The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from www.rand.org as a public service of the RAND Corporation.

Skip all front matter: Jump to Page 1 ▼

Support RAND
Browse Reports & Bookstore
Make a charitable contribution

For More Information
Visit RAND at www.rand.org
Explore RAND Health
View document details

Limited Electronic Distribution Rights
This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND website is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see RAND Permissions.
This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.
The Impact of the Coverage-Related Provisions of the Patient Protection and Affordable Care Act on Insurance Coverage and State Health Care Expenditures in California

An Analysis from RAND COMPARE

David Auerbach, Sarah Nowak, Jeanne S. Ringel, Federico Girosi, Christine Eibner, Elizabeth A. McGlynn, Jeffrey Wasserman

Executive Summary

The Patient Protection and Affordable Care Act (ACA) contains substantial new requirements aimed at increasing rates of health insurance coverage. These include a mandatory expansion of Medicaid programs to cover individuals in households with incomes below 133 percent of the federal poverty level, a requirement that states develop and run health insurance exchanges through which individuals and small businesses can purchase health care coverage, a requirement that large and mid-sized employers—including state governments—provide qualifying coverage to employees or face the possibility of penalties, and a requirement that most individuals purchase or otherwise obtain coverage. Because many of these provisions impose additional costs on the states, officials need reliable estimates of the likely impact of the ACA in their state. To demonstrate the usefulness of modeling for state-level decisionmaking, RAND undertook a preliminary analysis of the impact of the ACA on five states—California, Connecticut, Illinois, Montana, and Texas.

To estimate the ACA’s impact on coverage and health care spending in California, we used the RAND COMPARE (Comprehensive Assessment of Reform Efforts) microsimulation model. The following represents our best estimates of the effect of the coverage-related provisions of the ACA, though there is, of course, considerable uncertainty associated with these projections. Unless otherwise indicated, all projections apply to the year 2016, the year that all of the provisions in the ACA related to coverage expansion will be fully implemented:

- The proportion of California residents with insurance will increase from 80 to 96 percent—a reduction in the uninsured of nearly 6 million.
- The nature of employer-sponsored coverage will change slightly after implementation of the ACA: There will be a 2 percent reduction in the number of employees offered coverage, but approximately 400,000 employees will be covered through the exchange.
- By 2016, 17 percent of the insured, nonelderly population (roughly 6 million) will have coverage through the exchange.
- Enrollment in Medicaid will increase by 58 percent (3.6 million), with the majority of the new enrollees being newly eligible adults.
- Total state government spending on health care will be 7 percent higher for the combined 2011–
2020 period because of the ACA—mostly from increases in Medicaid costs. In dollar terms, this amounts to roughly $2 billion in additional state spending in 2016, approximately $333 per year for each newly insured individual. In 2020, state spending will be $4 billion higher than it would have been without the ACA.

I. Introduction and Background
The Patient Protection and Affordable Care Act (P.L. 111-148, or ACA), along with amendments attached through the Health Care and Education Reconciliation Act of 2010 (P.L. 111-152), introduce new obligations for states pertaining to health care coverage. Among these requirements are mandatory expansion of Medicaid to cover individuals in households with incomes below 133 percent of the federal poverty level (FPL) ($14,404 for a single person; $29,327 for a family of four), a requirement that states develop and run health insurance exchanges through which individuals and small businesses can purchase health care coverage, a requirement that large and mid-sized employers—including state governments—provide qualifying coverage to employees or face the possibility of penalties, and a requirement that individuals purchase or otherwise obtain coverage (unless they qualify for a waiver). These requirements, particularly the Medicaid expansion and the additional Medicaid take-up among the currently eligible, have potential consequences for state budgets.

While the law contains numerous provisions intended to improve health care delivery and reform how health care providers are paid (provisions that could have substantial impacts on the cost and quality of health care), in this analysis, we consider the implications of the main coverage provisions of the ACA for the state of California, focusing on total health insurance coverage in the state, Medicaid expenditures, exchange enrollment, and spending on private health insurance for state employees.4

Overview of the ACA
The ACA includes several provisions that will dramatically alter levels of coverage and associated costs at the state level. These include the following:

Medicaid expansion. As noted above, the ACA requires that states expand Medicaid eligibility to include anyone in households with income below 133 percent of the federal poverty level (FPL) ($14,404 for a single person; $29,327 for a family of four). Initially, the federal government will pay all of the Medicaid expenses for the newly eligible; this will later decline to 90 percent, a far higher federal share than is historically associated with Medicaid programs.5 States are not required to expand eligibility until 2014, but federal Medicaid contributions for newly eligible populations will be made available immediately to any state that chooses to expand eligibility ahead of the deadline.

