2015
National Business Group on Health (2014)	333	5	32% of large employers to private exchanges in next 3–5 years
PEEC (2013)	723	N/A	45% currently or will move to private exchange by 2018
PEEC (2014)	446	N/A	47% currently or will move to private exchange by 2018
KFF/HRET (2013)	2,067	N/A	9% all businesses will move to private exchange in the future 29% of large employers over 5,000 employees
KFF/HRET (2014)	2,052	2 ^a	13% large employers considering move to private exchange in the future 20% of large employers over 5,000 employees

NOTE: The statistics are current for the year in which they are published.

^a Large (≥ 200 employees) employers.

private exchanges. In 2014, the PEEC survey of employers found that 35 percent were considering using private exchanges to provide benefits to pre-65 retirees by 2018, and 37 percent were considering using private exchanges for post-65 retirees—although an increasing proportion of respondents expressed interest in public exchanges for retiree and other non-active employee coverage (PEEC, 2014).

Some employers, however, are hesitant to move to private exchanges in the next one to two years because of uncertainty surrounding the operation and benefits of private exchanges (Daly, 2012; PEEC, 2013). Indeed, in the 2013 PEEC survey, 80 percent of respondents noted that “immaturity of the private exchange market, stability of cost over time, stability or track record of exchange administrator[s], [and] limited information about private exchanges” were significant barriers to private exchange adoption (PEEC, 2013, p. 7). As evidence of this continued hesitancy, the same PEEC annual survey from 2014 found that 57 percent of employers “agreed that if an industry peer moved to a private exchange they would be more

likely to do so” (PEEC, 2014, p. 5). In a *Health Affairs* piece, Kramer suggested that the magnitude of private exchange adoption might be tied to potential uncertain future scenarios, such as how legal challenges to the ACA unfold, whether potential employees view private exchanges, and whether the public exchanges perform well (Kramer, 2012).

Several of our discussion participants were also skeptical of predictions about large increases in private exchange participation among active employee populations. One technology company representative said that many large employers have access to consultants, who help them navigate these decisions. For many employers, the “value proposition” is still unclear.

Benefit Design

Several exchange operators we spoke with said they require standardized benefit designs for all products. For example, one operator requires that plans offered on their exchanges adhere to one of five types of plan designs, which vary based on deductible, coinsurance, out-of-pocket maximums, pharmacy benefits, and network participation. These operators said the standardized plan benefit designs, which in some cases use metal tiers comparable to the ACA’s Marketplace plans, are part of the strength of their exchange offerings:

A silver plan for Blue Cross looks exactly the same as a silver plan for Aetna and United and Cigna. And that was important to us for a couple of reasons. First, is we didn’t think there was any reason that we would have to force a participant to search around a website for half an hour to find out whether or not physical therapy was covered at thirty visits or forty visits. There is ridiculous complexity involved in health care plan design and most of it is useless. So we wanted to make the consumer experience easy.

One operator also said that online decision-support tools would be difficult to construct without standard designs. This operator said that training benefit counselors is also difficult without standard designs. If carriers cannot differentiate themselves and compete on cost-sharing designs, carriers then have to compete on networks and customer experience, said one exchange operator.

A potential downside for employers under this model is losing control over plan benefit design. While some private exchange operators promote standardized plan designs as a way to both achieve savings from the carriers and to help employees make decisions, others highlighted that they tailor the exchange offerings to each employer. One exchange operator said no two companies have the exact same set of plans on their exchanges.

Premiums

There is still a high level of uncertainty surrounding the operation of private exchanges, including benefit design and plan choice, premiums and defined contribution levels, and the potential for adverse selection (Fronstin, 2012b). The method for setting premiums in the private exchanges for large groups is not clear from the existing literature. Employers are traditionally

rated based on the claims experience of their group, but from the literature, it was not clear whether premiums in private exchanges are based on the group or the entire exchange risk pool (e.g., Margolis and Thompson, 2013).

From the key informant discussions, we learned that premiums for private exchanges are set using the same approaches as in traditional group insurance. For example, premiums for fully insured large employers offering coverage in private exchanges are based on experience, and premiums for fully insured small employers are set based on the ACA's rating regulations. Fully insured employers with 50 or fewer workers in 2015 and 100 or fewer workers in 2016 and future years are subject to the ACA's rating requirements regardless of whether they offer coverage in private exchanges.

The discussion participants we spoke with were not aware of any private exchange arrangements that implemented risk pooling or cross-subsidization of premiums by multiple employers (although, small employers participating in private exchanges would be subject to ACA's risk adjustment requirements). However, respondents noted that, in some cases, private exchanges involving multiple employers may be able to negotiate reduced administrative fees from insurers or to improve bargaining power with providers. However, it is unclear whether private exchanges would necessarily improve employers' negotiating power relative to the status quo. A large employer offering traditional insurance might have a lot of leverage with an insurer, because by offering the insurer's plan, the employer would be providing the insurer with a large block of business. If the employer moved to a private exchange with many insurers, the employers' leverage with each individual insurer could be diluted. Potentially, the private exchange could make up for the employers' loss of volume by negotiating with insurers on behalf of all participating employers. Whether negotiating power is improved, however, would depend on the total volume of workers in the exchange relative to the number of participating insurers.

Unlike public exchanges that incorporate user fees into premiums, private exchange operators charge administrative fees on top of premiums that are structured on either a per employee or a percentage of premium basis.

Employer Contribution

Some have argued that moving to private exchanges can reduce employers' costs (Kramer, 2012; Fronstin, 2012b; Fronstin, 2012a). Indeed, PEEC (2014) found that a majority of employers surveyed that shifted to a private exchange model saved money, although the mechanism for the savings was not clear from the survey. The organizers of private exchanges and others argue that the primary way employers can save money is to move to a defined contribution model for health benefits (Sammer and Miller, 2013; Sammer, 2014). This approach allows the employer to pay a set contribution toward employee health benefits. Using a private exchange can then allow employees to choose from a menu of plans. If there is money left over in the employees' account after purchasing health insurance, this money could be given to the

employee in a health savings account, or the employee could be allowed to purchase other types of insurance with the extra money (Blumberg and Rifkin, 2013).

While the defined contribution approach can be beneficial for employers, allowing them to better predict their premium contributions from year to year, the benefits for employees are less certain. Because employees weigh both wages and benefit packages when considering employment with a given employer, the offer may seem less attractive (Pauly and Harrington, 2013; Kramer, 2012). An additional issue is whether the defined contribution approach could be burdensome for older or less healthy employees, who may need to pay more to receive adequate coverage (Blumberg and Rifkin, 2013). The defined contribution approach could also be burdensome for low-income individuals who may not be able to afford extra payments. There is little in the literature to determine whether this is yet a problem.

While the literature mentions defined contribution as a key benefit for employers in private exchanges (Fronstin, 2012b; Brown, 2014; Alvarado et al., 2014), several of the exchange operators we spoke with said the adoption of defined contribution in the active employee market has been low. The use of a defined contribution approach is more commonplace in the retiree private exchange markets. The rules for reporting future liabilities, such as retiree costs, on company balance sheets changed in the 1990s, which caused many companies to begin offering a defined contribution for health and pension benefits. These same standards were required for state and local governments in 2012 (Governmental Accounting Standards Board, 2012). Several discussants also noted that a defined contribution approach could be implemented with or without the private exchanges.

Employers and exchange operators have a variety of ways to set the employer contributions in the private exchanges. Some employers structure their premium contributions based on the richness of the health plan, in what is called a “reference pricing” approach. With reference pricing, the employer will set the premium contribution as a percentage of a benchmark plan. Enrollees who wish to choose a more-generous plan in the private exchange would pay the full marginal cost of a more-expensive plan. For example, the small business representative we spoke with set the employer’s contribution at 70 percent of the premium for the lowest cost available option. The employees could use this amount toward any of the plans made available. In contrast to a true defined contribution model, employers that use reference pricing must update their contribution each year based on changes to the premium for the benchmark plan. If health care cost inflation is substantial, this approach could lead to unpredictable increases in employer contributions over time.

The choice of how to structure premium contributions may depend on the industry in which the employer operates and the characteristics of the employer’s workforce, according to one respondent: “There are certainly industries that are much more dependent on their benefits to attract and retain talent.” In some cases, employers may worry that moving to a true defined contribution approach may find it harder to attract and retain workers, particularly in industries relying on knowledge or other skill-based employees, such as the software industry.

There are concerns that employers using a defined contribution (flat dollar amount) approach may lose sight of employees' total cost, exposing workers to increasing financial risk over time. One respondent stated:

It insulates the employer from knowing premium prices and what the employee is ending up paying. It insulates them from not only understanding that for their complete workforce at any given time but also from an understanding of premium increases. An employer who's paying a percentage of premiums may think twice about cutting back that percentage of premium in a future year, but an employer who's paying a defined contribution limit may have no relation to the premium prices over time.

Employers may be at increased financial risk over time if they are not readjusting their contributions. Both exchange operators and employer representatives said they do not want the employees' contribution to the health insurance premium to be above the ACA's affordability threshold, which can lead to employer penalties if workers must contribute more than 9.5 percent of family income to enroll in a single-employee plan.

One operator we spoke with set separate contributions for health insurance and other, ancillary products, instead of giving enrollees a single, lump-sum contribution for all benefits. Partly, the operator used this approach to avoid a situation in which the size of the contribution enabled workers to enroll in a health plan without contributing to the premium. One operator said that employer contributions are purposefully set to be less than the lowest-cost available plan so that there is no possibility of the employee getting cash back after selecting a health insurance plan. In general, employers want to avoid offering free coverage, because this could encourage dependents or employees who had opted out of the insurance to enroll, increasing the employers' total costs. When there is a premium contribution, some employees will opt out of the insurance plan because they rely on spousal coverage, military insurance, or another source of insurance. If the lowest cost plan on the private exchanges is free, many of these "opt outs" will enroll.

Nondiscrimination in Defined Contribution

Some respondents raised concerns about whether small-group plans that use a defined contribution approach could violate the Age Discrimination in Employment Act. This issue is described well by Blumberg and Rifkin (2013). Briefly, the ACA's rating regulations set very specific requirements for how issuers set premiums in the small-group market; one of these rules requires that the oldest adult enrolled in a policy cannot be charged more than three times as much as the youngest enrolled adult. Depending on the specific product and state law, the issuer may set a composite premium for the employer that reflects the age distribution of workers enrolled at the start of the year. However, it is unlikely that composite premiums could be set across multiple carriers offering plans in a private exchange.

As an alternative to composite premiums, some states may allow private exchanges to charge each participant a separate premium that varies by age and the plan selected. However, if the employer were then to offer a fixed-dollar defined premium contribution, older workers could be

required to pay significantly more than younger workers for equivalent coverage. One employee advocate we spoke with described the issue this way:

Individual employees weren't necessarily used to paying a different amount than their colleagues individually based on their age, yet under the ACA, each individual is now age rated. Defined contribution makes that particularly worrisome for older workers because it is going to hit an older worker much harder to have a defined contribution if that contribution . . . is the same across the whole workforce.

Such a practice could run counter to the Age Discrimination in Employment Act, which states that, while the absolute value of the worker's premium contribution may increase with age, the proportion of the premium paid for by the worker cannot increase with age.⁶ As one of our respondents put it, "If you said to someone, ok, we're going to give everybody 500 bucks [per month] to buy insurance, then what you're essentially doing is telling the younger people that they get more insurance than the older people in every case. There's no way around that." The issue has not yet been resolved in a court case or other regulation.

One researcher also mentioned that employers using a defined contribution approach could violate section 2716 of the Public Health Service Act, which states that employer benefit plans cannot discriminate in favor of high-income workers. These rules previously applied only to self-insured plans and precluded highly compensated workers, such as executives, from receiving more-generous health plans than lower-compensated workers without paying taxes on the "extra" benefits. The ACA now applies this rule to fully insured plans. The penalty for discriminating in favor of the high-income workers will trigger a 100-dollar-per day penalty. The researcher said that there could be an issue for employers if "the more highly compensated employees are able to purchase richer benefit plans and lower compensated employees are stuck with whatever benefits they can get with the defined contribution." The implementation of this rule has been delayed (see Internal Revenue Service, 2010).

Plan Funding in Private Exchanges

With self-insurance, an employer funds enrollees' claims out of general revenue or through a trust fund. The self-insured employer thus bears the risk of unexpected, high claims that enrollees might incur. In a fully insured model, the employer pays a fixed premium to an insurance company, and the insurer is then at risk for enrollees' claims. Historically, self-insurance has been rare for small employers because of the excessive financial risks (Yee, Christianson, and Ginsburg, 2012). Many small employers do not have enough employees across

⁶ See 29 CFR 1625.10, which states:

An older employee within the protected age group may be required as a condition of participation in a voluntary employee benefit plan to make a greater contribution than a younger employee only if the older employee is not thereby required to bear a greater proportion of the total premium cost (employer-paid and employee-paid) than the younger employee.

whom to spread the risk of a catastrophic expenditure, even with stop-loss insurance—a type of reinsurance for self-insured employers—to absorb very high claims. The ACA, however, instituted premium rate setting regulations, essential benefit mandates, and taxes that affect fully insured but not self-insured plans. These regulations may encourage small businesses to migrate toward self-insurance, particularly among small employers that think they have a better health risk profile than small employers offering fully insured coverage.

Anecdotal evidence suggests that insurers are creating new products for small businesses to help them offer self-insured coverage without incurring undue financial risk. For example, some insurers are coupling TPA services for self-insured plans with stop-loss insurance. In promotional piece for businesses with fewer than 250 employees, Cigna offers stop-loss insurance amounts of between \$10,000 and \$75,000 for each individual (Cigna, 2014). In theory, it is possible that private exchanges could be designed to make self-insurance easier, particularly for small employers. For example, self-insured private exchange plans could be packaged with stop-loss coverage.

It is not clear the degree to which employers, large or small, are moving between self- and fully insured models within private exchanges at this early stage. The KFF/HRET survey shows that the number of employers of all sizes with self-funded plans held steady at about 60 percent from 2010–2014. Among employers with fewer than 200 workers, about 16 percent offered self-insured plans, and among employers with 200 or more workers, about 83 percent offered self-funded plans (KFF/HRET, 2013). Some surveys have shown that there is increased interest among employers in moving to a self-insured model, and some employers would like to maintain their current self-insured arrangements, within private exchanges. For example, PEEC surveys from 2013 and 2014 found that 49 percent and 51 percent, respectively, of employers responded that it was “very important” that a private exchange offer a self-insured option (PEEC, 2013; PEEC, 2014). In contrast, other pieces point out that private exchanges may encourage more employers to move to a fully insured model (Alvarado et al., 2014). In a piece for Atlantic Information Services, one researcher said that the fully insured models are more profitable for insurers and consultants because the self-funded Administrative Service Only contracts have low profit margins (Brown, 2014).

