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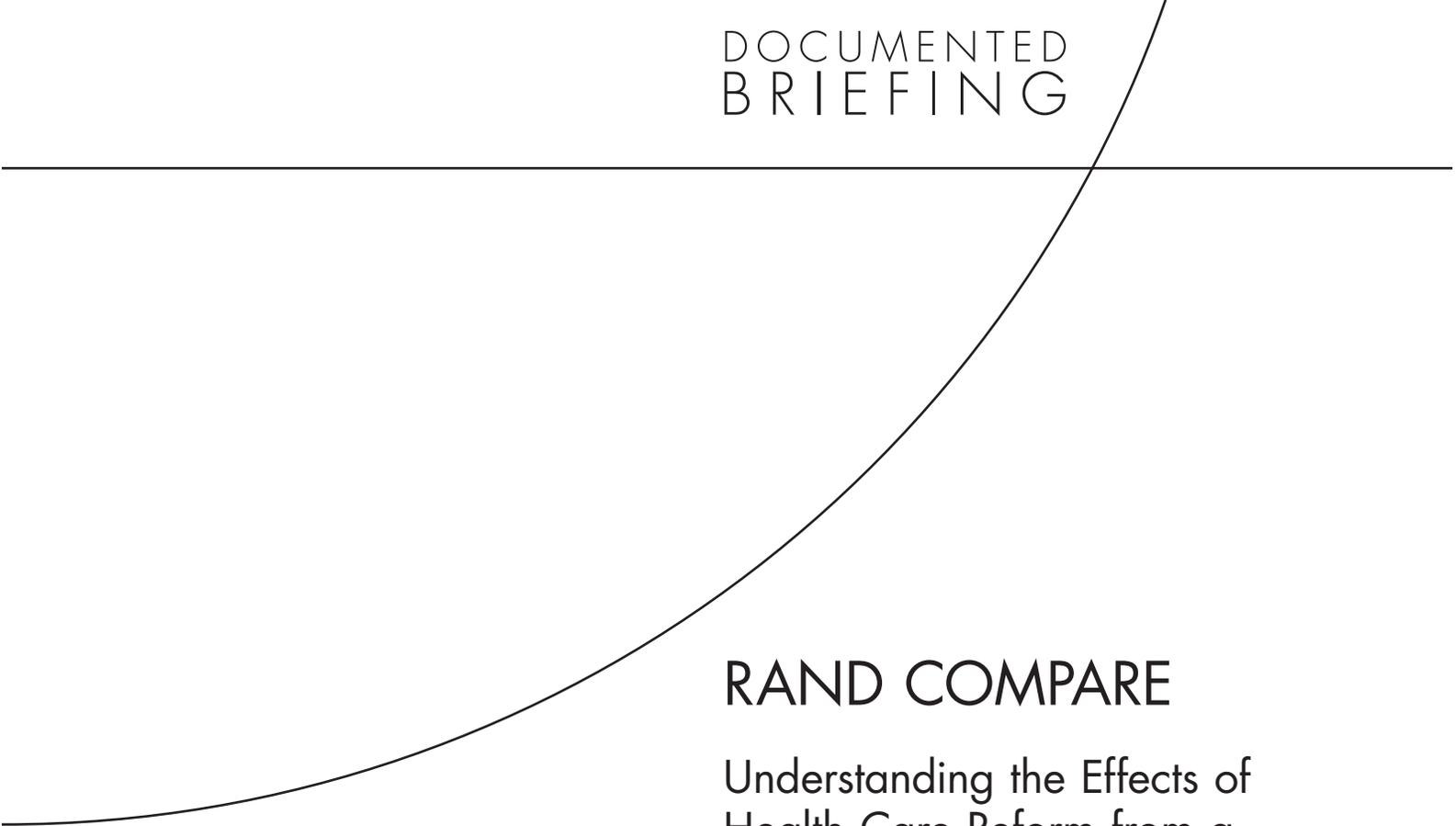
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BRIEFING



RAND COMPARE

Understanding the Effects of
Health Care Reform from a
National Perspective

Christine Eibner

The research described in this report was conducted in RAND Health, a division of the RAND Corporation.