State-based health insurance exchanges. Beginning in 2014, state health insurance exchanges (Internet-based virtual marketplaces for private insurance plans) must be made available to individuals and to businesses with 50 or fewer workers. By 2016, all businesses with 100 or fewer workers must be permitted to offer coverage through the exchanges, and states can opt to expand the exchange eligibility to all businesses, regardless of size, in 2017. Even when the option is available to them, employers will not be required to offer exchange coverage to their employees; for employers that choose to offer coverage on their own in lieu of the exchanges, their employees will not permitted to obtain coverage through the exchanges. States also have the option of joining together to create regional exchanges, or they may opt to make use of the federal “fall-back” of an exchange operated by the federal government. In addition, states have the option to offer a basic health plan for individuals with incomes between 133 and 200 percent of the FPL in lieu of coverage through the exchanges for this group.

Individual mandate. The ACA requires that, beginning in 2014, everyone must have health insurance, either through a private source or a public program. Those who do not must pay a penalty. For individuals with incomes between 100 and 400 percent of the FPL who do not have qualifying health insurance offers through their employer, federal subsidies in the form of tax credits are available to offset the cost of purchasing insurance. Subsidies, however, are available only for plans purchased through the health insurance exchanges.

Employer penalties. Under the ACA, beginning in 2014 mid-sized and large employers (defined as those with more than 50 workers) will face penalties if they do not offer coverage and any of their workers receive subsidized coverage on the exchanges. The penalty is $2,000 per worker, with the first 30 workers excluded from the payment calculation. Although the penalty is triggered only if a worker receives subsidized coverage from the exchanges, the penalty amount is calculated based on the total size of the firm’s workforce. For example, if a firm had 50 employees and did not offer coverage, the penalty would be $2,000 × 50 = $100,000. Mid-sized and large businesses are also at risk for penalties if a worker’s premium contribution share exceeds 9.5 percent of that

---

4 The analysis does not consider the possibility that California would seek to obtain a state innovation waiver, which would supplant many of the requirements, including the individual mandate, with a state-designed system that would be required to achieve the same coverage goals.

5 The federal matching rate for newly eligible Medicaid enrollees is set at 100 percent for FY2014 through FY2016; it falls to 95 percent for FY2017, to 94 percent for FY2018, to 93 percent for FY2019, and to 90 percent for FY2020 and beyond.
employee’s income or if the actuarial value of offered coverage is lower than 60 percent.

Finally, starting in 2018, some premiums in excess of $10,200 for single coverage and $27,500 for family coverage will be subject to an excise tax (the so-called Cadillac tax). Those thresholds will be higher if premiums grow faster than expected, and in 2018 the excise tax is expected to affect only a small fraction of policies. However, in the following years, the threshold for the tax rises only with general inflation, so that if premiums continue to increase more quickly than inflation, the tax will affect more and more policies with each subsequent year.

In previous analyses, RAND projected that the coverage expansion options included in the ACA will result, at the national level, in the number of uninsured being reduced from 52 million to 22 million—a reduction of 56 percent. Although the Congressional Budget Office (CBO) estimates that the coverage expansion provisions alone would increase the national deficit by $938 billion between 2010 and 2019, CBO estimates that other aspects of the ACA—including fees imposed on health insurers, cuts to payments to private plans offering the Medicare benefit, revenues from the Cadillac tax, and adjustments to Medicare reimbursement rates—will reduce federal government health care spending by more than $1 trillion, resulting in a net savings of $143 billion over that time period (Elmendorf, 2010). States will not benefit from most of these federal revenue provisions.

Overview of Health Insurance in California
California currently has a relatively high uninsured rate. In 2011, approximately 20 percent of the state’s nonelderly population is uninsured, compared with the national average of 17 percent. California’s higher rate is partly due to its low rate of employer-sponsored coverage (approximately 55 percent of the nonelderly in 2011, compared with the national average of 59 percent) and its large immigrant population. Approximately 8 percent of the state’s nonelderly are covered in the individual market or other insurance programs, such as military coverage or Medicare disability coverage. Many of the former will likely opt to obtain federal subsidies under the ACA to transfer that coverage to the exchange, but these shifts in coverage will generally not have a consequence for state costs.