For employers that already offer self-insured plans, a shift to a fully insured model could increase costs because of the risk premium charged by the insurer (Klepper, 2014; Pauly and Harrington, 2013). Such employers may also now have to pay state taxes on the full premium amounts rather than just on reinsurance premiums (Cigna, 2014). An additional drawback for employers that move from self insurance to full insurance is that they lose access to employee health cost data and will therefore not be able, for example, to analyze health care cost trends (Cook, 2014). One technology company noted that fully insured employers’ lack of access to claims data is an industrywide problem: “The truth is that it can be pretty difficult to get that information back. We have carrier relationships so in some cases, we can pull that information

through the carriers, but that’s definitely an issue and I wouldn’t say that we have the problem solved.”

Some respondents believed that employers typically maintain their current financing structure, whether that is a self-funded or fully insured approach, when moving to private exchanges. However, at least one consultancy that we spoke with offered only fully insured products and required employers to move to a fully insured model to participate in its private exchange. Others noted that the ACA, in general, creates incentives for small employers to self-insure to avoid ACA’s rating regulations and the single, small-group risk pool.

Self-insured arrangements do not lend themselves as well to a defined contribution approach; even with a fixed contribution, the employer is still exposed to unpredictable claims expenditures. An insurance industry representative confirmed that even with a private exchange, the financial liability for covered expenses remains with the self-insured employer.

In addition, some of the benefits of private exchanges, such as competition across insurance carriers and increased plan choices, may not lend themselves to self-insured models. One exchange operator suggested that carriers acting as TPAs have no incentive to lower costs: “there’s no incentive to drive different behaviors from the carriers’ standpoint . . . and we are trying to drive the insurance companies to do things differently.” The same exchange operator argued that adopting a fully insured approach is an integral part of private exchanges:

We only offer our exchange on a fully insured basis, and that is kind of fundamental to kind of our belief of what an exchange is. When we built this, we were trying to drive efficiency through competition. We believe very strongly that an exchange, in order to be an exchange, there has to be competition. . . . So I don’t understand what a self-insured exchange is because it’s not competitive. The word exchange is being used to describe a lot of different models.

Despite these comments, it still seems possible that there could be incentives for TPAs to keep claims low for employers; otherwise, there could be arbitrage opportunities for competing TPAs. However, fundamentally, self-insured employers accept more risk than fully insured employers and may need to purchase additional “stop-loss” insurance to guard against catastrophic financial loss due to unpredictably high employee claims. Whether there is a general trend toward full insurance in the employer insurance market remains to be seen. National surveys of employers over the next few years may shed light on whether there is a trend.

Risk Adjustment

One concern mentioned about private exchanges was that, when multiple products are offered, the sickest employees might gravitate toward plans with more-generous benefits, leading to adverse selection in these plans. This issue can potentially be addressed through risk adjustment. However, multicarrier exchanges offering fully insured products to large employers

had differing views on whether risk adjustment was needed.⁷ One large-exchange multicarrier operator said it did not use risk adjustment. Another multicarrier exchange applies risk adjustment across plans, but within employer. Specifically, among plans offered to a specific employer, funding from plans with low-risk enrollees is transferred to plans with higher-risk enrollees, using diagnoses from pharmacy claims data. In this manner, there is effectively cross-subsidization across workers within an employer, but each employer participating in the private exchange operates as a separate risk pool. Risk adjustment may not be necessary for small businesses offering in private exchanges, because such employers are already subject to the ACA's risk adjustment provisions.

Services Offered in Private Exchanges

Benefits Administration

Private exchange operators, including technology companies and consultancies, often offer benefit administration services, such as eligibility determination, reporting enrollment to carriers, and managing payroll deductions. These processes can often be very complex. For example, large employers may have different eligibility rules for different employee populations in different states, and private exchanges can offer services to assist with these determinations. One respondent noted that other administrative services that can be provided through private exchanges include employee payroll deductions and enrollment tracking: “On the back end, we will interface with all the employers and send them their payroll information and we will interface with the carriers to send them all deduction information and the election information. . . . We’re connecting with everyone along the continuum.”

Smaller employers may particularly value the administrative services offered through private exchanges. One exchange operator said that, for many employers, technology assistance is a key consideration in moving from paper-based enrollment systems to electronic ones: “The concept of online shopping, online enrollment, and online engagement with their employees is really a very clean and nice value proposition for them.”

Private exchanges may also offer services to assist with regulatory compliance, including managing new requirements stemming from the ACA. One employer we spoke with said that, through an add-on service, their private exchange helped facilitate tracking of workers' hours. This service enabled the employer to ensure that all full-time workers were offered health insurance, as required by the ACA. A representative from a midsize business noted:

⁷ Separately, the ACA requires all fully insured small businesses to be part of a single risk pool, with risk adjustment across plans. Large firms, which comprise the bulk of the private exchange market, are not part of this single risk pool.

In industries with a lot of hourly workers, it adds a lot of complexity because we have to track the look-back and stability periods in an industry that has extremely high turnover. . . . I only have two full time employees that focus on our benefits programs. . . . Because that's a lot of work with a small staff, and it's just not really value added work. It's a lot of administration, and the risk is high because if you . . . goof up eligibility you could potentially be stuck with some hefty penalties.

In many cases, these benefit administrative services could be obtained without going through a private exchange. However, the private exchanges frequently combine these services with other functions, such as consumer decision support and increased plan choice. Together, the package of services appears to define the value propositions the private exchanges offer. However, not all private exchange operators appear to be offering this assistance. The small employer we spoke with said that the private exchange he was working with (regional single carrier version) was not yet able to offer the administrative help.

While many respondents noted that improvements in benefit administration were a helpful function of the private exchanges, some respondents said that completely handing over benefit administration to a third party can have drawbacks. Several exchange operators and technology and benefits companies mentioned that control over the eligibility and enrollment process is a valuable part of an employer's overall benefits strategy. A respondent representing self-funded employers noted that, in some cases, self-funding may enable employers to advocate more effectively for employees who face negative benefit determinations or difficulties with providers:

When the employee is having a problem with the provider, when the employee is having a problem with how the benefits were paid, having problems with the timeliness of payment, with collection efforts by a provider. . . . The further away you get from a self-funded, stable employer plan, the less you can be an advocate for the employees that are having issues somewhere along the continuum of getting their benefits.

One technology company representative noted that some private exchanges were less adept at assisting with enrollment changes following key life events, such as a marriage, divorce, or a new baby, that occur over the course of the year. Many respondents thought these changes are easier to implement when the employer has control over the benefits. One benefit administrator said that handling the open enrollment period is only about 50 percent of the benefit administrative workload: "What some of the private exchanges are doing is essentially just handling that first component and then making the . . . carriers and the employers figure the rest out among themselves."

Others cautioned that many employers do want to get out of the business of benefit administration and that private exchanges do not have to create barriers in working with employees: "We find many of our large customers, who are our traditional customers, still consider their benefits to be a big part of their overall rewards program for employees and they don't want to disconnect themselves from their employees."

Call Centers and Decision Support

Private exchanges typically provide extensive software to aid consumers in decision support. Some exchange operators provide all or most services, while others partner with technology companies to run specific functions, such as Web design and decision support. This part of the market seems to be in flux because some of the larger exchange operators recently acquired technology and benefit administration companies. For example, Aetna purchased bSwift, and TowersWatson purchased Liazon (Aetna, 2014; Towers Watson, 2013). Three insurers jointly own Bloom Health (PRNewswire, 2011). Other technology firms, such as ArrayHealth, have continued to operate with multiple exchanges.

Nearly all discussants said advanced decision support was one of the strengths of the private exchanges, for both employers and employees. One exchange operator said, “You can rely on an exchange vendor to help explain those changes to each and every one of your employees, rather than you having to try to do it on your own.”

One exchange operator said that, in an exchange environment in which the employee is responsible for understanding and selecting health insurance, the decision-support tools are critical to help employees avoid poor choices. The software, in the most basic sense, allows consumers to compare choices side by side, said one technology company representative:

You basically filter different products based on different variables. And then you have the personality test model that is a little bit like eHarmony or something like that, where it asks you a ton of questions and it works its magic and it spits out a response. Both models have problems.

The respondent said that one potential problem with the “personality test” model is that people may find questions invasive and quit the tool before selecting a plan. Filtering tools can also be challenging because, if a respondent wishes to change one of the options (e.g., sorting on deductibles rather than premiums), he or she may need to start over at the beginning of the decision process. More-advanced models would allow side-by-side comparisons as the employee adjusts particular characteristics. Websites can also include pop-up information to explain facets of the benefits as the employee is looking at a particular item, such as the drug coverage in a health plan.

Some technology companies are now able to integrate employee utilization data into Web-based calculators to assist employees with plan choices. This allows employees to predict their expected out-of-pocket costs across different plan choices. One of the technology companies offering the out-of-pocket payment software noted that this feature was available only for self-insured employers who retain control over employee health data. In other instances, lack of coordination between health insurers and employers, as well as privacy concerns, has limited the availability of out-of-pocket spending calculators in fully insured private exchanges.

Decision support tools may also be used to direct consumers to lower-cost plans and wellness initiatives. One respondent noted:

If an employer decides we're going to offer a high deductible health plan, well, they have to build that benefit, price that benefit, communicate it to their employees, give their employees tools to understand what those benefits are, and then get their employees to enroll in those plans. . . . With the exchange, with the guided shopping experience, our ability to communicate with employees, we think we can get much higher adoption rates for things like high-deductible health plans or narrow networks or accountable care organizations or consumer tools.

Even with the advances in technology, some respondents noted that health insurance decisions can still be difficult for employees. One reason is that health plan benefit information is complex; choices are inherently difficult; and many Americans still have trouble understanding key terms, such as *copayment* and *deductible* (Loewenstein et al., 2013; Blumberg et al., 2013; Barcellos et al., 2014). In addition, some employees may be mistrustful of the information insurance companies provide. One respondent noted: “We found . . . there really is already kind of a deficit of trust with the system because people are just naturally, they don't really trust their health insurer.”

It is unclear how and whether the decision-tool software is helping consumers with factors other than premiums that can influence poor decisionmaking in health insurance. The number of choices can be overwhelming; there can be inertia with the current plan; or there can be a bias toward making no choice. Some studies have shown consumers may find it difficult to make a selection when the number of options becomes large (Bundorf and Szrek, 2010; Hanoch et al., 2009; McWilliams et al., 2011). When facing many choices, employees may resort to decisionmaking shortcuts, such as choosing on brand name or a single attribute (Ericson and Starc, 2012). Inertia can occur when costs may be associated with switching plans, such as having to choose a new provider (Handel, 2011). There can also be unexpected out-of-pocket costs if employees are selecting low-actuarial value (AV) plans, in which the consumer is expected to pay a higher share of the costs out of pocket, on average (Abaluck and Gruber, 2011; Zhou and Zhang, 2012).

Given the uncertainty around whether employees can make choices suitable for their health risk, some respondents argued that telephone hotlines and face-to-face customer service are still valuable services to employers and their workers. One technology company said the various technology and benefit companies for private exchanges have different levels of customer support. In describing their own level of support, the company representative stated: “We actually go out into the field, depending on the employer, and set up an enrollment café for one-on-one sessions, where one of our licensed counselors can actually sit with the individual employee.”

Additional Employer Issues

Cost Implications

Our literature review on private exchanges presented several possible avenues for cost savings with private exchanges. Of these, the most commonly referenced was the defined contribution allowing the employer to set contribution levels for health care at a particular level. Most discussants said that, in practice, the biggest source of cost savings was actually from employees choosing less-generous plans relative to what the employer had been offering before. This happened regardless of whether the employer was using a defined contribution or some other contribution method, such as a percentage of the premium.

One multicarrier exchange operator said that, under the traditional group insurance model, an employer will migrate toward a richer plan to make more employees happy when choosing one plan for the whole workforce. However, when employees were given more choices, both the exchange operators and the employers we spoke with said many employees picked less generous plans: “In our first year of having a high deductible health plan we had about 15-percent takeup . . . but by the second year, we had over half of our population take one of two high-deductible health plans.” Except for brief mentions of the plan choices in Aon Hewitt’s news releases confirming the selection of lower-cost plans, not enough data are available so far from the large exchange operators, multi- or single carrier, to confirm this finding (Aon Hewitt, 2013; Aon Hewitt, 2014). One respondent did say that some employees actually purchased richer coverage. This could be because the deductibles in the cheaper plans are unaffordable or because the employees expect to use a significant amount of health care services in the year.

Another factor for lower costs in private exchanges might be cost savings standardized benefit designs offer, particularly for smaller companies. One employer we spoke with said:

As a smaller company we don’t have a lot of leverage with the insurance companies. . . . By using consistent plan design which creates some efficiencies and then negotiating with carriers on behalf of all the clients on an exchange, we thought we might benefit from some cost savings.

Cadillac Tax

A third frequently cited benefit of private exchanges may be the ability of employers to more easily avoid the ACA’s “Cadillac tax.” Starting in 2018, all health plans with annual premiums over \$10,200 for an individual or \$27,500 for a family will be subject to an excise tax of 40 percent on the amount of the premium over the threshold. Nearly all respondents we spoke with said this is one of the key issues employers will face in the next few years.

The 2014 Society for Human Resource Management and Employee Benefit Research Institute Health Benefits Survey found that 3.5 percent of employers were planning to move to private exchanges in 2015 to avoid paying the Cadillac tax on high-cost health plans (Fronstin, 2014). Because the full premium, not just the employer contribution, counts toward whether the

plan exceeds the Cadillac tax threshold, the tax cannot be avoided simply by moving to a private exchange. However, an employer that moved to a private exchange could offer a mix of high- and low-cost plans and could require the workers to pay the full marginal cost of the Cadillac tax if they choose the more-expensive plan option (e.g., Sammer and Miller, 2013; Fronstin, 2012b).

Several respondents said that employers want to avoid hitting the Cadillac tax limit and are doing everything they can to keep their costs down. As one respondent put it: “That means changing [the company’s] benefit strategy to keep their plans below the Cadillac tax level.” The respondent told us that employers can keep premiums down in a variety of ways: by keeping claims low, adopting lower-cost plans, moving to lower-cost networks, and implementing wellness or care-management programs.

These cost-saving strategies can be pursued regardless of whether an employer enters a private exchange. However, to the extent that private exchanges encourage workers to choose lower-cost plans, they may reduce exposure to the Cadillac tax. Private exchanges may also enable employers to offer workers a menu of options that includes generous plans while simultaneously allowing workers to choose a plan that avoids the tax.