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Preface

In January 2009, RAND launched the COMPARE website, a tool to help policymakers understand the possible effects of health care reform. The information on the COMPARE website synthesizes what is currently known about health care in the United States, provides information on health care policy proposals, and estimates the impact of commonly discussed policies. In this briefing, we present an overview of COMPARE and show the estimated effect of four policies: employer mandates, Medicaid and SCHIP expansions, individual mandates, and refundable tax credits. This analysis, which was originally presented to the National Conference of State Legislatures on July 20, 2009, will be of interest to state and federal policymakers who are considering options for health care reform.

RAND Health, a division of the RAND Corporation, is the nation's largest independent health policy research program, with a broad research portfolio that focuses on quality, costs, and health services delivery, among other topics. RAND Health is the developer of COMPARE (Comprehensive Assessment of Reform Efforts), a one-of-a-kind online resource that provides objective analysis about national health care reform proposals. Visit www.randcompare.org to learn more.



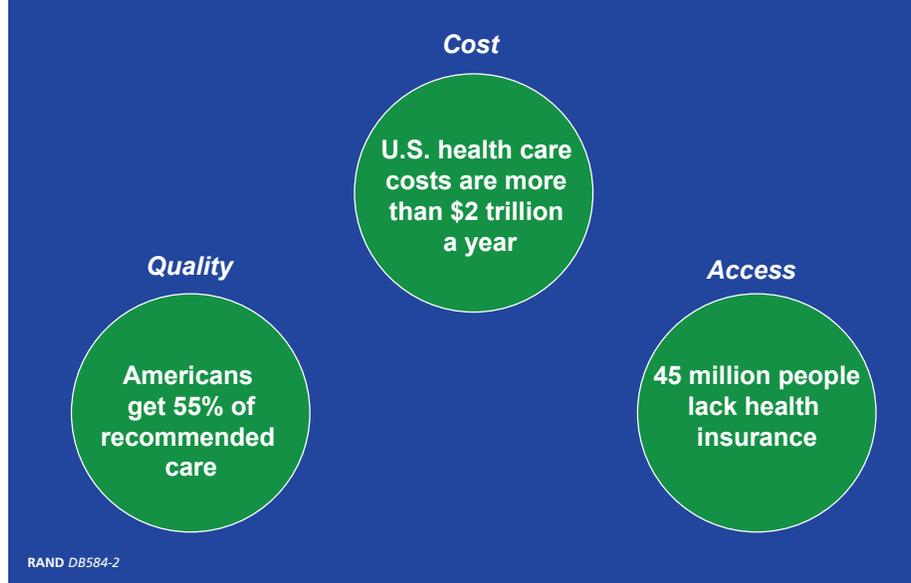
RAND COMPARE: Understanding the Effects of Health Care Reform from a National Perspective

RAND DB584-1

This briefing uses RAND COMPARE, a policy tool developed at the RAND Corporation to help policymakers, the media, and other interested parties understand, design, and evaluate health policies. The briefing was originally presented to the National Conference of State Legislatures on July 20, 2009, in Philadelphia, Pennsylvania.

In addition to assessing policy proposals, the briefing provides background on the RAND COMPARE project, as well as information from COMPARE that may be of particular relevance to the states.

Many Policymakers Seek to Improve the Health Care Status Quo in the U.S.



Policymakers are currently struggling with the challenge of reforming the U.S. health care system to reduce costs, improve quality, and expand access. Current spending on health care in the United States exceeds 2 trillion dollars annually, accounting for nearly 17 percent of Gross Domestic Product (GDP).¹ Yet, despite this high spending, over 45 million Americans lacked health insurance coverage in 2007,² and recent projections suggest that the number of uninsured Americans may have reached 52 million by early 2009.³ Moreover, Americans do not necessarily receive appropriate treatments when they visit a physician or hospital. A RAND study found that, conditional on visiting a health care provider, Americans get only about 55 percent of recommended care—such

¹ Keehan S, Sisko A, Truffer C, Smith S, Cowan C, Poisal J, Clements MK, the National Health Expenditure Account Projections Team, “Health Spending Projections through 2017: The Baby-Boom Generation Is Coming to Medicare.” *Health Affairs*, Web Exclusive [Epub: Vol. 27, No. 2, February 26, 2008], pp. w145–w155.