State Consequences of Medicaid Expansion
The expansion of Medicaid will increase state spending, since—in the long run—states will be required to pay 10 percent of Medicaid costs for the newly eligible population. Although this is far less than the traditional state share of Medicaid funding (ranging from 50 to 20 percent, depending on the state’s per capita income), it is more than the states would spend if these individuals remained uninsured. However, those states that currently cover or subsidize the coverage of low-income individuals who are not Medicaid-eligible may financially benefit from the new requirement, since the federal government will pay most of the costs for these populations through federal Medicaid matching dollars or exchange subsidies. We expect that individual mandates will induce some Medicaid-eligible individuals who are not currently enrolled to take up coverage. To the extent that these individuals subsequently use health care, this will increase state and federal expenditures. At the same time that these changes are happening, employer penalties and the option for some employers to offer health insurance coverage in the exchanges may increase eligibility for employer-sponsored insurance, leading some currently and newly Medicaid-eligible individuals to take up employer-sponsored coverage instead of Medicaid. Our analysis projects expected levels of Medicaid enrollment and state spending for the years 2011 to 2020, enabling us to determine their net effects.

Exchange Operation
Only three states—Massachusetts, Utah, and Washington—currently operate health insurance exchanges, and their level of investment varies widely. Annual operating budgets range from $700,000 to more than $30 million. California was the first state to authorize the creation of a state exchange, which is expected to be fully functional by 2014, to accommodate the ACA; it set up the entity to fund itself entirely from assessments on premiums, so it does not require state funds. Expenses vary depending on both exchange enrollment and the level of services provided by the exchange, which could include regulation of plans, risk adjustment, assessment of exchange eligibility, customer service, and marketing. We assume that states will attempt to recoup all costs associated with running health insurance exchanges through administrative charges levied on plans; for example, Massachusetts currently levies fees equal to 4.5 percent of premiums or 4 percent of capitated expenditure for subsidized plans (Lischko, Bachman, and Vangeli, 2009).

Under the ACA, the federal government will also provide

---

6 Although undocumented immigrants are not eligible for Medicaid or the exchanges, such individuals were not identified in the COMPARE model. Thus, projected rates of coverage may be somewhat higher than they would be if undocumented immigrants were accounted for.

7 Also, states that currently extend Medicaid eligibility for adults beyond 133 percent of the FPL could save state dollars by rolling back the eligibility threshold to 133 percent by 2014, at which time the federal government would cover those individuals through exchange subsidies. We do not account for this possibility in the model; rather, we assume that states with eligibility thresholds above 133 percent of FPL will maintain those levels under the ACA.

8 State costs associated with administering the Medicaid program are not included in this analysis, nor are the effects of enhanced federal matching rates for the Children’s Health Insurance Program (CHIP) from 2015 to 2019.
start-up grants to states for the initial costs of establishing exchanges, but the amount of money available is not specified in the ACA.

Since it is unclear which services each state exchange will provide or how much of these expenses will be financed through administrative charges levied on plans, we did not attempt to project the costs of establishing and operating a health insurance exchange in California. Instead, we estimated the number of people that will be enrolled in the exchange, in both the individual market and the small group market. Citing the Massachusetts experience, Lishko, Bachman, and Vangeli (2009) argue that the number of exchange enrollees is the most important predictor of total exchange operating costs.

Spending on State Employee Health Insurance

The mandate requiring all individuals to obtain health insurance or pay a penalty could increase the number of state employees who have health insurance. To the extent that these workers enroll in plans offered by the state and use covered health care benefits, state outlays on health insurance will increase. However, it is possible that some state employees or dependents will enroll in alternative health insurance options after the ACA is implemented (e.g., if a spouse’s employer begins to offer coverage), so the net effect on enrollment in state health insurance policies is uncertain. In our analysis, we consider the total number of state employees enrolled in state-sponsored health insurance coverage before and after the reform and the net impact on state health insurance spending.