Advantages and Disadvantages for Employees

Choice of Health Plans and Other Benefits

One potential benefit associated with private exchanges is the increased choice of health plans available to employees (Alvarado et al., 2014; Cohen and Condeluci, 2012; Aon Hewitt, 2012). Before the arrival of the public or private exchanges, most nonelderly Americans who received coverage through their jobs had very little choice in health plans, with the majority of employers offering only a single health insurance option. According to the KFF/HRET 2014 employer survey, one-half of all workers with access to employer coverage have only a single plan option (KFF/HRET, 2014). For many workers and employers, one of the main advantages of private exchanges is that they enable a more health insurance options. However, in some contexts, too much choice can be difficult for consumers to process. Workers may not have enough information to choose an adequate health plan or may find the choice overwhelming (Fronstin, 2012b; Demko, 2014; Block, 2013). Decision-support tools may help employees choose the right plan. Technology employers, such as Bloom Health and Array Health, have created specialized decision-support tools for private exchanges. Many employers also need advice on what plans to offer employees. The 2014 PEEC survey of employers found that a majority of employers (about 72 percent) wanted help making decisions about coverage and wanted that advice to be independent of the plan sponsors.

In addition to allowing an employer to offer employees more health plan options, private exchanges can also be used to offer ancillary benefits, such as life insurance. Private exchanges also relieve the employer of having to choose one or two plans for an entire workforce. For

example, an insurance industry expert that we spoke with said the choice allows employees to pick appropriate insurance:

[W]ith exchanges, you now have several options from several different carriers, so people can kind of choose what's right for them. So a young 24-year-old single guy can choose a high deductible plan that's, you know, limited coverage. And somebody who needs a lot more care, uses a lot of care, can get a different plan.

One drawback of increased choice, however, is that having more choices can make it difficult for employees to select a plan that is adequate for their health risk. Several authors have noted potential drawbacks of the expansion of choices in the private exchanges. These drawbacks include a lack of employee knowledge that can lead to under- or overinsurance and anxiety over the transition from traditional employee coverage to private exchanges (Fronstin, 2012b; Demko, 2014; Block, 2013). For example, a survey conducted by the Employee Benefits Research Institute found that 36 percent of employees felt they were not comfortable choosing their own health plans (Fronstin, 2014). Pauly and Harrington (2013) argued that more plan choice may come at a higher administrative cost, even in the context of a private exchange, particularly if plans move to a fully insured model. Several publications from the industry also cite potential increases in administrative costs with a fully insured model that some of the private exchanges offer (e.g., Brown, 2014). Others, such as Fronstin (2012a), have argued that private exchanges on the whole can transfer administrative functions from employers to the plans, thereby reducing these costs.

One industry representative cautioned that this selection process is still difficult, even with decision tools:

People don't understand health insurance. There's a tremendous literacy issue, so yes, more choices [are] going to make it harder on the employees to make a good choice, the best choice. It is easy to make an argument that an employer making a choice for them leaves them with no choice, so it's a balance.

One employee advocate cautioned that it is not yet clear that decision-support tools are helping employees, saying that this is traditionally a role brokers play for employers in supporting their decisions on selecting insurance.

Increased Cost Sharing

Private exchange arrangements can lead to increased cost sharing from employees. This occurs if the employer limits or reduces its premium contribution when moving to a private exchange (e.g., with a defined contribution approach) or if employees select less-generous plans on these exchanges. These mechanisms affect both the amount the employee pays in premiums and the amount the employee pays at the point of service:

There have been a lot of parallels that have been drawn between defined contribution in the health space and defined contribution in the retirement space. . . . It's possible the same kind of thing could happen where really they're

just shifting costs. . . . There's been an implied or unspoken perspective that defined contribution would help employers reduce costs, but you hear people talking less about how that actually works.

If employees do not understand the plan they are purchasing, they can open themselves up for substantial out-of-pocket costs: "People are less prepared to cover expenses if something happens." The increased cost-sharing from selecting a lower-cost plan can also be a problem in the public exchanges.

Potential Implications for SHOP

We considered a variety of hypotheses for how private exchanges could affect the ACA's SHOP exchanges. Under the ACA, all fully insured small businesses are part of the same risk pool and are subject to the same rating requirements, which allow premiums to vary only based on age, tobacco use, family size, geography, and the AV of the plan. Private exchanges could affect the SHOP exchange risk pool if they encourage more businesses with healthier risk profiles to self-insure, thus leaving less healthy employees in the fully insured small-group market. Private exchanges could also affect the risk pool if they incentivize small businesses to begin offering coverage (or preclude small businesses from dropping coverage). Additionally, private exchanges may affect the SHOP exchanges if they siphon enrollment from SHOP. With lower participation in SHOP, the SHOP exchanges may not be able to collect enough revenue (e.g., through administrative fees) to be self-sustaining.

The SHOP exchanges were created for employers with 100 or fewer employees. In 2014 and 2015, states have the option to restrict the SHOP exchanges to business with 50 or fewer workers but must expand the market to all employers with 100 or fewer workers by 2016. In most states, these small business exchanges run parallel to the individual exchanges. The fines for not offering coverage have been delayed to 2016 for those with 50 to 99 employees (Lowry and Gravelle, 2015). Like private exchanges, SHOP exchanges have the ability to offer small employers a number of plan choices, and the employers can control what plan choices are offered to employees.

As an additional incentive, the SHOP exchanges offer a tax credit for small employers with fewer than 25 employees with average salaries less than \$50,000 per year ("See If Your Business Qualifies For SHOP Tax Credits," 2014). The availability of the tax credit for small businesses purchasing coverage through the SHOP exchanges is as follows:

- 50 percent of employers' share of premiums (for profit)
- 35 percent of employers' share of premiums (nonprofit)
- Also dependent on the number of covered employees
 - Credit is highest for those with less than 10 employees
 - Decreases as number of employees increases to 25
- Employers can only qualify for the tax credit for two consecutive years (Government Accountability Office [GAO], 2013).

Despite the financial incentive, only about 170,000 out of 1.4 million to 4 million potentially eligible small businesses took up the tax credit, according to recent reports from GAO (GAO, 2013; GAO, 2015). The GAO indicates that barriers to enrollment in the SHOP exchange may have outweighed the benefits. For example, businesses were unsure of how the SHOP exchanges were going to run in their first year of operation and may have felt that the application process for the tax credits was too much work. To help small employers determine whether they qualify for the tax credit, the Centers for Medicare and Medicaid Services (CMS) recently launched the SHOP Tax Credit Estimator on HealthCare.gov.

There has been some concern that the ACA creates new incentives for small businesses to self-insure to avoid the ACA's rating regulations and single risk pool. If small groups with healthy and low-cost workers gravitate toward self-insurance, premiums on the SHOP exchanges and in the single small-group risk pool could increase. Historically, it is much less common for small groups to self-insure because their size does not allow them to effectively spread risk among employees, but the ACA may change the incentives: "We are seeing more sales of low attachment point stop-loss coverage to smaller businesses, that's kind of a growing marketplace, but that's a carrier, not an exchange [issue]."⁸

We asked discussion respondents whether private exchanges might be designed to make it easier for small businesses to self-insure. However, we did not find much support for this hypothesis. One researcher that we talked with believed that offering self-insurance to small employers in private exchanges could open operators up to regulatory challenges. For example, the respondent speculated that pooling multiple small businesses in a self-insured private exchange could cause the exchanges to be labeled as multiple employer welfare groups, which are subject to a variety of regulatory and reporting requirements under the Health Insurance Portability and Accountability Act, Employee Retirement Income Security Act (ERISA), and ACA: "I would speculate that those who are setting these things up don't want to muddy up their business plans with regulatory issues that are still, you know, not fully resolved."

We did not find an example of an exchange operator offering self-insured products in private exchanges for small businesses. Only one of the single-carrier exchange operators that we spoke with markets private exchanges to businesses with 100 or fewer workers, and the products the issuer sold in this market were fully insured. One exchange operator we spoke with said it is offering self-insured products to businesses with as few as 25 employees in some states: "If there is a healthy population with an employer we have some level funding options that provide the employer the advantages of self-funding without the variability that often self-insured products may offer." This exchange operator, however, did not market private exchanges to small employers.

⁸ An *attachment point* is the dollar value at which the employer stops paying a claim and the stop-loss insurer picks up the remainder of the cost.

Dropping Coverage Versus Buying in Private Exchanges

The number of employers offering coverage to employees has declined steadily over the past several decades. The percentage of employers offering coverage to both full- and part-time employees was 55 percent in 2014, down from 66 percent in 1999 (KFF/HRET, 2014). Health insurance offer rates vary dramatically by employer size, with nearly 100 percent of employers with 200 or more employees offering coverage in 2014, compared to 54 percent of small businesses with less than 200 employees. Only 44 percent of businesses with fewer than 10 employees offered coverage. A recent study in *Health Affairs* reported that firm offer rates held steady over the first year of the ACA implementation (Blavin et al., 2015).

The KFF/HRET survey shows the percentage of employers that offer coverage to any workers, which could include part- and full-time workers. Among employers offering coverage, KFF/HRET shows no change in the trend over time in the probability of offering to part-time workers among large firms from 2011-2014, and among small firms, there is no clear trend over time. The private exchanges do not specifically address coverage for part-time workers. Our sense is that employers offering to part-time workers would continue to do so in private exchanges, but we have no confirming data. The SHOP Marketplaces CMS operates allow both part-time employees and retirees to enroll.

The ACA may exacerbate the erosion of employer coverage because it creates a viable, subsidized market for health insurance outside the employer system. Now that the public, individual marketplaces are entering their second year, some businesses may decide to stop offering coverage altogether to allow employees to purchase subsidized coverage in the individual exchanges. While the ACA institutes fines for employers with 50 or more workers that do not offer insurance, some employers may still opt not to offer coverage, particularly low-wage employers with employees who may be eligible for substantial subsidies on the individual market (Herring and Pauly, 2010).

Private exchanges could mitigate the trend toward dropping coverage if they lead to cost savings or otherwise make it easier or less burdensome for employers to offer insurance. Some authors note, that while there may be initial savings when employers move to private exchanges (e.g., if employees gravitate toward lower-cost plans), it is not clear whether these savings will continue as premiums rise, particularly if the employer has tied the contribution to one of the plans in the exchange (Fronstin, 2012b; Cook, 2014). To date, we have no clear evidence that private exchanges are affecting employer offer rates. However, if private exchanges cause some employers to continue offering (or to start offering) coverage, this trend could influence the SHOP risk pool by adding more employers to the pool. Specifically, because the ACA requires the entire small-group market to operate as a single risk pool, including SHOP plans, private exchange plans offered to small employers, and other small-group plans, small employers that newly offer coverage in private exchanges will affect premiums on the SHOP exchanges.

When asked whether private exchanges might encourage small businesses to offer coverage, many we spoke with said that the private exchanges are not likely to affect this decision:

You've always had two kinds of [small] employers. . . . Those that offered benefits and those that didn't. Those that offered it always felt there was a business reason for doing so. They were concerned about recruitment and retention and the overall success of their business. . . . Small employers that didn't offer health benefits, for the most part, didn't think that not offering them had a negative impact on the overall success of their business. And I think that is a bigger factor than whether they get their benefits through a private exchange or through the SHOP exchange or don't offer coverage at all.

The respondents we spoke with did not believe that private exchanges were likely to influence SHOP risk pools.

Private Exchange Benefits over SHOPS

A private exchange may provide several benefits over the SHOP exchange. States can choose to run their own SHOP exchanges or defer to the federal government. In 2015, the federal government is running SHOP exchanges for 34 states, including 27 states with federally facilitated marketplaces and seven states with state-partnership marketplaces (KFF, 2015). There was no online SHOP enrollment process in the federally facilitated marketplaces in 2014 (GAO, 2014b). In some states, the number of issuers on the SHOP exchange is low, so private exchanges could potentially offer more choices. A recent GAO report found that Arkansas, West Virginia, and New Hampshire had only one silver tier plan each in the SHOP exchange, while Washington, D.C., had 89 (GAO, 2014b). The average number of issuers in the SHOP Marketplaces was four in 2014 (GAO, 2014a). Even where there are many plan choices or many issuers on the SHOP exchange, the administrative support may be better in a private exchange. Although ease of use and quality of support technology may differ between public and private exchanges, not much in the literature currently supports whether the website or decision-tool software is better when purchasing through a private exchange compared to SHOP. One small business owner, who has written a series of blog posts for the *New York Times*, actually thought the public exchange website was an easier way to quickly compare plans than through actual insurer websites (Downs 2014a; Downs 2014b). This, however, is just one small business owner's experience with the SHOP website in Pennsylvania and may not apply to all states.

Private exchanges could affect the SHOP exchanges if they siphon enrollment. The ACA requires that the exchanges (both individual and SHOP) be financially self-sustaining, with funding obtained through operating fees charges to issuers, enrollees, or both (Day and Nadash, 2012). Many with whom we spoke suggested the private exchanges were easier to deal with than the public SHOP exchanges in their first year and may eclipse them in terms of popularity in later years: "The public SHOP is struggling in most states. . . . It could be that these private

exchanges get set up, you get to a point where you say, ‘I’m not sure what the point of having a public SHOP is.’”

One small employer we spoke with echoed the comments about the SHOP exchanges in their first and even second year:

Last year the website wasn’t functioning at all. It is just not a feasible process right now. . . . I made accounts in 2013 to look at the SHOP . . . and when I went back to try and use those accounts this fall we were unable to get past the verification step, so I was never able to actually use it.

Respondents also speculated that the small business premium tax credit, which is available only to employers enrolling in the SHOP exchanges, does not provide a strong incentive to enroll in SHOP. The lack of interest in the credit could relate to the fact that it is temporary and available only to a limited subset of very small employers with relatively low wages. It is also possible that some employers are unaware of the credit or that the administrative hassle associated with filing for the credit poses a barrier to taking it up. Limited uptake of small business tax credits is also noted in a recent GAO report (GAO, 2013).

An additional barrier to SHOP enrollment is the ACA’s requirement that businesses have at least a certain percentage of their employees taking up coverage to enroll in the SHOP exchange. This percentage varies from a low of 50 percent in Tennessee to 75 percent in Texas (CMS, 2014b). Small businesses are able to enter without meeting this rate during the one-month special enrollment period each year, from November 15–December 15 (Internal Revenue Service, 2014). One insurance industry representative cautioned that SHOP’s minimum participation rules can mean that some employers did not want to offer through SHOP: “The participation rates can hold back employers from beginning to offer coverage if they can’t get enough employees to kick in.” Responding to the challenge of businesses having to meet SHOP’s minimum participation rate, CMS recently proposed and finalized a new regulation giving small employers credit for employees who have coverage from another source, such as a spouse or a public program. In effect, this will make it easier for small employers to enroll in coverage through SHOP Marketplaces. This regulatory change will make it easier for employers with 50 or more employees to comply with the ACA requirement to provide coverage to employees as of 2016.

Private exchanges might offer administrative benefits or online support that is perceived to be better or more efficient than the services available on SHOP. One respondent stated:

If you’re a small group, especially if you have fewer than 10 employees, you are the owner, but you’re also the human resources department, the benefits department, the employee relations department—you know, this is a big job for you. You’re also out there in the market trying to find somebody who can be a trusted resource for you and help you choose your benefits plan. . . . You get the benefits of a big company.