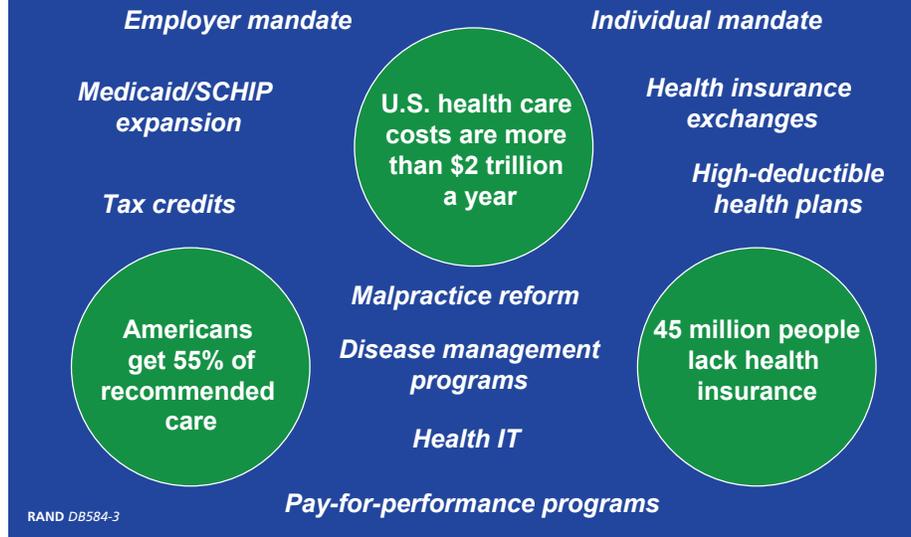
² DeNavas-Walt C, Proctor DB, Smith J, “Income, Poverty, and Health Insurance Coverage in the United States: 2007.” U.S. Census Bureau, Report No. P60-235, August 2008.

³ Cecil G. Sheps Center for Health Services Research, University of North Carolina and North Carolina Institute of Medicine, “Updating Uninsured Estimates for Current Economic Conditions: State Specific Estimates.” March 2009. Available at: http://www.shepscenter.unc.edu/new/FindingsBrief_UninsuredUnemployment_Mar2009.pdf (Accessed 7/30/09).

as appropriate medication for hypertension or diet and exercise counseling for individuals with diabetes.⁴

⁴ McGlynn EA, Asch AM, Adams J, Keesey J, Hickey J, DeCristafaro A, Kerr EA, “The Quality of Health Care Delivered to Adults in the United States.” *The New England Journal of Medicine*, Vol. 348, No. 26, June 26, 2003, pp. 2635–2645.

Diverse Options Have Been Proposed to Reform the Health Care System



Many policies have been proposed with the intention of improving the U.S. health care system. However, proposed policies could have complicated effects, and policymakers need objective, evidence-based information on the likely impact of reforms.

Health Care Proposals May Recommend One or Multiple Policy Changes

Examples

Proposal A
Single policy changes

Reform medical malpractice law

Proposal B
Multiple changes

- **Employer mandate**
- **Individual mandate**
- **Medicaid/SCHIP expansion**
- **Tax credits**

RAND DB584-4

Health care reform proposals can focus on a single policy, such as medical malpractice reform, or multiple policy options that would be enacted in combination. The recent bills^{5,6} proposed by the “House Tri-Committee” (Energy and Commerce, Ways and Means and Education and Labor Committees) and the Senate Health, Education, Labor, and Pensions (HELP) Committee both take the approach of combining many different policy options into a single reform. Both bills include an employer mandate that would require businesses to either offer health insurance or pay a penalty, and an individual mandate that would require all individuals to obtain health insurance or pay a fine. Some of the other components of the bills include new regulation in the nongroup health insurance market, tax credits for small businesses that offer health insurance, and the establishment of a public health insurance plan.

⁵ House Tri-Committee, “House Tri-Committee Health Reform Discussion Draft, Section-by-Section Analysis.” Released June 30, 2009. Available at: http://energycommerce.house.gov/Press_111/20090630/healthcarereform_sectionsummary.pdf (Accessed 7/25/09).

⁶ Senate Health, Education, Labor, and Pensions (HELP) Committee, “HELP Health Reform Legislation—Section-by-Section Narrative.” Released July, 15, 2009. Available at: http://help.senate.gov/Maj_press/2009_07_15_b.pdf (Accessed 7/25/09).