States will also have to ensure that health benefits offered to their employees meet the standards outlined in the ACA, or else face penalties (separate from the penalties related to the failure to offer or accept coverage). Specifically, if any state employee receives subsidized coverage through the health insurance exchange, the state will be subject to a fine equal to the lesser of $3,000 per worker receiving subsidized coverage or $2,000 per worker. Employees are eligible to receive subsidies from the exchange only if their employer does not offer qualifying coverage or if the employee would be required to spend more than 9.5 percent of household income on premium contributions for employer-sponsored coverage. As of 2009, health benefits provided by California appeared to meet most of the requirements for qualified health plans under the ACA, so it is unlikely that the state will face fines associated with the quality of coverage. It is possible that employer contribution requirements for some low-income workers could exceed 9.5 percent of household income. However, for the purpose of this analysis, we assume that the state will not face any penalties associated with inadequate benefit generosity.

Other Impacts

There are several other possible impacts of the ACA on California spending or health care provision more broadly that we are not able estimate precisely and thus do not include in the quantitative analysis. As a result of a reduction in the number of uninsured, health care providers will likely provide less charity or “uncompensated” care, and, therefore, state or private subsidies for that care might be reduced. Private and state employee premiums could go down if part of these premiums is currently covering the costs of uncompensated care. On the other hand, federal disproportionate share hospital (DSH) subsidies to state hospitals will also be reduced, so the net effect of the reduction in the number of uninsured on state spending is uncertain. Separately, if spending on employer-sponsored insurance is reduced (because of fewer people enrolled, lower premiums in the employer market, or lower premiums because small employers shifted their workers to the exchange), some of the avoided spending may be paid out to employees as higher wages, a move that would boost state income tax revenues.

Finally, there are numerous potential impacts of the ACA that could have spillover, or indirect, effects on state budgets—effects that are very difficult to estimate. Secondary effects of changes in premiums on the overall business climate or labor market, or changes in the overall health of the population due to changes in insurance coverage, are beyond the scope of this report. For example, the law reduces Medicare payment rates to hospitals and to private insurers that administer Medicare Advantage plans. Both of these moves will reduce federal spending on Medicare, but they may also reduce access to care for some elderly residents. There are also provisions designed to encourage more-efficient and higher-quality care, such as withholding payments to hospitals for readmissions, provisions that create accountable care organizations, and a measure that creates a new cost-cutting board to oversee Medicare payment policy. All together, those provisions may have a major effect on the costs and quality of health care for both Medicare-eligible and non-Medicare-eligible Californians, though the magnitude of impact is highly uncertain.

II. How We Estimated the Effect of the ACA on California

In the appendix to this report, we provide a more detailed explanation of the methods used to estimate the effect of the ACA in California. We briefly summarize our approach here so that readers can understand the basis of our results.

9 Secondary effects of changes in premiums on the overall business climate or labor market, or changes in the overall health of the population due to changes in insurance coverage, are beyond the scope of this report.

10 For example, although the Congressional Budget Office and the Centers for Medicare and Medicaid Services Office of the Actuary have estimated relatively minor impacts of the ACA on the overall health care system, some analysts estimate substantial reductions in costs. See, for example, Cutler, Davis, and Streimiks, 2010.
We conducted this analysis using a microsimulation model developed by RAND researchers for the COMPARE project. This sophisticated model produces estimates of the effects of various coverage expansion policy changes on the number of people who newly obtain insurance and/or change sources of insurance, the types of plans they choose to enroll in, and the resulting changes in private- and public-sector spending. The microsimulation model provides a way of looking at the choices made by individuals, employers, insurance companies, and governments in response to changes in their opportunities for obtaining health insurance. Typically, people and employers consider the option that is in their best financial interest, taking into account both expected spending on health care and the risk of experiencing high costs associated with a very expensive health problem (e.g., hospitalization or major surgery). Two of the more important assumptions relevant to this analysis are the effect of the individual mandate on decisions to obtain insurance and the stigma associated with Medicaid coverage, both of which affect Medicaid take-up rates. Parameters that govern those assumptions were chosen to be consistent both with economic theory and with empirical estimates of these effects, where available. We estimated the results for each year from 2011 to 2020, noting that it is not until 2016 that all of the changes in the law related to coverage expansion will be fully implemented.11 We then compared these results to projections of what would have occurred if the law had not been enacted.