More than one respondent mentioned that brokers may have the potential to influence the uptake of private exchanges rather than SHOP:

The interesting thing is you're likely going to see small businesses sold on a private exchange without really realizing that's what they're buying. Their broker or agent is going to tell them . . . "Hey, I've got a better deal for you. For the same amount of money you are spending per person, I can offer you, your employees ten choices instead of two."

An insurance industry expert commented that the options in and out of the SHOP exchanges were not all that different in the first year: "If you go through your broker, I think the broker reimbursement may be higher outside the SHOP exchange." This representative also mentioned that brokers were saying it was just more work to go through the SHOP exchanges: "If the options are similar, then why not go through the path of least resistance from the broker's perspective?" The owners may not have the time to search extensively for coverage and may rely solely on their broker's advice, not having even explored the public exchanges. As a counterpoint, however, CMS regulations require issuers selling plans in the federally facilitated marketplaces to offer brokers the same commissions for similar plans sold outside the marketplaces (CMS, 2014a).

4. Modeling the Implications of Private Exchanges for Employers and Employees

Our literature review and discussions with experts revealed that reducing health care costs and possibly avoiding the Cadillac tax are primary motivations for employers to move or consider moving to private exchanges. However, discussants reported that most of the cost reductions in moving to private exchanges stem from employees switching to lower-cost plans. Moves to lower-cost plans may be incentivized through reference pricing or defined contribution approaches, in which the employer's contribution is fixed as a dollar amount or as a percentage of a low-cost plan and does not increase if the employee chooses a more-expensive option.

While the ability to choose and enroll in a low-cost plan may be beneficial for some consumers, out-of-pocket expenditures could increase if people select plans with low AVs. Several studies have shown that consumers lack familiarity with key health insurance terms, such as *coinsurance* and *deductibles* (Loewenstein et al., 2013; Blumberg et al., 2013; Barcellos et al., 2014), raising the possibility that some consumers might not fully understand the implications of selecting a low-cost plan on a private exchange. Other literature has found that consumers place an undue emphasis on premiums when making health insurance choices, further suggesting that cost-sharing is not well understood (Zhou and Zhang, 2012; Abaluck and Gruber, 2011).

Moreover, employers' abilities to reduce and control costs on private exchanges may be limited by certain ACA requirements. For example, employers' attempts to make health care costs more predictable by using a defined contribution approach are limited by the ACA's employer mandate, which can lead to penalties if workers must contribute more than 9.5 percent of household income to enroll in minimum essential coverage. Similarly, strategies to avoid the Cadillac tax by offering lower-costs plans may be limited by the ACA's minimum essential coverage provisions, which require plan AVs to be no less than 60 percent.

In this section, we use RAND's COMPARE microsimulation model to estimate the implications for employers and workers of cost-saving strategies that may be facilitated by private exchanges. We consider four research questions in particular:

- **What are the implications for workers if employers introduce private exchanges and move to a defined contribution approach?** In this scenario, we focus on how employer strategies to reduce premium costs might affect workers' total out-of-pocket costs, including both premium contributions and out-of-pocket expenditure.
- **What share of workers hit the 9.5 percent affordability threshold under a defined contribution approach?** In this scenario, we consider whether the ACA's affordability threshold may limit employers' ability to implement a true defined contribution approach.
- **What share of employers offer plans that hit the Cadillac tax under different assumptions about AV?** In this scenario, we estimate premium trajectories over time for

plans with 60-, 70-, 80-, and 90-percent AVs and calculate what percentage of employers would hit the Cadillac tax if they offered such plans. We hold AVs and other plan characteristics (such as provider networks) constant, so the probability of hitting the Cadillac tax is driven by workers' health status and anticipated expenditure. Of the four research questions considered, this is the only one that focuses on employer-level results. The other analyses focus on worker-level outcomes.

- **What are the implications for employee out-of-pocket spending if employers or employees adjust their behavior to avoid the Cadillac tax?** In this scenario, we assume that employers (or their workers) attempt to avoid the Cadillac tax by selecting a lower-AV plan if their original plan would have been subject to the tax.

The research questions described above are only loosely related to private exchanges. Private exchanges are not necessary to incentivize enrollment in low-cost plans or to implement a defined contribution approach. Moreover, employers will face the Cadillac tax whether or not they use private exchanges, and the option to reduce plan AVs in response to the tax could be implemented with or without private exchanges. However, private exchanges may facilitate employers' shifting to a new model of health care provision focuses more on cost containment than traditional approaches do. We focus our modeling on these cost-containment approaches, rather than on private exchanges specifically, because the cost-containment approaches could have unanticipated consequences for workers' spending patterns.

Microsimulation Methods

To estimate how employer policy changes related to private exchanges might affect workers' premiums and out-of-pocket expenditures, we used data from the COMPARE microsimulation model. COMPARE is a tool developed at RAND to predict how individuals and employers might respond to major health policy changes, including the ACA. The model has been used extensively to analyze how changes to the ACA might influence health insurance premiums, enrollment decisions, and government spending. Cordova et al. (2013) provides details on COMPARE's methodological approach. Briefly, the model uses a utility maximization approach to predict how individuals and employers will respond to changes in health policy. Under utility maximization, individuals and families make decisions about whether to enroll in health insurance and which plan to choose by comparing the costs and benefits of available options. Firms make decisions about whether to offer insurance based on such characteristics as employer size, unionization status, share of low-wage workers, industry, and the estimated value of insurance to the employers' workers. Individuals and employers' decisions are influenced by such factors as expected health spending with and without insurance, individual penalties associated with not enrolling in coverage, employer penalties associated with not offering coverage, ACA regulations that affect premium levels, benefit generosity, and aversion to risk. Firms and their workers also take into account current tax advantages associated with employer-sponsored coverage (which is not subject to income or payroll taxes), as well as the possibility

that low-income workers may be better off with Medicaid or subsidized marketplace plans than with employer coverage.

Because details of the model have been published elsewhere, we focus the methodological discussion below on aspects of the model that are critical for the current analyses. These components include the model's data sources, our approach to estimating premiums, plan AV, enrollee out-of-pocket spending, and rates of health care cost growth over time. At the end of the section, we also discuss several important limitations.

Data Sources

To populate COMPARE, we created a synthetic data set to represent the full population of the United States, including workers, families, and employers. Data on individuals come from the April 2010 wave of the 2008 Survey of Income and Program Participation (SIPP) (U.S. Census Bureau, 2008). Because health care expenditure data from the SIPP are limited, we merged expenditure information from the 2010 and 2011 Medical Expenditure Panel Survey, Household Component (MEPS-HC) (Agency for Healthcare Research and Quality, 2011). We linked Medical Expenditure Panel Survey (MEPS) expenditures to individuals based on age, sex, insurance status, health status, and poverty category. We then aggregated workers in the merged SIPP-MEPS files into hypothetical firms by grouping people based on employer size, industry, census region, unionization status, and whether the employer offers health insurance. The distribution of employers in COMPARE is modeled using data from the 2010 KFF/HRET Annual Survey of Employers (KFF/HRET, 2010). We made further adjustments to represent the distribution of employers in the United States more accurately, based on U.S. Census Bureau (undated).

We used expenditure data from the MEPS as a basis for estimating health insurance premiums for both large-group and small-group employers. When calculating premiums for small-group employers, we took into account the rating regulations required by the ACA.

Premiums for Small Firms' (≤ 100 Workers)

The ACA limits premium variation for small employers, requiring that premiums in this market vary only by age, tobacco use, family size, AV, and geographic area. While premiums can vary according to age, premiums for the oldest adult in the market can be no more than three times as expensive as premiums for a 21-year-old. Similarly, tobacco users can be charged no more than 1.5 times as much as nontobacco users. The entire small-group market (within a geographic rating area) is considered a single risk pool, and the ACA imposes risk adjustment across plans to transfer costs from plans whose enrollees have lower than average actuarial risk to plans whose enrollees have higher-than-average actuarial risk.

We took these provisions into account when estimating small-group premiums in our model. To calculate premiums, we used the simple actuarial logic that premiums are equal to expected medical expenditures in the group, times AV, times an administrative loading factor. We then

applied ratio adjustments to scale premiums to enrollees' age, the AV of the plan chosen, and enrollees' tobacco use status. The final equation used to estimate small-group premiums is

$$Premium_{avt}^{SG} = R_v * R_a * R_t * E(ME_{Claims}) * (1 + \delta).$$

Above, the subscripts a , v , and t represent age, AV, and tobacco use, respectively. The term $E(ME_{Claims})$ is the expected amount of medical claims for an average enrollee in the single risk pool, and δ is an administrative loading factor. The R terms represent the ratio adjustment used to account for the ACA's rating regulations. R_v is the ratio of the AV of the premium being calculated to the average AV of the pool. For example, the bronze premium is constrained to be 6/7ths of the silver plan premium. We constrained premium ratios to the ratio of the premiums' AVs and modeled different metal tier premiums as being in the same pool to account for the ACA's risk adjustment provisions. The term R_a accounts for the ACA's age rating regulations using the rating curve published by the Center for Consumer Information and Insurance Oversight (CMS, 2014c). Finally, the term R_t is set to 1.5 if the enrollee is a tobacco user and 1 otherwise.

We calculated $E(ME_{Claims})$ using data from the MEPS-HC. For small-group plans, we assumed that the administrative loading factor is 12 percent. AV calculations are described in more detail later.

Premiums for Large Firms' (≥ 101 Workers)

For employers with more than 100 workers, premiums are employer specific and represent a weighted average of the employer's experience-rated premium and a community-rated premium. We estimated expected claims for the experience-rated premiums by using the MEPS to predict health spending for enrolled workers and their dependents. Our regressions account for individuals' age, insurance status, health status, income, census region, gender, and employer size. To estimate community-rated premiums, we calculated the average expenditure for all large-group enrollees in each census region. To calculate premiums, both the experience-based and community-based claims estimates are adjusted to reflect administrative loading factors and AVs. For employers with more than 100 workers, we assume that the administrative loading factor amounts to 8 percent of premiums collected.

After estimating both the community- and experience-rated premium for each employer, we calculate the final premium using the following function:

$$Premium^{LG} = [\omega \times (P_{experience})] + [(1 - \omega) \times (P_{community})]$$

where ω is a term that ranges from 0 to 1 and reflects the relative weight insurers place on the employers' claims experience relative to the expected expenditure among all similarly sized

employers.⁹ On advice from actuaries, we assumed that ω is 0.37 for employers with 101 workers, rising (on a sliding scale) to 1 for employers with more than 500 workers. The weighting reflects the possibility that small employers' past claims might be inaccurate predictors of future costs, so insurers hedge by relying on market experience to set prices.

Premium Adjustments

We adjusted premiums for single covered workers to reflect the distribution of premiums found in the 2014 KFF/HRET Employer Health Benefits Survey (KFF/HRET, 2014). We then assumed that each employer's premium for its employee-plus-one plan was equal to 2 times its single premium and that the family plan premium was equal to 2.86 times its single premium, based on 2013 data from the MEPS–Insurance Component. Using the distribution of 2014 single premiums for covered workers in the KFF/HRET data, we imputed distributions of premiums for plans with AVs of 60 percent, 70 percent, 80 percent, 90 percent, and more than 90 percent. We used a beta distribution to model the distribution of single premiums for covered workers and used an expansion factor ρ to map premiums to the domain $[0,1]$. The factor ρ represents an upper bound on premiums. We estimated parameters using a combination of method of moments estimation and percentile matching. For sample premiums x_i with weights w_i and beta distribution shape parameter α , the parameters β and ρ are

$$\beta = \left(1 - \frac{\mu}{\rho}\right) \left(\frac{\rho\mu - \mu^2}{v} - 1\right) \text{ and } \rho = \frac{\mu^3 + v\mu}{\mu^2 - \alpha v},$$

where

$$\mu = \frac{\sum_{i=1}^n w_i x_i}{\sum_{i=1}^n w_i} \text{ and } v = \frac{\sum_{i=1}^n w_i (x_i - \bar{x})^2}{\sum_{i=1}^n w_i - 1}$$

are weighted sample means and variances, respectively. Correctly capturing the upper tail of the premium distribution is critical to accurately estimating the effects of the firewall and Cadillac tax. For that reason, we adjusted model parameters to ensure that we matched the 75th and 95th percentiles reported in the KFF/HRET 2014 survey, while still matching the average premiums from the KFF/HRET survey. When adjusting premiums to match the KFF/HRET data, we preserved the ordering of premiums we had originally calculated using the methods described above for small and large employers. For example, an employer with an unadjusted premium at the 95th percentile would still have premiums at the 95th percentile after we completed our adjustments.

By using 2014 data from KFF/HRET, we were able to capture any changes to the distribution of premiums that may have occurred between 2013 and 2014 as a result of ACA implementation.

⁹ The Urban Institute uses a similar strategy to estimate premiums (see Blumberg et al., 2003, p. 128, eq. 9.1.2).

Actuarial Values

We assigned average AVs to plans according to employer size based on Gabel, McDevitt, et al. 2006. Rather than assigning a single AV to all employers of the same size, we imputed a distribution using data from Gabel, Lore, et al. (2012). A key assumption underlying our analysis is that employer AVs were not directly affected by the ACA. We thus assumed that the average AV conditional on employer size, and the distribution of AVs in the employer market, did not change after the major provisions of the ACA were implemented in 2014. We made this assumption for two reasons. First, average AVs in the employer market have historically remained relatively constant. For example, using data from 2002, Gabel, McDevitt, et al. (2006) found that the average AV across all employer plans in the United States was 83.4 percent. A more recent study by the same coauthors (Gabel, Lore, et al., 2012) found that the employer average AV in 2010 was 83 percent. Second, at this point, we do not have comprehensive information on how employers' AVs evolved after the ACA's major provisions took effect on January 1, 2014. Because recent studies have estimated that the ACA had a relatively small impact on the employer market overall (Claxton, Rae, Panchal, Whitmore, et al., 2014; Blavin et al., 2015), we assume that AVs were not fundamentally affected by the law.

Out-of-Pocket Spending

We assigned a deductible, coinsurance rate, and out-of-pocket maximum to each plan based on the plan's AV. We set these cost sharing parameters to ensure that a typical population enrolled in the plan would pay 1 minus the AV in out-of-pocket spending. To simplify the calculations, we applied only three cost-sharing parameters and assumed that individuals first pay the deductible, then pay coinsurance over the deductible until the out-of-pocket maximum is reached. In reality, plans can have many different designs, including separate deductibles for drugs and medical spending, different coinsurance rates for different types of services, copayments instead of coinsurance, and other arrangements. In separate analyses, we have found that attempting to realistically model the variation in cost sharing arrangements can easily become intractable. If people select health insurance plans within an AV tier to minimize their potential out-of-pocket spending, our simplified approach may mischaracterize the distribution of out-of-pocket spending. However, this concern is reduced by the fact that one-half of all workers have access to only one plan (KFF/HRET, 2014), so the ability to selectively choose a plan that yields low cost sharing is limited. Further, a large literature demonstrates that people have trouble understanding health insurance plan design and do not systematically enroll in plans that minimize costs even when offered multiple options (Loewenstein et al., 2013; Zhou and Zhang, 2012). We adjusted the total healthcare spending associated with each plan using elasticities derived from the RAND Health Insurance Experiment to account for the fact that individuals with more generous plans consume more health care (Newhouse et al., 1993). Given the RAND Health Insurance Experiment, we assume that individuals who are responsible for the

full cost of their health care consume about one-half as much health care as those who have free care. Consumption is based on plan design, so individuals in COMPARE behave as though they bear the full cost of health care before they hit their deductible and behave as though they have free care once they reach their maximum out of pocket.