Health Care Proposals May Recommend One or Several Policy Changes

Examples

Proposal A
Single policy change

Reform medical malpractice law

Proposal B
Multiple changes

- *Employer mandate*
- *Individual mandate*
- *Medicaid/SCHIP expansion*
- *Tax credits*

But it can be difficult to estimate the effects of proposed changes

RAND DB584-5

Regardless of whether a proposal focuses on a single policy option or multiple options in combination, it can be difficult to evaluate the effects of proposed changes. Moreover, policy proposals can have different effects for different stakeholders. In addition, policy proposals can have beneficial effects on some outcomes and adverse effects on others.

For example, a Medicaid expansion might increase access for low-income individuals while raising total government costs.

RAND Launched the COMPARE Website in January 2009 to Inform the Debate

- COMPARE provides tools to help policymakers understand and evaluate the effects of health care policy changes
- COMPARE is available as an online resource (www.randcompare.org) that
 - synthesizes what is known about the current health care system
 - provides information on proposals to modify the system
 - delivers insight about how potential policy changes are likely to affect health care delivery and costs in the United States
- COMPARE includes a microsimulation model
 - Estimates effects of policy changes on cost, coverage, health, consumer financial risk

RAND DB584-6

In January of 2009, RAND launched the COMPARE website (www.randcompare.org) to inform the policy debate on health care reform. The website provides tools to help policymakers understand the likely effects of health care reform. The RAND COMPARE website includes: (1) background information and statistics on the current state of the U.S. health care system; (2) descriptions of policy proposals aimed at improving the system, including federal legislation, state health reform initiatives, and proposals by private interest groups; and (3) analyses of the likely effects of particular policy proposals on outcomes related to cost, quality, and access.

To help predict the likely effects of policies, some of the analysis reported by RAND COMPARE is based on a “microsimulation” model. The microsimulation model uses computer software to develop a virtual U.S. population made up of individuals, families, firms, insurers, and the federal and state governments. These actors can respond to policy changes, and each actor’s response depends on specific characteristics such as income (for individuals) and firm size (for businesses). The information used to develop behavioral responses is derived from decades of data analysis—some conducted at RAND and some conducted elsewhere—estimating how people, firms, and other groups such as insurers respond to health system changes. With the use of the microsimulation model, we can predict how individuals, firms, and other modeled groups will respond to health care policy changes. An advantage of the microsimulation approach is that it can

be used to predict the response to complex changes involving multiple new policies. In addition, the microsimulation model can allow us to predict how changes may differentially affect different segments of the population, such as small and large firms or low- and high-income individuals.

The microsimulation model is used specifically to estimate the effects of health care policy changes on cost, insurance coverage, health, and consumer financial risk. Other outcomes, such as patient experience, reliability, and waste, are evaluated using literature review. To date, we have used the microsimulation model to evaluate four policies: employer mandates, individual mandates, Medicaid and SCHIP expansions, and tax credits in the nongroup market.

COMPARE Provides Information on State Initiatives to Improve the Health Care System

- The website includes a grid with policies listed on the left-hand side, and states listed across the top
- Cells within the grid indicate which states have considered or enacted each of the policy options
 - By clicking on each cell, the viewer can get more detailed information on the status of proposals
- The website is currently being updated, with new information expected by mid-August 2009