It is important to note that we did not make any adjustments for the number of undocumented immigrants living in California. A recent estimate placed this number at 2.55 million, approximately 6.9 percent of the state’s population (Passel and Cohn, 2010). Undocumented immigrants are far more likely to be uninsured—one study from California found that 68 percent of undocumented immigrants were uninsured (Goldman, Smith, and Sood, 2005). Some of these individuals were included in the microsimulation model but not all, because undocumented immigrants are less likely to respond to surveys than are U.S. citizens. Furthermore, most of these individuals, but not all (because of imperfect enforcement), will be prevented from obtaining Medicaid or subsidized exchange coverage. To the extent that our model estimated that these individuals would obtain coverage and therefore engender additional state Medicaid costs, our estimates of increased rates of coverage and associated costs to state government in California will be higher (by as much as, but probably less than, 23 percent, according to our best estimates), relative to a model that was able to accurately distinguish undocumented immigrants from legal residents.

III. Results

Using our COMPARE model, we predict that, under the ACA, the proportion of California residents with insurance will increase from 80 to 96 percent. (See Table 1.) As a result, the number of nonelderly California residents without insurance in 2016 will be less than one-fourth of what it would be in absence of the law (1.6 million uninsured compared with 7.5 million).12

The nature of employer-sponsored coverage will change only slightly under the ACA. We predict that slightly more employers will opt to offer coverage through the exchange. The largest source of coverage in California will continue to be employer-sponsored insurance. However, some employers (mostly small) may opt to offer coverage through the exchange rather than on their own. We estimate that, once the exchange is in place, approximately 400,000 people (representing 2 percent of all workers with employer-sponsored coverage in California) will get their health insurance through an employer plan offered through the state’s new health insurance exchange.13

By 2016, 17 percent of the insured, nonelderly population will have coverage through the exchange. In addition to the 400,000 California residents who will get small employer-sponsored insurance provided through the exchange, we predict that, by 2016, an additional 5.6 million California residents will purchase private health insurance through the exchange. This will bring the total number of Californians insured through the exchange to 6 million, or just over 17 percent of the state’s insured, nonelderly population in 2016. Approximately 63 percent of California residents who will be enrolled in the exchange as individuals in 2016, some 3.5 million people, will receive federal government subsidies to purchase this coverage.

Once the law is fully implemented, enrollment in Medicaid will have increased by 58 percent, relative to what it would be in the absence of the ACA. In 2016, an additional 3.6 million California residents will be enrolled in Medicaid, an increase of 58 percent. Most of that increase in enrollment (2.1 million) will come from

11 In the analysis, we did not assume a start-up period, or “phase-in,” of the full effect of the law from the date when the provision becomes law, because such implementation lags would vary extensively by state in ways that would be hard to predict.

12 If we were accounting for undocumented immigrants, the number of remaining uninsured would be more than 1.6 million. Though there is considerable uncertainty as to the size and the insurance status of the undocumented population, our best guess is that the reduction in the uninsured would be, at most, 1.3 million less (4.6 million instead of 5.9 million) if the undocumented were fully accounted for in the microsimulation model.

13 In arriving at this estimate, the model does not account for the fact that many employers will eventually face having to comply with the new benefit requirements under the ACA because of changes they wish to make to their plans that will end their grandfathered status. That, in turn, will lead more employers to offer insurance through the exchanges than are estimated here.
individuals who are newly eligible for Medicaid as a result of the ACA.

**Total state government spending on health care will be 7 percent higher for the combined 2011–2020 period because of the ACA.** Table 2 shows the cumulative changes in state government spending for Medicaid and on private coverage for state employees. The net effect on State Employee Insurance will be very small and will arise from minor changes in premiums and enrollment. Medicaid enrollment and associated spending, on the other hand, will increase substantially under the ACA. The cumulative effect will be a 7 percent increase in spending from 2011 to 2020, a total of roughly $16 billion. Most of that increase (69 percent) will be due to people who were previously eligible for Medicaid but enrolled only after implementation of the ACA. In the later years (starting 2020), however, as state spending on the newly eligible grows and the federal match rate gradually declines from 100 percent to 90 percent, the newly eligible will account for around half of the new state spending due to the ACA.

**A slightly smaller percentage of California workers will get their health insurance coverage from their employer.** Figure 1 shows the change in the percentage of California workers offered coverage through their employer with and without the ACA. The total number of workers offered coverage changes very little. The slight increase in larger firms is due mainly to the
individual mandate and penalties for not offering coverage, which increase demand for employer coverage, more than offsetting the subsidies available in the exchange, which decrease demand for employer coverage. While those incentives are also present for smaller firms, the administrative costs of exchange coverage are lower than for typical small firms but higher than for typical large firms, providing an added incentive for small firms to drop coverage in favor of letting their employees purchase their own coverage through the exchange. Overall, the drop in coverage among small-firm employees is larger than the gain among large-firm employees, so, by 2020, roughly 2 percent (300,000) fewer workers will be offered employer-sponsored coverage statewide.