Inflation Trends

We estimated trends in both health insurance premium growth and the Consumer Price Index (CPI) using the Congressional Budget Office's (CBO's) January 2015 and March 2015 budget projections (CBO, 2015a; CBO, 2015b). The January report estimated that annual growth in the CPI would average between 1.2 and 2.4 percent between 2014 and 2024. The March report updated CBO's projections of the growth in private health insurance spending. Strikingly, the analysis found that the growth in private health insurance spending between 2006 and 2013 had averaged only 1.8 percent per year above CPI growth, compared to 5 percent per year growth (above CPI) between 1998 and 2005. CBO assumes that future growth in health insurance premium costs will reflect a weighted average of the 1998–2005 and the 2006–2013 trends. Following CBO, we assumed that future growth in private health insurance spending will average 2.2 percent per year between 2014 and 2018 and 3.1 percent per year between 2018 and 2024. We applied these trends after accounting for general inflation, as measured by the CPI.

Limitations

Our analysis has several important limitations that should be considered in interpreting our results. First, in modeled scenarios without private exchanges, we assumed that employers offer only a single plan, with an AV drawn from the distribution assigned, as described earlier. We adjusted the distribution of AVs to ensure that we had the correct number of workers enrolled in plans of different AVs. As a result, worker-level results should be reasonably accurate. However, the model cannot be used directly to estimate employer-level results because it does not capture the fact that some employers will have workers who have enrolled in a distribution of plans. To address this issue, all employer-level analysis reported in this report focuses on hypothetical scenarios that do not rely on our estimates of the share of workers in each employer enrolled in specific plans. For example, when considering the potential impacts of the Cadillac tax, we estimated how many employers would be affected *if all employers* offered a plan with a 90-percent AV.

A second limitation is that no nationally representative data sources report the distribution of workers within employers (e.g., in terms of income, age, health status, etc.). This poses a challenge because the model seeks to develop an accurate representation of U.S. employers and their workers, but we have limited ability to verify that we have accurately mapped workers into employers in a way that preserves correlations across workers in terms of demographic characteristics. With the available data, we are able to match workers to employers based on Census region, employer size, industry, whether the employer has unionized workers, and

whether the employer offers health insurance. While this approach should capture some correlations across workers in terms of demographic characteristics, it may understate the degree to which workers with similar ages, incomes, and health needs tend to group together within employers. Because premiums in our model are based on the expenditures of the workers and family members enrolled in coverage at each employer, it is possible that we are underestimating the variation in premiums across employers in the model. But, without better data sources, there is no way to validate or correct for this issue.

Another limitation is that no nationally representative data sources available that would allow us to estimate how workers choose among plans offered in private exchanges or the average mix of plans offered in private exchanges. To address this limitation, we considered private exchange outcomes using hypothetical scenarios. For example, we considered what might happen if workers moved from a traditional employer plan to a private exchange and selected a health insurance plan with a 60-percent AV. We did not attempt to predict what types of plans workers would select on private exchanges.

Finally, we did not have access to a single data source that reports both premiums and AVs for health plans. As a result, we needed to combine premium data from the Kaiser/HRET survey with AV data reported in papers by Gabel and colleagues, making relatively strong assumptions about the joint distribution of AVs and premiums. This could mean that we are misclassifying AVs for some plans (Gabel et al., 2006; Gabel et al., 2012).

Overview of Findings

We estimate that moving to lower-AV plans on private exchanges does not necessarily lead to higher total spending for the average worker. When employees choose lower-AV plans, spending on out-of-pocket costs increases, but spending on premiums falls. On balance, we estimate that the typical employee spends less on a low-AV plan. Lower spending alone does not necessarily imply that workers are better off in low-AV plans. Due to risk aversion, workers may be willing to pay extra to avoid the risk of excessively high spending. If employers cut contributions significantly when moving to private exchanges, employees' total spending will likely increase regardless of plan AV.

Yet our analysis also suggests that cutting contributions significantly when moving to private exchanges may be problematic for some employers, given the ACA's minimum premium contribution requirements. If employers set contributions at a fixed amount based on a percentage of a 60-percent AV plan in 2014 (indexed to general inflation), more than 20 percent of single workers and approximately 5 percent of family workers would need to pay more than 9.5 percent of income to enroll in the lowest-cost available employer plan. Because their premium contributions for employer coverage are high, these workers would become eligible for marketplace subsidies by 2024. In turn, employers could be penalized by more than \$3,000 per worker for each employee who enrolls in subsidized marketplace coverage.

One frequently cited reason for adopting private exchanges is that these exchanges could potentially make it easier for employers and workers to avoid the ACA's Cadillac tax. While plans with high premiums may face the Cadillac tax whether or not they are offered on private exchanges, private exchanges may enable employers to offer a mix of plans, including lower-AV plans that are less likely to reach the Cadillac tax limit. Our analysis suggests that, while more than 20 percent of employers would hit the Cadillac tax in 2024 if they offered plans with a 90-percent AV, fewer than 1 percent of employers would hit the Cadillac tax in this time frame if they offered a 60-percent AV plan.

We also considered the consequences for workers if they moved to lower-AV plans to avoid the Cadillac tax. Such a move could occur if employers eliminated plans that hit the tax and instead offered less-generous plans, regardless of whether these employers use private exchanges. Alternatively, some employers may offer an array of plans through a private exchange—including plans affected by the Cadillac tax—and allow workers to choose whether they wish to pay the additional marginal cost if they wish to enroll in this coverage. Because the Cadillac tax is so steep, it is likely that few workers would chose an affected plan. For an average worker at an employer that may be affected by the Cadillac tax, we estimate that total spending will fall if the worker switches to a lower-AV plan. This drop in spending occurs even relative to a baseline scenario in which the Cadillac tax is not implemented, suggesting that some individuals in high-premium plans may be overinsured. However, an important caveat with this result is that we considered the effects only for the average and median worker. The ACA imposed annual out-of-pocket maximum spending amounts for all health insurance plans, regardless of AV, and workers with extremely high spending might be likely to hit these caps regardless of what plan they enroll in. However, workers with moderately high spending, such as those with spending near the deductible, may spend more on total health care costs if they enroll in plans with lower AVs.

Results

The following subsections describe the results of our analysis in more detail.

Research Question 1: What Are the Implications for Workers If Employers Introduce Private Exchanges and Move to a Defined Contribution Model?

We considered scenarios in which we assumed all employers currently offering insurance moved to a private exchange and implemented a defined contribution approach. We considered a baseline scenario without private exchanges and two private-exchange scenarios with alternative defined contribution approaches. Because many employers currently set employees' premium contributions based on a percentage of the total costs, we implemented this approach as a baseline and assumed that the percentages the employee and the employer contribute remain stable over time. For the defined contribution scenarios, we assumed that employers set their

premium contributions as a fixed dollar amount and allow these amounts to grow at the rate of general inflation (based on CPI). Because CPI growth is projected to be lower than the growth rate of health care costs, the defined contribution approach will lead to a decline in the generosity of the employer's contribution over time. The following bullets describe each of these scenarios in more detail:

- **Baseline:** As a baseline scenario, we assumed that employers offering coverage used a percentage-based approach to determine contribution levels. Using the most recent data from KFF/HRET's annual survey of employer benefits, we assumed that employers contributed 86.5 percent of premiums for single coverage, 68.0 percent of premiums for family coverage, and 69.0 percent for single-plus-one coverage. Using data from the Kaiser/HRET survey and information on AVs published by Gabel, Lore, et al. (2012), we imputed a distribution of AVs with a mean of 83 percent. We allowed AVs to vary based on employer size, with smaller employers offering slightly less-generous plans than larger employers.
- **Defined contribution set at 2014 level:** In this approach, we calculated the dollar amount that each employer contributed to workers' premiums in 2014, then fixed this amount over time, indexing to the CPI rather than health care cost inflation. Over time, this approach leads employers to reduce the generosity of their contribution, assuming health care cost growth exceeds the rate of general inflation. As described in more detail in our earlier subsection on microsimulation methods, we derived projected trends in both CPI growth and health care cost inflation from CBO's January 2015 and March 2015 updated budget projections (CBO, 2015a; CBO, 2015b).
- **Defined contribution set using bronze plan:** In this approach, we calculated the percentage of the premium that each employer contributed in 2014. We then applied this percentage to a plan with a 60-percent AV, calculated the resulting dollar amount, and fixed this amount over time (indexing to the CPI). Because the average AV of plans offered in 2014 was approximately 83 percent, this approach resulted in a less-generous contribution initially because of the shift to offering a 60-percent AV benchmark plan. The value of the contribution falls further over time, assuming health care cost growth exceeds inflation.

In both of the defined contribution approaches, we assumed employers set different defined contribution amounts for single, single-plus-one, and family coverage.¹⁰ Single employee-plus-one coverage is grouped with family coverage in our tables and figures. Because we have limited information with which to predict how workers will respond when offered a fixed contribution to apply to a large set of plans in private exchanges, we assumed all workers chose the same plan, then calculated the financial consequences under scenarios in which the chosen plan had an AV of 60 percent, 70 percent, 80 percent, or 90 percent. In some cases, the employer's contribution amount exceeded the premium for a low-AV plan. In these instances, we capped the contribution amount at the plan premium. We calculated all effects in 2017 to avoid complicating the analysis

¹⁰ In the federally facilitated SHOPs, different contribution amounts are allowed only for single and family coverage; separate contribution amounts for single-plus-one coverage are not allowed.

with the Cadillac tax (which takes effect in 2018). The Cadillac tax is considered in separate scenarios, which we will describe later. Analyses for this research question focus on worker-level (rather than employer-level) outcomes.

Tables 4.1 and 4.2 show the effects of moving to a defined contribution approach based on 2014 contribution levels for single workers and for workers with families (including single-plus-one coverage). The tables show that, in general, workers' premium spending increases if they choose higher AV plans on private exchanges and, simultaneously, out-of-pocket spending falls. However, in general, total spending (the sum of premium and out-of-pocket spending) rises as the AV of the plan increases. Workers typically spend less with a 60-percent AV plan on private exchanges with a defined contribution pegged to 2014 premiums, even compared to the baseline scenario, in which the average plan had an AV of 83 percent. This analysis suggests that, on average in a defined contribution scenario, workers may spend less with lower-AV plans. This possibility is consistent with the overinsurance hypothesis, which posits that current tax advantages for employer-sponsored insurance lead employers and workers to choose more generous health plans than they otherwise would (Feldstein and Friedman, 1977; Pauly, 1986; Blomqvist, 1997; Cutler and Zeckhauser, 2000). In addition, part of the increase in spending as the AV of the plan increases may be due to an induced demand effect, in which individuals spend more when they have a greater level of insurance coverage. Economists refer to this phenomenon as *moral hazard*.

The finding that an average individual has lower total spending (premium plus out-of-pocket costs) with a low as opposed to a high AV is consistent with previous research (Lore et al., 2012). The bottom rows of the tables also indicate that, in general, the probability of spending more than 10 percent of income on health care increases as the AV of the plan increases because the more-generous plans require higher premium contributions. The results are less consistent when we consider the probability of spending more than 20 percent of income on health care—in this case, single workers choosing the bronze plan have a slightly higher chance of spending more than in the baseline scenario or with a silver plan. However, workers with platinum plans are more likely to spend 20 percent of income on health care than are other workers. In part, this pattern may reflect induced demand—consistent with prior research, our model assumes that individuals with lower cost-sharing requirements will spend more on health care than individuals with higher out-of-pocket costs.

The last two rows of Tables 4.1 and 4.2 show the probability that a worker would have to pay more than 9.5 percent of income toward the premium and the probability that a worker has access to a marketplace subsidy due to high premium contributions. These two rows are identical for single workers and show that, with a 60-percent AV plan, 3.7 percent of single workers would be eligible for marketplace subsidies because of the high employer premium contributions. Because access to marketplace subsidies is based on the cost of the single premium (regardless of whether the worker has a family), the probability of paying more than 9.5 percent of income toward the health insurance premium is higher for families than the

Table 4.1. Financial Impact of Private Exchanges on a Typical Worker Choosing Single Coverage, 2017, Defined Contribution Set at 2014 Level

	Baseline ^a	Actuarial Value of Plan Selected on Private Exchange			
		60% AV	70% AV	80% AV	90% AV
Average total premium (\$)	6,748	4,896	5,712	6,528	7,344
Average employer premium contribution (\$)	5,690	4,658	5,172	5,433	5,489
Average employee premium spending (\$)	1,058	238	540	1,095	1,856
Average employee out-of-pocket spending (\$)	739	1,511	1,257	915	455
Total employee spending (premium plus out-of-pocket costs) (\$)	1,797	1,749	1,797	2,010	2,311
Median employee premium spending (\$)	715	0 ^b	70	806	1,603
Median employee out-of-pocket spending (\$)	317	454	538	587	278
Median employee total spending (\$)	1,032	454	609	1,394	1,881
Probability of spending at least					
10% of income on medical costs (%)	20.0	19.5	20.1	22.8	25.6
20% of Income on medical costs (%)	8.7	9.1	9.0	9.3	10.4
9.5% of income on premiums (%)	13.4	3.7	7.4	13.8	21.9
Eligible for exchange coverage due to high premiums (%)	13.4	3.7	7.4	13.8	21.9

^a Baseline assumes the distribution of AVs remains constant between 2014 and 2017 and that employers contribute a fixed percentage of the premium amount. The average AV of 2014 plans offered in our model is 83 percent.

^b Median spending is \$0 because, for more than 50 percent of workers, a defined contribution amount exceeds the cost of a 60-percent AV plan. Results are reported at the worker level.

probability of getting access to marketplace subsidies for families. For example, while 5.1 percent of families would pay more than 9.5 percent of income in 2017 to enroll all members in a 60-percent AV plan, only 0.8 percent of families would be eligible for marketplace subsidies. Families are also less likely than single workers to get access to marketplace subsidies because families frequently have two earners rather than one, which both increases the probability that at least one worker has access to affordable insurance and increases income. Workers would be eligible for marketplace subsidies only if the premium contribution for the lowest-cost available plan exceeded 9.5 percent of income, so—in practice—most employers offering private exchanges could satisfy this requirement if they offered a plan with a 60-percent AV, even if most workers choose a more-expensive plan. Of course, employers could offer a 60-percent AV plan with or without a private exchange. But private exchanges may make it easier for employers to offer multiple plan options, due to the benefit administration and decisions support tools for enrollees that private exchanges offer.