www.randcompare.org/proposals/state

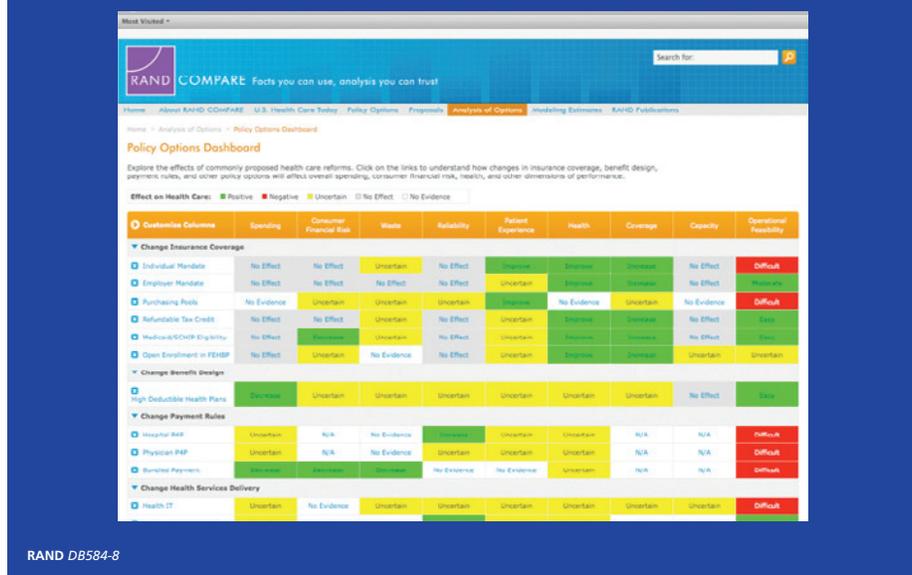
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One of the contributions of the COMPARE website is a description of state policy initiatives. The website lists various policy proposals, and shows which states have considered and/or enacted these proposals.

On the website, viewers can get information such as bill numbers, the status of proposals (e.g., passed, failed, under consideration), and specific descriptions of the proposed policies.

More information can be found at: www.randcompare.org/proposals/state.

The COMPARE Dashboard Evaluates Policies Across Nine Dimensions



The centerpiece of the COMPARE website is a “dashboard” that evaluates federal policy proposals along nine performance dimensions. The performance dimensions include three outcomes focused on health care costs (spending, consumer financial risk, and waste), three outcomes focused on health care quality (reliability, patient experience, and health), and two outcomes focused on health care access (coverage and capacity). In addition, we consider “operational feasibility,” an assessment of how easy or difficult it would be to implement a given policy.

The dashboard gives a top-level assessment of how each policy option (listed on the left column) will affect each performance dimension (listed across the top). The cell content provides a one-word description of the likely effects of each reform, coded in “stoplight” colors: green indicating that a reform has a beneficial effect on the outcome, yellow indicating that the effect of the reform is uncertain, and red indicating that the reform has an adverse effect on the outcome (or in the case of operational feasibility, would be difficult to implement). Viewers can click on the cells within the dashboard to get more information on the assessment. Underlying each cell are two tiers of additional information—a bulleted list describing the likely effect of the reform in more detail, and a full report with statistics and additional information explaining how we arrived at the top-level assessment. The detailed report includes additional information, such as how the overall assessment might vary across individuals or stakeholders.

Although the full effect of the dashboard is difficult to capture in a screen shot, the actual COMPARE dashboard can be accessed via the following link: <http://www.randcompare.org/analysis/>.

Today, We Consider The Building Blocks of Many Reform Proposals Under Discussion

- **Employer mandate:** Require employers to offer insurance or pay a penalty, small firms often exempt
- **Medicaid/SCHIP expansion:** Medicaid and SCHIP would cover everyone below a set percent of the poverty line
- **Individual mandate:** Require individuals to obtain insurance or pay a penalty; often coupled with a health insurance exchange
 - We couple the individual mandate with the exchange in our analysis
 - The policies could be implemented separately
- **Refundable tax credit:** Spending on nongroup health insurance refunded to taxpayers, up to a maximum amount

RAND DB584-9

In this presentation, we use COMPARE to evaluate four policy proposals that have been frequently discussed within the context of the national health care reform debate. These policies include an employer mandate that would require all businesses to offer health insurance or pay a penalty, a Medicaid and SCHIP expansion that would extend coverage to all individuals with incomes below a fixed percentage of the federal poverty level (FPL), an individual mandate that would require all individuals to obtain health insurance coverage, and a refundable tax credit that would refund spending on nongroup coverage to taxpayers. In our analysis, the individual mandate would be coupled with a national health insurance “exchange” that would make it easier for individuals without access to employer-sponsored coverage to purchase health insurance directly from health insurance companies. The exchange would likely be coupled with subsidies for low-income individuals and families. The health insurance exchange could be implemented without the individual mandate, and—potentially—the individual mandate could be implemented without the health insurance exchange. However, we consider them together because they are commonly coupled in the policy discussion.