**Bottom Line: Substantially more California residents will be insured, and state Medicaid costs will rise.** We predict that under ACA there will be nearly 6 million, or 79 percent, fewer uninsured Californians in 2016 than there would be without the ACA.14 The state’s costs associated with the increase in coverage amount

---

14 Our model does not account for undocumented immigrants in California (estimated by Passel and Cohn [2010] to number 2.55 million). Because these individuals are not eligible for Medicaid and will be unable to access the exchange, our estimates of expanded coverage, and associated state costs, may be overestimated by as much as 23 percent.
to approximately $2 billion in 2016. While this is a substantial sum, the federal government will pick up most of the tab for the newly eligible and the entire tab for those covered through the exchange; thus, the state’s cost will be approximately $333 per newly insured Californian per year. These costs rise to $4 billion in 2020—after the state has started contributing to the costs of covering those newly eligible for Medicaid. We also project that the exchange will play a large role in California’s insurance market, covering about 5.6 million individuals in 2016.

The estimates provided in this analysis are rooted both in economic theory and in past experience, and, to the extent that the future brings unforeseen challenges and incentives, actual impacts could differ from these projections. Furthermore, it is important to note that there is a good deal of flexibility in how individual states implement various provisions of the ACA. Some of these decisions could alter our projections. The timing of implementation, the management and oversight of the exchanges, the mechanisms created for determining Medicaid or subsidy eligibility, and the extent of outreach efforts designed to enroll individuals in Medicaid or the exchanges will affect rates of coverage and, by extension, state costs. Finally, there are many courses of action that states can take to reduce health care spending generally, many of which are summarized in a recent RAND report for the state of Massachusetts, which has been struggling with many of the same issues that the nation will be upon full implementation of the ACA (Eibner et al., 2009).

Methodological Appendix
Overview of COMPARE Model
We modeled the effects of the ACA on state health expenditure and state-specific health insurance enrollment levels for California using RAND’s COMPARE microsimulation model. The analysis accounts for the individual mandate, employer penalties associated with not offering coverage, subsidies for low-income individuals, and the Medicaid expansion. The COMPARE model is based on a nationally representative population of synthetic individuals and firms derived from data sources including the Survey of Income and Program Participation (SIPP), the Medical Expenditure Panel Survey (MEPS), and the Kaiser/Health Research and Educational Trust (Kaiser/HRET) employer survey. Individuals in the model make decisions about health insurance enrollment by comparing the benefits of an option (e.g., reduced out-of-pocket expenditure, lower risk) to its costs (e.g., higher premiums). Firms in the model decide whether and what type of insurance to offer based on a “group choice” algorithm, in which they consider preferences of their workers and the costs of providing coverage. The firm decisionmaking process accounts for the fact that some workers may be eligible for Medicaid or subsidized coverage on the exchanges, both of which reduce the incentives to the employer to offer company-sponsored health insurance. It also accounts for penalties that may be levied on firms with 50 or more workers that do not offer coverage and for the fact that firms with 100 or fewer workers will have the option to offer coverage from the exchanges. A full description of the model methodology can be found in Eibner et al. (2010).

Premiums in the COMPARE model are determined endogenously, using the predicted expenditure of enrollees in each health insurance plan. In calculating employer health insurance premiums, we assume that plans offered by businesses with less than 25 workers have an actuarial value of 0.75, plans offered by businesses with 25 to 99 workers have an actuarial value of 0.80, and plans offered by businesses with 100 or more workers have an actuarial value of 0.85. Actuarial values (the percentage of expected health expenses that will be paid for by the insurance plan) for employer health insurance coverage in the COMPARE model correspond with actuarial values reported in the literature (e.g., Buntin et al., 2003; Gabel et al., 2006). Exchange plans have actuarial values of 0.60 (bronze), 0.70 (silver), 0.80 (gold), and 0.90 (platinum). We assume that administrative costs will be lower on the exchanges than in the grandfathered employer-sponsored health insurance (ESI) market (12 percent of premiums on the exchanges versus 20 percent of premiums for firms with fewer than 25 workers in grandfathered ESI plans and 13 percent of premiums for firms with 25–99 workers in grandfathered ESI plans). Administrative costs for traditional ESI plans correspond to values used by another health insurance microsimulation model (Blumberg et al., 2003). We further assume that health insurance exchanges will be open to all businesses with 100 or fewer workers. Many of these assumptions are currently uncertain, and actual details could well vary from state to state. We have the ability to adjust these assumptions if and when state-specific information becomes available to guide our choice of parameters.