Tables 4.3 and 4.4 repeat the analysis above for the bronze contribution scenario. Because of the lower employer contribution, workers pay more for premiums under the bronze contribution scenario than in the 2014 contribution scenario, and workers are more likely to pay more than

Table 4.2. Financial Impact of Private Exchanges on a Typical Worker Choosing Family or Single-Plus-One Coverage, 2017, Defined Contribution Set at 2014 Level

	Baseline ^a	Actuarial Value of Plan Selected on Private Exchange			
		60% AV	70% AV	80% AV	90% AV
Average total premium (\$)	16,165	11,893	13,750	15,573	17,381
Average employer premium contribution (\$)	12,075	10,508	11,266	11,535	11,489
Average family premium spending (\$)	4,089	1,385	2,485	4,038	5,892
Average family out-of-pocket spending (\$)	2,003	3,996	3,346	2,505	1,257
Total family spending (premium plus out-of-pocket costs) (\$)	6,092	5,381	5,831	6,543	7,149
Median family premium spending (\$)	3,219	0 ^b	1,421	3,318	5,252
Median family out-of-pocket spending (\$)	1,516	3,119	2,649	2,113	1,058
Median Family total spending (\$)	4,736	3,119	4,070	5,431	6,310
Probability of spending at least 10% of income on medical costs (%)	29.2	24.1	27.1	32.2	36.0
Probability of spending at least 20% of Income on medical costs (%)	9.1	7.6	8.9	10.0	12.0
Percent spending at least 9.5% of income on premiums (%)	20.0	5.1	11.0	19.7	30.8
Percent eligible for exchange coverage due to high premiums (%)	2.8	0.8	1.6	2.9	4.6

^a Baseline assumes the distribution of AVs remains constant between 2014 and 2017 and that employers contribute a fixed percentage of the premium amount. The average AV of 2014 plans offered in our model is 83 percent.

^b Median spending is \$0 because, for more than 50 percent of workers, a defined contribution amount exceeds the cost of a 60-percent AV plan. Results are reported at the worker level.

10 percent or more than 20 percent of their incomes toward health care. However, the patterns shown in Tables 4.3 and 4.4 are generally the same as those shown in Tables 4.1 and 4.2. Specifically, total spending increases as the AV of the plan increases; for most workers, the larger premium contribution requirement outweighs the reduction in out-of-pocket spending that comes along with a higher AV plan. In addition, although the probability that a worker becomes eligible for marketplace subsidies increases in Tables 4.3 and 4.4 relative to Tables 4.1 and 4.2, it is still relatively uncommon for workers to pay more than 9.5 percent of income for the single plan, particularly in the 60-percent AV scenario. In this case, about 10.5 percent of single workers and 2.0 percent of workers with families become eligible for marketplace subsidies. However, because of the steep, one-time reduction in employers' premium contributions that occurred when employers pegged contributions to the bronze plan, workers have lower total spending on health care in the baseline scenario than in the private exchanges scenarios, regardless of the AV chosen.

Table 4.3. Financial Impact of Private Exchanges on a Typical Worker Choosing Single Coverage, 2017, Defined Contribution Pegged to Bronze Premium in 2014

	Baseline ^a	Actuarial Value of Plan Selected on Private Exchange			
		60% AV	70% AV	80% AV	90% AV
Average total premium (\$)	6,748	4,896	5,712	6,528	7,344
Average employer premium contribution (\$)	5,690	3,958	3,958	3,958	3,958
Average employee premium spending (\$)	1,058	938	1,754	2,570	3,387
Average employee out-of-pocket spending (\$)	739	1,511	1,257	915	455
Total employee spending (premium plus out-of-pocket costs) (\$)	1,797	2,450	3,011	3,485	3,842
Median employee premium spending (\$)	715	701	1,532	2,369	3,207
Median employee out-of-pocket spending (\$)	317	454	538	587	278
Median employee total spending (\$)	1,032	1,154	2,070	2,956	3,485
Probability of spending at least 10% of income on medical costs (%)	20.0	26.0	32.6	39.9	46.3
Probability of spending at least 20% of Income on medical costs (%)	8.7	12.3	14.0	15.7	17.3
Percent spending at least 9.5% of income on premiums (%)	13.4	10.5	19.0	29.4	42.6
Percent eligible for exchange coverage due to high premiums (%)	13.4	10.5	19.0	29.4	42.6

^a The baseline assumes the distribution of AVs remains constant between 2014 and 2017, and that employers contribute a fixed percentage of the premium amount. The average AV of 2014 plans offered in our model is 83 percent. Results are reported at the worker level.

Research Question 2: What Percentage of Workers Hit the Marketplace Firewall and Become Eligible for Subsidies Under a Defined Contribution Approach?

In our discussions with experts, one factor that appeared to keep employers from moving to a true defined contribution approach, in which the premium contribution is set at a fixed level and pegged to general inflation, is that—with such an approach—workers may end up paying more than 9.5 percent of income toward the lowest-premium single plan. Under the ACA, workers who would have to pay more than 9.5 percent of income for single coverage become eligible for marketplace subsidies, and employers face penalties if workers enroll in subsidized marketplace plans. Tables 4.1, 4.2, 4.3, and 4.4 show that relatively few workers become eligible for subsidies under the defined contribution approaches considered above. However, the analysis for the tables focused on 2017. Over time, the share of workers eligible for subsidies may increase, particularly if health care cost inflation exceeds CPI growth.

Figures 4.1 and 4.2 plot the share of workers that we estimate would be eligible for subsidies in each year from 2016 through 2024, assuming that employers use the two defined contribution strategies described earlier. Figure 4.1 shows the 2014 contribution approach, in which

Table 4.4. Financial Impact of Private Exchanges on a Typical Worker Choosing Family or Single-Plus-One Coverage, 2017, Defined Contribution Pegged to Bronze Premium in 2014

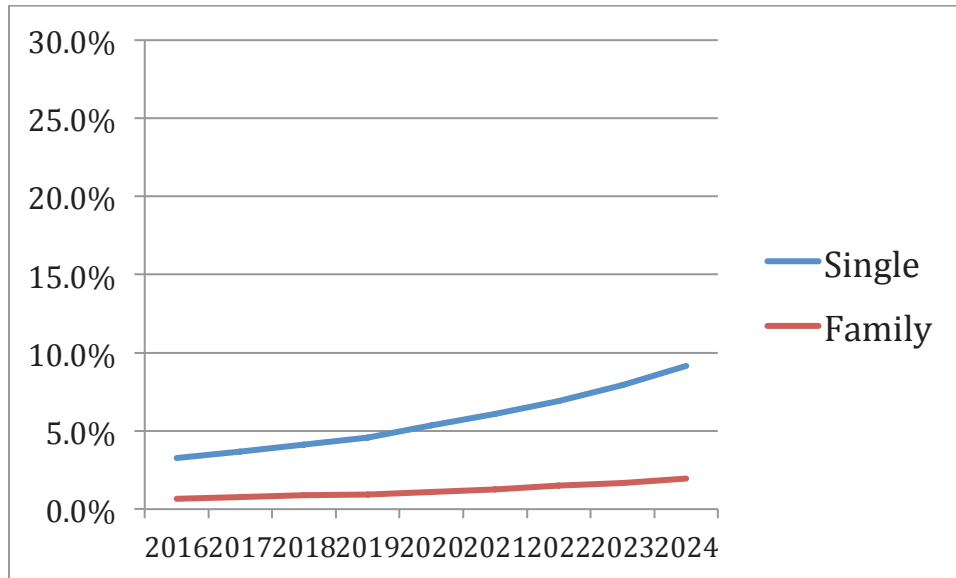
	Baseline ^a	Actuarial Value of Plan Selected on Private Exchange			
		60% AV	70% AV	80% AV	90% AV
Average total premium (\$)	16,165	11,637	13,425	15,209	16,981
Average employer premium contribution (\$)	12,075	8,323	8,183	8,057	7,936
Average family premium spending (\$)	4,089	3,314	5,242	7,151	9,044
Average family out-of-pocket spending (\$)	2,003	3,996	3,346	2,505	1,257
Total family spending (premium plus out-of-pocket costs) (\$)	6,092	7,311	8,588	9,657	10,302
Median family premium spending (\$)	3,219	2,736	4,674	6,600	8,482
Median family out-of-pocket spending (\$)	1,516	3,119	2,649	2,113	1,058
Median family total spending (\$)	4,736	5,856	7,323	8,713	9,540
Probability of spending at least 10% of income on medical costs (%)	29.2	36.3	45.5	53.1	57.2
Probability of spending at least 20% of Income on medical costs (%)	9.1	11.8	15.8	19.3	22.0
Percent spending at least 9.5 % of income on premiums (%)	20.0	13.4	25.6	39.5	52.0
Percent eligible for exchange coverage due to high premiums (%)	2.8	2.0	3.6	6.1	9.5

^a The baseline assumes the distribution of AVs remains constant between 2014 and 2017, and that employers contribute a fixed percentage of the premium amount. The average AV of 2014 plans offered in our model is 83 percent. Results are reported at the worker level.

employers freeze contributions at 2014 levels and peg to general inflation over time. Figure 4.2 shows the bronze contribution approach, in which employers contribute a percentage of the premium for a 60-percent actuarial plan in 2014, and then index this amount over time to the rate of general inflation. In both cases, we assume that all employers would offer at least one 60-percent AV plan, and subsidy eligibility is triggered only if workers would need to pay more than 9.5 percent of income to enroll in this 60-percent AV plan.

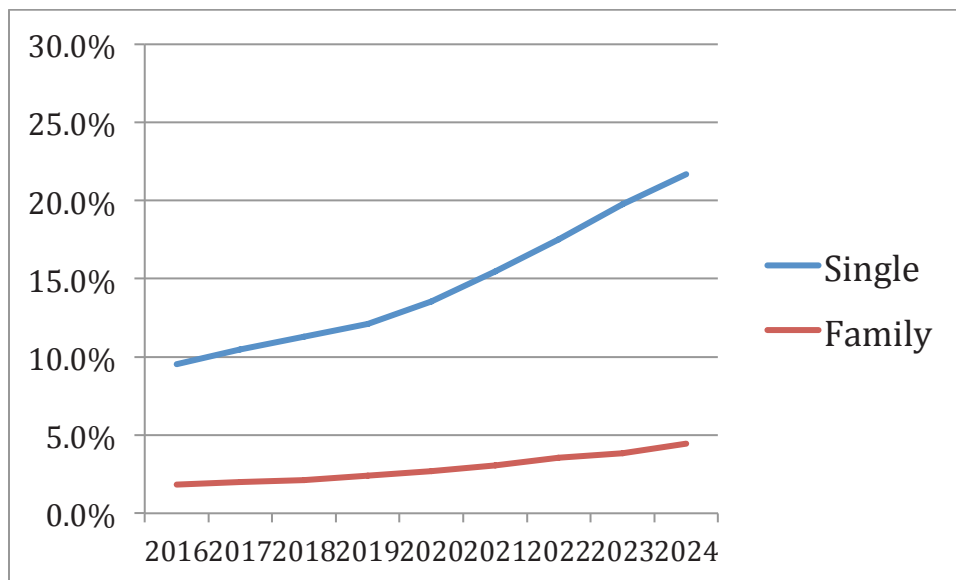
Both scenarios show an increase in the share of workers becoming eligible for marketplace subsidies over time if the employer uses a defined contribution approach. More single workers are eligible for subsidies than workers with families, in part because families tend to have higher incomes and are therefore less likely to spend more than 9.5 percent of their income on premium contributions. Workers with families are also more likely than single workers to have a secondary offer (e.g., from a spouse), which reduces the chance of being eligible for marketplace subsidies. The probability of being eligible for a marketplace subsidy is higher under the bronze contribution scenario (Figure 4.2) than with the 2014 contribution scenario (Figure 4.1) because the bronze contribution scenario requires workers to contribute a larger percentage of the premium. Under the bronze contribution scenario, the share of workers that would be eligible for

Figure 4.1. Probability that a Worker Offered Coverage is Eligible for Marketplace Subsidies, Defined Contribution Pegged to 2014 Levels



NOTES: Separate results shown for workers with single and family coverage. Single-plus-one coverage is grouped with family coverage. Workers are eligible for subsidies if required contribution exceeds 9.5 percent of income.

Figure 4.2. Probability that a Worker Offered Coverage is Eligible for Marketplace Subsidies, Defined Contribution Pegged to Bronze Premium



NOTES: Separate results shown for workers with single and family coverage. Single-plus-one coverage is grouped with family coverage. Workers are eligible for subsidies if required contribution exceeds 9.5 percent of income.

marketplace subsidies is relatively high. By 2024, 22 percent of single workers and almost 5 percent of workers with families would be entitled to enroll on the marketplaces and receive

subsidies with a defined contribution based on 2014 premiums for a 60-percent AV plan. Because employers will be penalized if workers enroll in the marketplace and receive federal subsidies, many employers may be hesitant to use a defined contribution approach that would lead to an increase in the number of subsidy-eligible workers over time.