Each of the reforms requires design choices that will affect outcomes (such as the number of people newly insured). For example, the effect of the employer mandate will depend on whether some firms are exempt, and the level of the penalty for noncompliance. Similarly, penalties for noncompliance will likely affect

the number newly insured through an individual mandate. For tax credits, the impact will be influenced by the amount of the credit, as well as rules regarding who is eligible for the credit. The effect of Medicaid and SCHIP expansions will depend on how broadly the expansion is applied.

We use the COMPARE model to analyze how these design choices affect the number newly insured. We then consider the effects of the policies on national health expenditure and government spending. Policy proposals currently under consideration by the U.S. Congress include elements of the four reforms considered in this briefing, but they differ across key design choices. For example, the House Tri-Committee bill would levy a penalty equal to 8 percent of payroll on firms that do not comply with the employer mandate, while the penalty proposed in the Senate HELP bill is \$750 per worker. Our analysis sheds light on how these design choices affect key outcomes.

How Might These Proposals Affect the States?

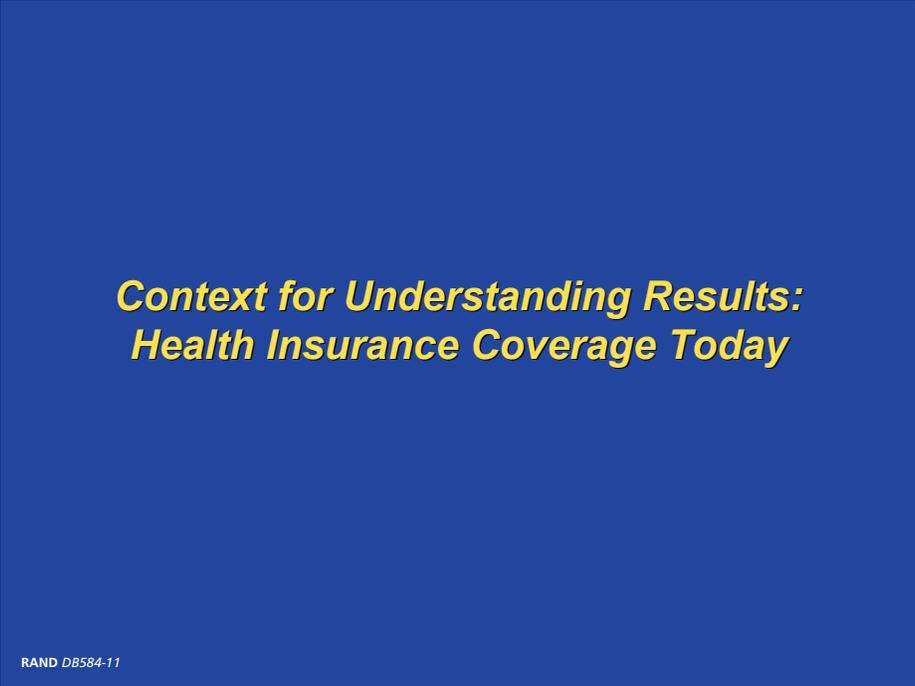
- **COMPARE is at a national level, and we have not done in-depth state-specific modeling**
- **The Medicaid expansion is likely to have the biggest effect on state finances**
 - **About 43 percent of Medicaid spending comes from states**
- **Health insurance exchanges (often part of individual mandates) might require state oversight**

RAND DB584-10

COMPARE provides national-level estimates—we do not currently report state-specific estimates. However, we have a methodology in place for conducting state-specific analyses, and may engage with states in the future to take advantage of this capacity.

Although we cannot provide state-specific estimates in this briefing, we can shed light on how some of the policy proposals under consideration would affect states. Currently, states pay about 43 percent of all Medicaid costs. The specific percent of Medicaid cost-sharing varies across states; Mississippi currently pays for about 24 percent of its Medicaid spending, while thirteen states including California, Maryland, Washington, and Virginia cover 50 percent of their state Medicaid costs. Policies that extend Medicaid and SCHIP coverage could have implications for state budgets, depending on how additional Medicaid and SCHIP spending would be funded. Our model assumes that the incidence of the Medicaid burden would remain constant following a Medicaid and SCHIP expansion, so that states would, on average, pay about 43 percent of new Medicaid costs. However, it's unclear whether the Medicaid burden would remain constant after health care reform. For example, the House Tri-Committee bill would require state Medicaid programs to cover all individuals with incomes below 133 percent of the FPL, but the federal government would pay 100 percent of the costs for this population.