For purposes of this report, we did not model the creation of a basic health plan. In addition, we assumed that California will ultimately decide to establish a state-specific health insurance exchange rather than participate in a regional compact or defer operation of the state’s exchange to the federal government.

California-Specific Adjustments
Although the original COMPARE microsimulation model was nationally representative, the number of observations in each state was too small to support state-specific estimates. To address this issue, we reweighted all of the data in the COMPARE model to reflect the
distribution of workers and firms in California. The reweighting procedure accounted for race, insurance status (public, employer-based, nongroup, other insurance, or uninsured), employment status, firm size, and the joint distribution of age and poverty category among all California residents. We also recalculated the Medicaid eligibility status of modeled individuals using criteria specific to California and based on a Congressional Research Service report and information from the Kaiser Family Foundation (Hearne, 2005). To account for population changes over time, we calibrated the model to reflect California-specific population projections based on data from the U.S. Census and the American Community Survey. Our population adjustments account for changes in the total size of the population and the distribution of the population by age, race, and sex. We did not adjust for possible differences in health status for California residents versus the nation as a whole. More important, we did not attempt to separately account for undocumented residents, as noted previously. Medicaid enrollment in the state under the status quo was adjusted to match estimates from the Kaiser Family Foundation.

We adjusted health care spending in the model to match the state health insurance expenditure accounts (SHEAs) reported by the Centers for Medicare and Medicaid Services (CMS). Since state health expenditure data from CMS are available only through 2004, we projected expenditures forward using historical expenditure growth rates for California derived from the SHEAs. In reconciling our figures with the SHEA data, we accounted for both overall spending and for spending for particular categories of payer (e.g., private expenditure, Medicare, Medicaid, Medicare, other federal, and other state and local expenditures).

We identified state government employees by (1) selecting workers in SIPP who reported that they are employed by the government and (2) reweighting a subset of this population to represent all state government workers in California (the remainder are assumed to be federal government employees—state and federal workers cannot be disentangled using the SIPP question). Using California-specific data from the 2008 American Community Survey, the reweighting strategy adjusted the data so that approximately 350,000 individuals were flagged as full-time employees of the state of California in our model. This figure includes all state employees, including university workers, workers employed by public utilities, and workers employed by the state correctional system. With additional information from California state government, we could more accurately describe the population of state workers.

References


About This Report
The Patient Protection and Affordable Care Act (ACA) contains substantial new requirements aimed at increasing rates of health insurance coverage. Because many of these provisions impose additional costs on the states, officials need reliable estimates of the likely impact of the ACA in their state. To demonstrate the usefulness of modeling for state-level decisionmaking, RAND undertook a preliminary analysis of the impact of the ACA on five states—California, Connecticut, Illinois, Montana, and Texas—using the RAND COMPARE microsimulation model. This technical report presents the findings for California. This research was sponsored by and conducted in partnership with the Council of State Governments. It was carried out within the Economics, Finance, and Organization Program of RAND Health, which addresses the financing and delivery of health care services, health insurance, cost control, the reorganization of health care markets and providers, and distributional issues in health and health care. The program includes RAND COMPARE.

About RAND COMPARE
COMPARE (Comprehensive Assessment of Reform Efforts) is a transparent, evidence-based approach to providing information and tools to help policymakers, the media, and other interested parties understand, design, and evaluate health policies. RAND Health, a division of the RAND Corporation, is conducting COMPARE. The RAND Corporation is a nonprofit institution that helps improve policy and decision-making through research and analysis. RAND Health is one of the world’s largest private health research groups, with an annual budget of more than $60 million and a research portfolio that focuses on health care quality, costs, and delivery, among other topics.

For more information about COMPARE, see http://www.randcompare.org/. Inquiries about COMPARE can be sent to the following address:

Christine Eibner
Director, RAND COMPARE
RAND Corporation
1200 South Hayes Street
Arlington, VA 22202
703-413-1100, x5913
eibner@rand.org

RAND publications are available at www.rand.org

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.