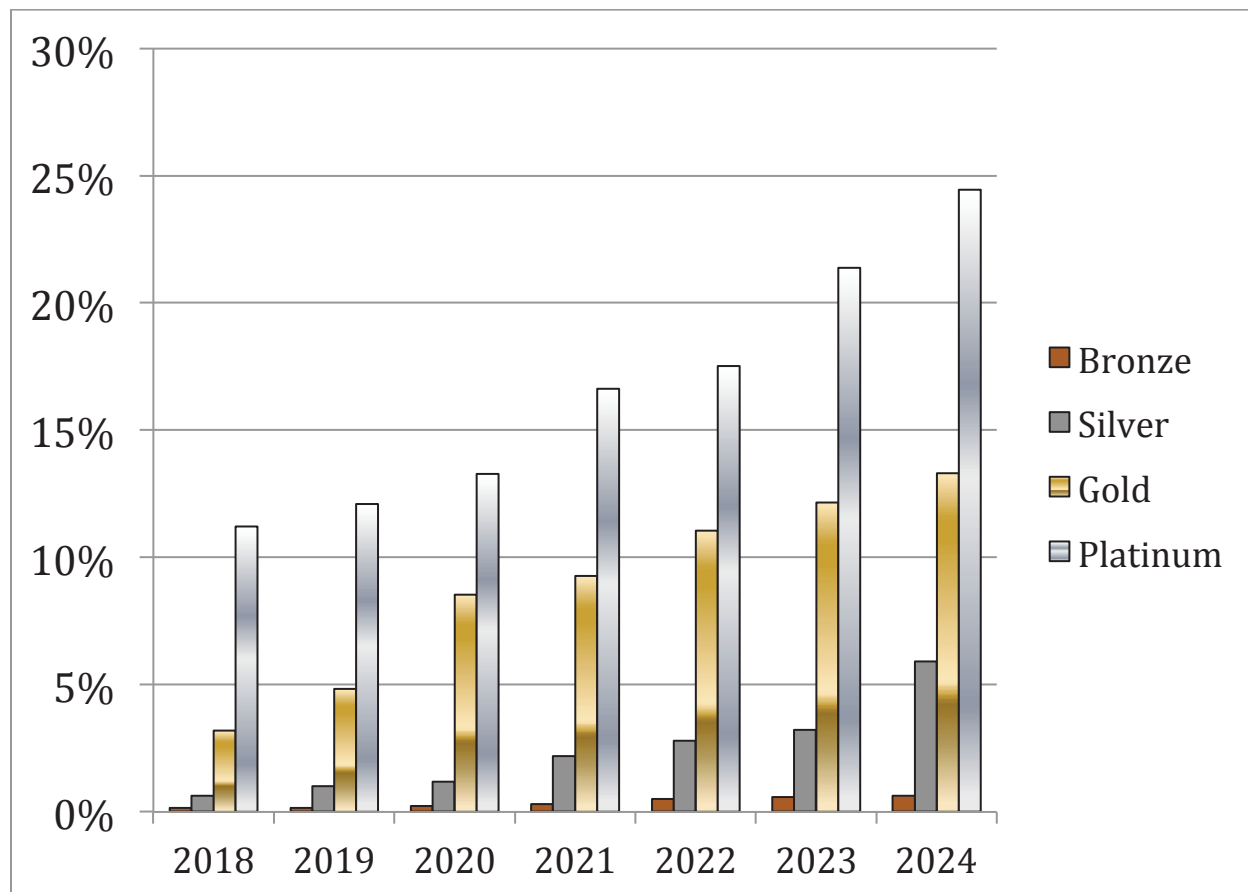
Research Question 3: What Share of Employers Hit the Cadillac Tax Under Alternative Assumptions About AV?

The Cadillac tax, which takes effect in 2018, levies a 40-percent excise tax on health insurance plans with premiums over \$10,200 for single coverage or \$27,500 for family coverage. Although, technically, the tax is levied on the insurance company, most economists believe that the cost increase will be fully passed on to employers and, ultimately, workers in the form of higher premiums (Gruber 2010). The tax affects only plans with premiums above the thresholds; there is no effect for lower-cost plans. For the first two years after implementation of the tax, the Cadillac tax thresholds are indexed over time using the growth in CPI plus 1 percentage point; subsequently, the thresholds increase at the rate of CPI growth. While high-premium plans are subject to the Cadillac tax whether or not they are offered on private exchanges, the ability to offer a range of plans on private exchanges might make it easier for employers to provide at least one plan that is not subject to the tax. In addition, if employers peg their contribution rates to low-cost plans, they can effectively require workers to pay the full marginal cost of the Cadillac tax if workers opt to choose a high-premium plan offered through a private exchange. Both our literature review and discussions with experts suggested that some employers are considering private exchanges as a potential mechanism to reduce the impact of the Cadillac tax.

As employers approach the question of how to address the Cadillac tax, one important consideration is the degree to which the tax can be avoided by offering a less-generous plan. In general, lower-AV plans have lower premiums than higher-AV plans, so offering a lower-AV plan could reduce the possibility of incurring the tax. However, premiums also depend on other factors, such as the health status of plan enrollees. As a result, some employers could hit the Cadillac tax even if they offered a 60-percent AV plan (for example if workers have extremely high health spending), while other employers might not hit the Cadillac tax even if they offered a 90-percent AV plan. The probability of hitting the Cadillac tax could also increase over time if health care cost inflation exceeds the rate of general inflation. Figure 4.3 reports the share of employers that we estimate would hit the Cadillac tax if they offered a plan with a 60-, 70-, 80-, or 90-percent AV. Unlike the other tables and figures reported in this section, the results presented in Figure 4.3 are at the employer, rather than the worker, level.

The figure suggests that, at least in the short run, the vast majority (more than 99 percent) of employers can avoid the Cadillac tax by offering a plan with a 60-percent AV. However, by 2024, about 13 percent of employers could incur the tax if they offered plans with an AV of 80 percent, which is close to the current average AV for employer coverage. Firms offering more-generous coverage have an even greater chance of hitting the Cadillac tax limit. We

Figure 4.3. Share of Firms that would hit the Cadillac Tax if They Offered a Plan with a 60, 70, 80, or 90 percent Actuarial Value



NOTE: The bars report the share of employers that we estimate will hit the Cadillac tax. The analysis assumes that each employer offers only one plan, and this plan's benefit generosity is set at the specified AV level. If an employer offers single and family coverage, we report that an employer hits that tax limit if the premium for at least one type of coverage (family, single, or single-plus-one) exceeds the Cadillac threshold.

estimate that, if all employers offered a 90-percent AV plan, about 25 percent of employers would incur the tax by 2024. These estimates differ from estimates previously published by Herring and Lentz (2011) because our analysis is at the employer level, rather than the plan level, and because our analysis incorporates CBO's most recent expectations about health care cost growth (Herring and Lentz 2011).¹¹

¹¹ CBO has revised downward its expectations about health care cost growth several times since 2011.

Research Question 4: What Are the Implications for Enrollee Out-Of-Pocket Spending if Employers Reduce the Generosity of Plans Offered to Avoid the Cadillac Tax?

Because a nontrivial number of employers could hit the Cadillac tax if they maintain the generosity of current coverage, we assessed the implications for workers if they enrolled in a plan that was just under the Cadillac tax limit in 2020. If employers offered multiple plans on private exchanges, this type of switch could be driven directly by workers, might prefer a less generous plan rather than face higher premiums under the Cadillac tax. Alternatively, employers may simply eliminate high-premium plans and offer only lower-cost plans that avoid the Cadillac tax.

In our analysis, we assumed that workers would switch to the most generous plan that avoids the Cadillac tax. We then compared spending under this plan to spending under the original plan, both with and without the Cadillac tax. We present results for all workers and the subset of workers affected by the Cadillac tax because, even among employers offering generous plans, relatively few will face the Cadillac tax by 2020.

To avoid conflating the effects of the Cadillac tax with effects of changes to the generosity of employer premium contributions, we assumed that employer premium contributions would grow over time based on historical growth in premium contributions derived from the MEPS (rather than setting a defined contribution based on 2014 contribution levels). These trends indicate a slight decline in the employer's share of the premium, particularly for family plans. However, we assume that employers' premium contributions in 2020 are a fixed amount, rather than a percentage of plan premiums. This assumption implies that workers will pay the full marginal cost of the Cadillac tax if they enroll in a taxed plan. We made this assumption to avoid erroneously increasing the workers' total compensation as a result of the Cadillac tax.¹²

Tables 4.5 and 4.6 suggest that, on average, employees will spend less on total health care costs if employers reduce the AVs of plans offered to a level that avoids the tax. Not only do employees spend less in the "reduce AV" scenario relative to the scenario with the Cadillac tax, on average, they spend less in the "reduce AV" scenario than they do in the scenario in which we assume the Cadillac tax is not enacted and the employer continues to offer the high-premium plan (the "no Cadillac tax" scenario). For example, in the "no Cadillac tax" scenario, we estimate that the average worker with single coverage affected by the tax would spend \$2,409 on premium contributions and out-of-pocket costs, compared to \$2,185 under the "reduce AV" scenario. This finding is consistent with the overinsurance hypothesis mentioned above, which posits that the current employer-sponsored insurance tax advantage leads employers to offer

¹² If we had assumed that employers contributed a percentage of the premium, the total premium contribution would have increased in proportion to the Cadillac tax. Without a countervailing assumption about a decline in wages or a decline in other forms of compensation to offset this increase in compensation, the approach would have led to an implicit increase in workers total compensation as a result of the Cadillac tax. In turn, this could have led to erroneous conclusions about the tax's effect.

Table 4.5. Implications for Worker Out-of-Pocket Spending if Firms or their Workers Switch to Lower AV Plans to Avoid the Cadillac tax in 2020, Single Coverage

	All Workers			Workers Affected by Cadillac Tax		
	No Cadillac Tax	Do Not Adjust to Tax	Reduce AV to Avoid Tax	No Cadillac Tax	Do Not Adjust to Tax	Reduce AV to Avoid Tax
N (in millions)	38.4	38.4	38.4	2.6	2.6	2.6
Average total premium (\$)	7,781	7,864	7,667	12,599	13,825	10,905
Average employer premium contribution (\$)	6,557	6,557	6,492	10,906	10,906	9,948
Average premium spending (\$)	1,224	1,307	1,175	1,692	2,919	957
Average out-of-pocket spending (\$)	855	855	890	717	717	1,228
Total spending (premium plus out-of-pocket costs) (\$)	2,080	2,162	2,065	2,409	3,636	2,185
Median premium spending (\$)	829	859	787	1,509	2,014	530
Median out-of-pocket spending (\$)	367	367	380	319	319	511
Median total spending (\$)	1,197	1,226	1,167	1,828	2,333	1,041
Probability of spending \geq 10% of income on medical costs (%)	21.8	22.4	21.7	19.8	29.4	18.5
Probability of spending \geq 20% of income on medical costs (%)	9.6	9.8	9.6	8.8	12.3	8.8
Percent spending \geq 9.5 % of income on premiums (%)	14.8	15.3	14.4	14.2	21.6	9.2
Percent eligible for exchange coverage due to high premiums (%)	14.8	15.3	14.4	14.2	21.6	9.2
% with plan AV < 60%	0.0	0.0	0.3	0.0	0.0	4.5

NOTE: The “no Cadillac tax” and “do not adjust to tax” scenarios assume that the 2014 distribution of AVs is maintained. The average AV of 2014 plans offered in our model is 83 percent. Results are reported at the worker level.

health plans that are more generous than would be optimal if income spent on health insurance and income spent on other goods and services were taxed at the same rate.

We cannot say, however, based on this analysis, whether workers are better or worse off in the “reduce AV” scenario than in the “no Cadillac tax” scenario. Risk-averse workers may prefer lower out-of-pocket spending and higher premium contributions, even if total spending is lower under a scenario in which employers reduce plan AVs. In addition, our analysis does not account for the fact that money saved by reductions in health insurance spending would be subject to income and payroll taxes.

One challenge some employers and workers may face is that, to reduce spending to a level that avoids the Cadillac tax, it may be necessary to reduce the plan’s AV to a level that is below 60 percent (and therefore out of compliance with the ACA’s standards for minimum essential coverage) or to make other significant changes to the benefit’s design. We find that this situation

Table 4.6. Implications for Worker Out-of-Pocket Spending if Firms or their Workers Switch to Lower AV Plans to Avoid the Cadillac tax in 2020, Family Coverage

	All Workers			Workers Affected by Cadillac Tax		
	No Cadillac Tax	Do Not Adjust to Tax	Reduce AV to Avoid Tax	No Cadillac Tax	Do Not Adjust to Tax	Reduce AV to Avoid Tax
N (in millions of families)	39.6	39.6	39.6	1.7	1.7	1.7
Average total premium (\$)	18,660	18,769	18,510	32,809	35,276	29,402
Average employer premium contribution (\$)	13,934	13,934	13,895	25,543	25,543	24,659
Average family premium spending (\$)	4,726	4,834	4,614	7,266	9,733	4,742
Average family out-of-pocket spending (\$)	2,311	2,311	2,361	1,812	1,812	2,938
Total family spending (premium plus out-of-pocket costs) (\$)	7,037	7,146	6,976	9,077	11,544	7,680
Median family premium spending (\$)	3,716	3,864	3,623	6,247	8,818	3,258
Median family out-of-pocket spending (\$)	1,749	1,749	1,789	1,316	1,316	2,185
Median Family total spending (\$)	5,465	5,613	5,412	7,562	10,134	5,443
Probability of spending \geq 10% of income on medical costs (%)	32.4	32.9	32.1	42.6	54.0	35.9
Probability of spending \geq 20% of income on medical costs (%)	11.0	11.2	10.8	14.2	20.7	10.5
Percent spending \geq 9.5 % of income on premiums (%)	22.2	22.8	21.7	35.8	47.4	23.3
Percent eligible for exchange coverage due to high premiums (%)	3.1	3.2	3.1	4.1	5.9	3.2
% with plan AV < 60%	0.0	0.0	0.1	0.0	0.0	1.8

NOTE: The “no Cadillac tax” and “do not adjust to tax” scenarios assume that the 2014 distribution of AVs is maintained. The average AV of 2014 plans offered in our model is 83 percent. Results are reported at the worker level.

is rare, but possible in 2020. Approximately 0.3 percent of all single workers and 4.5 percent of single workers affected by the tax could face the Cadillac tax even if they enrolled in a 60-percent AV plan. Fewer workers with family coverage are likely to hit the Cadillac tax with a 60-percent AV plan, in part because workers with family coverage are more likely to have access to a secondary offer (e.g., through a spouse). These estimates likely represent an upper bound on the share of workers that would be required to pay the Cadillac tax for minimum essential coverage because the estimates do not consider other cost-sharing measures that could be enacted to reduce plan premiums. For example, workers may demand that employers or private exchange operators reduce premiums by narrowing plan networks without reducing the AV of plans offered.

Limitations

This analysis has several important limitations. We did not consider how changes in employers' health insurance contribution rates might affect wages. Most economists believe that, in the long run, reductions in health insurance compensation will be offset by increases in wages or other benefits. As a result, our estimates of the share of total income spent on health care in the defined contribution scenarios could be biased upward if moving to a defined contribution approach could enable wages to grow more quickly and, hence, lead to higher incomes over time. Similarly, we did not consider how the current tax advantage for employer-sponsored coverage might interact with plan choices on private exchanges. When looking at total spending without considering taxes, it appears that many workers are better off in low-AV plans because the lower premium contributions more than offset the higher out-of-pocket spending amounts. However, because any money saved by switching to a lower-AV plan will be subject to income and payroll taxes, some workers may prefer to enroll in higher-AV plans despite the higher total costs. Workers who are risk averse may also prefer plans with lower out-of-pocket spending and higher premiums, even if total spending in these plans is on average higher than it would be in a plan with higher cost-sharing requirements. In addition, our analysis focused on effects for an average or median worker. It is likely that results would be different for workers with specific spending patterns. In particular, workers who might spend close to the deductible amount for 60-percent AV plan are more likely to benefit from enrolling in high AV plans and could face greater financial challenges if employers shift to a contribution approach that favors plans with lower AVs.

5. Conclusion

Given both our literature review and our discussions with key experts, we found no consensus on the definition of private exchanges. Respondents agreed that increased plan choices, use of decision tools, benefit administration, and cost-containment strategies were core functions of private exchanges. However, respondents disagreed on other potential features of private exchange design. For example, some respondents believed that plan standardization within the exchanges was important, while other exchange operators preferred to work with employers to develop customized plan designs. Several respondents also argued that a core component of private exchanges is the ability to encourage competition among carriers, which may only be possible in multicarrier exchanges selling fully insured products. Other respondents argued that single-insurance carriers could operate private exchanges and that exchanges could offer self-insured products.

Respondents noted that private exchanges may offer a variety of benefits for employers, including performing administrative functions, assisting with ACA regulatory compliance, and offering potential cost savings. Cost-reduction strategies could include reference pricing (setting employer contributions as a percentage of one plan benefit level, and requiring employees to pay the difference), defined contribution (setting a fixed dollar amount), or the inclusion of high-deductible plans. Our respondents believed cost savings typically came from employees gravitating toward lower-cost plans in the exchanges. Use of defined contribution approaches in private exchanges is cited as a key factor in the grey literature, although few employers in the exchanges have adopted this approach for active employees, according to our respondents. Some respondents also suggested that there were unresolved legal issues with setting a defined contribution, particularly with the new age-rating rules for the small business market.

Several of our modeling scenarios considered the implications for workers if employers switched to defined contribution plans on private exchanges. We found that workers' health spending may increase under these arrangements, particularly if employers substantially reduce the generosity of their premium contributions when they move to the defined contribution approach (as in our bronze contribution scenario). Whether or not these increases in health spending could be harmful to workers is uncertain and would require a more-detailed study of how defined contribution health plans affect workers' overall health and well-being. Past work in this area has tended to find that shifts to lower-AV health plans reduce spending without adversely affecting health outcomes. For example, Manning et al. (1987) found that an individual with average characteristics was no worse off in a plan with cost sharing compared to a plan with free care (although the same study found that the plan without cost sharing lowered the risk of high blood pressure and vision problems among people with low incomes) (Manning et al.,

1987). A comprehensive study of the implications for workers would also need to consider how a defined contribution approach would affect wages and other benefits.

Like our discussions with experts, our simulation analysis also found that moving to a true defined contribution approach (in which the contribution is set at a fixed level and indexed over time to inflation) could expose employers to penalties over time. Firms can potentially avoid these penalties if they index their premium contribution growth to the price of a benchmark plan to ensure that few if any workers face premium contributions that are high enough to trigger employer penalties.

For employees, the potential benefits of private exchanges include increased plan choice, decision aids to assist with plan comparisons, and an improved shopping experience. While we did not evaluate how well these decision tools work, some respondents noted that the decision process likely remains difficult for many enrollees. A drawback from the employees' perspective is that, to the extent that employers are moving to defined contribution approaches or otherwise incentivizing low AV plans, private exchanges may be associated with increased out-of-pocket spending. Based on our simulation analysis, it is not clear that switching to a lower-AV plan will necessarily increase total spending (out-of-pocket spending plus premium contributions). In fact, we estimate that total spending on health care could fall for many workers in lower-AV plans. Although out-of-pocket spending in low-AV plans is typically higher than in more-generous plans, the increase in out-of-pocket spending is more than offset by the reduction in premium contributions. This pattern is particularly true if employers use a defined contribution or reference pricing approach, in which employer premium contributions remain fixed even if worker premium costs increase. However, an important caveat to this conclusion is that we did not consider the potential effects for workers with very high spending. Prior research has shown that, although individuals with average health spending have lower total spending with lower-AV plans, those in the top 5 percent of the health spending distribution spend less in higher-AV plans (Lore et al., 2012). Moreover, the current tax advantage associated with employer-provided coverage may lead workers to prefer higher-AV plans, even if total spending in these plans is relatively high.

In our discussion, we also considered the potential implications of increased private exchange participation for the SHOP exchanges. Because of the ACA's single risk pool, it seems unlikely that increased use of private exchanges will directly affect SHOP premiums. Small employers can avoid the ACA's single risk pool if they stop offering coverage or if they self-insure, decisions our respondents did not think likely to occur because of private exchanges.

There was more support for the possibility that private exchanges might compete with SHOP for enrollees. While employers' choice to use a private exchange instead of SHOP would not directly affect SHOP premiums, low enrollment may make it difficult to generate enough revenue through administrative fees to make the SHOP exchanges self-sustaining.

While some surveys predicted rapid rise in the growth of private exchanges, discussion respondents were more cautious, indicating that many businesses were taking a wait-and-see

approach as the ACA's regulations continue to unfold. One insurance industry representative noted that the ACA has focused attention on the exchange model for buying coverage, even though the concepts are not new, and that the technology has improved to a point to make the private exchanges feasible: "It's only because the nature of the technology over the last, probably 5 or 6 years, has really taken off. . . . The technology has really advanced dramatically." And another respondent mentioned, "the fact that the public is so comfortable and familiar with doing things online, using the internet for purchasing, that's all advanced [the private exchanges.]"

A final theme that emerged in our discussion is that many of the changes that are occurring in private exchanges reflect more-general trends in the health insurance landscape and might occur with or without these exchanges. For example, employers might consider defined contribution approaches or increased use of high-deductible health plans without using a private exchange. Additionally, there is concern over hitting the Cadillac tax. Nearly all respondents mentioned that concern over the Cadillac tax could motivate employers to consider private exchanges but that the methods for keeping premiums low enough to avoid incurring the tax can also work outside the private exchanges. Our modeling analysis suggested that both the Cadillac tax and the ACA's requirement that employees should not have to contribute more than 9.5 percent of income toward their health insurance plans create incentives for employers to reduce the generosity of benefits offered. Lower-AV plans are less likely to hit the Cadillac tax over time, and—because lower-AV plans may require smaller worker premium contributions—shifting to these plans reduces the chance that a worker will spend more than 9.5 percent of income on premiums.

The idea of introducing more price competition to curb health insurance costs has been around for decades. Private exchanges, in their current form, seem to be taking advantage of the current attention focused on delivering health benefits through online shopping portals, possibly catalyzed by the ACA's introduction of exchanges for the individual and small-group markets. Private exchanges are conveniently packaging the exchange platform with online shopping technology, decision support, and benefit administration services, which may be of interest to employers. However, to date, enrollment in private exchanges is low, and not enough systematic evidence to determine whether these exchanges will become prominent in the insurance market and what their impact will be for employers and their employees.

Appendix. Discussion Guides

This appendix presents the proposed discussion questions, modified for each respondent category. Small employers are considered <100 employees.

Question Set A. Health Insurers Offering Exchanges

1. How long have you been offering private exchange options?
2. Are you participating in other private exchanges?
3. What motivates employers to join private exchanges?
 - a. Are the factors that influence uptake different for small and large employers?
4. What types of employers are using private exchanges?
5. How many employers are using your private exchange?
 - a. How many employees does this represent?
6. Have any associations joined your exchange?
 - a. How many individuals does this represent?
7. What types of plans are offered (preferred provider organization, high-deductible health plan, health maintenance organization, etc.)?
 - a. How does the process work for selecting coverage designs or networks?
8. What type of plan selection do we see on private exchanges? Are employees gravitating to the lowest-cost option?
9. Do employees select a plan online in some kind of portal? Or do employers manage this process?
 - a. Come with decision-support tools?
10. How does your company market the private exchanges?
11. Does your company offer both fully insured and self-insured products?
 - a. Do you offer different things for small vs. large employers?
12. How are premiums set?
 - a. Able to use composite rating for each employer?
 - b. Pool premiums across employers?
 - c. Do you prefer companies to be fully insured with your exchange?
 - d. Are premiums set differently for small vs. large employers?
 - e. If there are associations as members, are premiums set using the whole association as a group?
13. Are there regulatory issues that affect the decision to offer cover through a private exchange? Do these issues vary across states?

- a. For associations: does the ERISA definition of a group health plan impact the association members?
- 14. How are the plans structured to the employees? Using metal tiers or any similar devices to guide coverage choices?
- 15. Is your company offering plans on the public exchanges as well?
- 16. How are the networks, premiums or other design features different than public exchanges?
- 17. What are the benefits of joining the private vs. public exchange?
- 18. Offering in multiple markets, such as large group, small group etc.?
 - a. How do private exchange offerings different than what your company offers otherwise?
- 19. How are administrative fees structured?
 - a. Percent of premium, per employees, something else?

Question Set B. Consulting or Other Groups Offering Exchanges

1. How long have you been offering private exchange options?
2. What motivates employers to join private exchanges?
3. What types of employers are using private exchanges?
 - a. Are the factors that influence uptake different for small and large employers?
4. How many employers are using your private exchange?
 - a. How many employees does this represent?
 - b. Are any associations members?
5. How do you choose insurance companies for your exchanges?
6. What carriers are participating on your exchange?
7. What types of plans are they offering (preferred provider organization, high-deductible health plan, health maintenance organization, etc.)?
 - a. How does the process work for selecting coverage designs or networks?
8. What type of plan selection do we see on private exchanges? Are employees gravitating to the lowest-cost option?
9. Do employees select a plan online in some kind of portal? Or do employers manage this process?
 - a. Come with decision-support tools?
10. How does your company market the private exchanges?
11. Does your company offer both fully insured and self-insured products?
 - a. Do you offer different things for small vs. large employers?
 - b. What are the benefits for a self-insured employer in the private exchanges?
12. How are premiums set?
 - a. Able to use composite rating for each employer?

- b. Pool premiums across employers?
 - c. Does your exchange perform some type of risk adjustment across issuers?
 - i. Did you develop the methodology for the risk adjustment in your exchange?
 - ii. Can you explain the basic structure of the methodology to us?
 - d. Do you prefer companies to be fully insured with your exchange?
 - e. Are premiums set differently for small vs. large employers?
 - f. If there are associations as members, are premiums set using the whole association as a group?
13. Are there regulatory issues that affect the decision to offer cover through a private exchange? Do these issues vary across states?
- a. For associations: does the ERISA definition of a group health plan impact the association members?
14. How are the plans structured to the employees? Using metal tiers or any similar devices to guide coverage choices?
15. How are the networks, premiums, or other design features different than public exchanges?
16. What are the benefits of joining the private vs. public exchange?
17. Do you also offer the mix-and-match benefits, so that employees can choose other types of insurance benefits at the same time?
18. How are administrative fees structured?
Percent of premium, per employees, something else?

Question Set C. Consultants to the Private Exchanges

- 1. Which private exchanges do you work with?
- 2. How do you interface with the exchange organizers?
 - a. Is this different when you work with multi- vs. single insurer exchange?
- 3. What do you feel your company provides to the exchanges?
- 4. What are the current IT concerns your company has encountered?
 - a. How has technology assisted the sponsoring organizations?
- 5. Are the benefit designs for plans transparent?
 - a. Have you created or used any type of a decision-support tool?

Question Set D. Employers

- 1. How many years has your company participated in the private exchange?
 - a. Which company is running your exchange?
- 2. Did your previous insurer tell you about the exchange?
 - a. If so, did you stick with coverage through them?

- b. If no, what influenced your company to move to the private exchange model?
- 3. Did you think about dropping coverage before selecting the private exchange model?
 - a. Would you also consider setting a defined contribution for employees to purchase in the public exchanges?
- 4. Who is eligible for the private exchange coverage in your company?
 - a. Retirees only?
 - i. If only retirees, when or will you shift active employees?
 - b. All active employees?
 - c. Just some active employees such as part-time workers?
- 5. How did you decide on the employer contribution level?
 - a. Set at the average premium level for plans offered?
 - b. If you've been in more than one year, how much has the contribution changed from year to year?
 - c. Do you offer different contributions for certain classes of employees (say nonsmokers?)
 - d. Are there administrative fees for participating?
- 6. Does your exchange also have mix-and-match benefits to allow employees to purchase other types of insurance?
 - a. Does this decision impact the contribution level?
- 7. In this move to a private exchange, have you shifted between being self-insured to fully insured or vice versa?
 - a. If your company has shifted, what are the benefits?
 - b. If your company self-insures, what are the benefits of a private exchange?
- 8. How much plan choice is available to your employees on the private exchanges?
 - a. Was this a motivating factor in joining?
- 9. Did your company have any involvement in setting premiums or other benefits?
- 10. How does the benefit design compare to your old coverage?
- 11. How have employees responded? What are the pros and cons from the employee perspective?
- 12. Are your employees gravitating to the lowest-cost option?
- 13. Are there regulatory issues that affect the decision to offer cover through a private exchange?
- 14. Does the employer or exchange provider have decision-support tools?
 - a. Such as a plan compare tool?
 - b. Been hard to explain the move to employees?
- 15. For small employers: Were the private exchanges used as an alternative to SHOP?
 - a. Why or why not?
- 16. Have you encountered any problems with your exchange?
 - a. If so, what are they?

- b. Have the problems been significant enough that you would consider switching to something else? What would you switch to?

Question Set E. Employee Representatives

1. What are the benefits for employees?
2. What are the disadvantages?
3. How have employees responded to the move?
4. What are the pros and cons of having the employer participate in a SHOP exchange?
5. Are employers also thinking about dropping coverage before joining a private exchange?
6. What type of plan selection do we see on private exchanges? Are employees gravitating to the lowest-cost option?
7. How do employees feel the costs of the new plans are compared to the old ones?
8. Do they feel the choices are adequate?
 - a. It is too much or too little choice?
 - b. Does the employer or exchange provider have decision-support tools?
 - i. Such as a plan compare tool?
9. Are employees seeing a shift in their out-of-pocket costs?
 - a. Is this because they are selecting less generous plans than previous coverage?
 - b. Or is the employer contribution only really covering certain types of plans?
10. Is the employer contribution covering the whole premium for at least one plan?
11. Do the private exchanges benefit some types of employees more than others?
12. Are employees also offered the mix-and-match coverage options?
 - a. Are these viewed favorably?

Question Set F. Researchers and Others

1. Are there differences in structure depending on what type of entity is running the exchange (e.g., consulting firm, insurers, etc.)?
2. How are the premiums being set?
 - a. Composite ratings—create single rate for all employees in the given company?
3. Are the private exchanges encouraging some employers to continue to offer coverage?
4. Do we see small businesses taking the private exchange option?
 - a. Why or why not?
 - b. What are the benefits and risks for small employers?
 - c. Are the private exchanges allowing small businesses to continue to offer coverage?
5. Are there regulatory issues that affect the decision to offer cover through a private exchange? Do these issues vary across states?

- a. Movement from self to fully ensured means adhering to state-level benefit mandates
 - b. Employers then pay additional ACA taxes.
6. Are small businesses able to self-insure with the private exchanges?
 - a. Is this happening at all?
7. Are the private exchanges better at controlling costs than the public exchanges?
8. Are there worries about underinsurance where employees may be picking out low cost, but inadequate coverage?
9. Is there any evidence on plan switching by employees, once the exchange is in place?
10. Some of the offerings are structured similarly to the public exchanges (i.e., with the same metal tiers).
 - a. What are the benefits of joining the private vs. public exchange?
 - b. How are the networks/premiums etc. different?

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