In addition to Medicaid and SCHIP spending, states are likely to be affected by reforms involving health insurance exchanges. Health insurance exchanges would likely require new state regulation in the nongroup insurance market (the market for insurance policies that individuals purchase directly from insurance companies) and possibly the small group market, conforming to broad federal guidance. For example, the federal government would likely require that policies offered within state-based health insurance exchanges have “guaranteed issue”—meaning that insurers must sell policies to all interested individuals regardless of their age, health status, or other risk factors. In addition, the federal government would likely require that policies sold on the exchange would be subject to “rate banding”—meaning that insurance price variation based on age and other factors would be restricted, and that price variation based on health status would be prohibited.



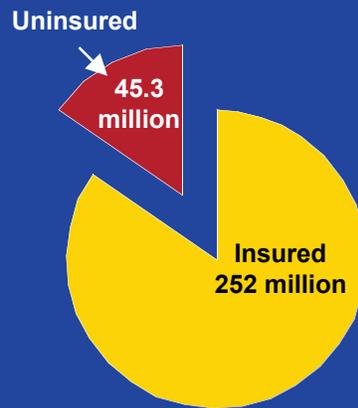
***Context for Understanding Results:
Health Insurance Coverage Today***

RAND DB584-11

Before turning to the COMPARE results, we first provide some background for understanding the current state of health insurance coverage in the United States.

How Many Americans Lack Insurance?

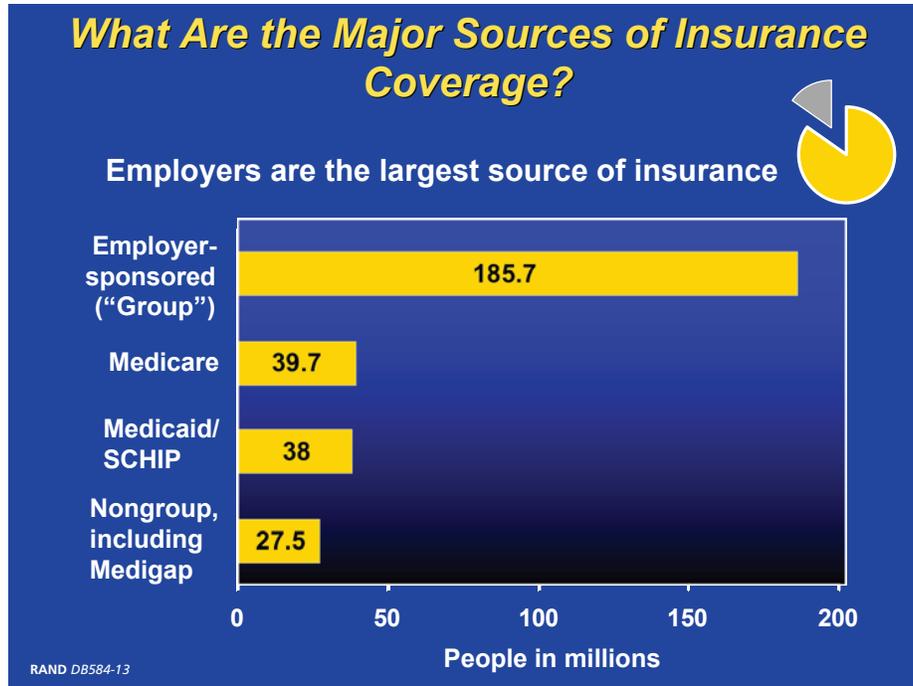
Insurance status in United States (2007)



RAND DB584-12

As of 2007, approximately 45 million Americans—or 15 percent of the population—lacked health insurance coverage. The COMPARE microsimulation model is calibrated to match 2007 population statistics, because this is the most recent year for which we have comprehensive, disaggregated data on health outcomes and individual characteristics that can be used to inform the model. However, uninsurance rates may have risen over the past 2 years due to the economic downturn, with recent projections suggesting that the number of uninsured Americans may have reached 52 million by 2009.⁷ Despite the probable recent increases, 2007 remains the baseline for our model.

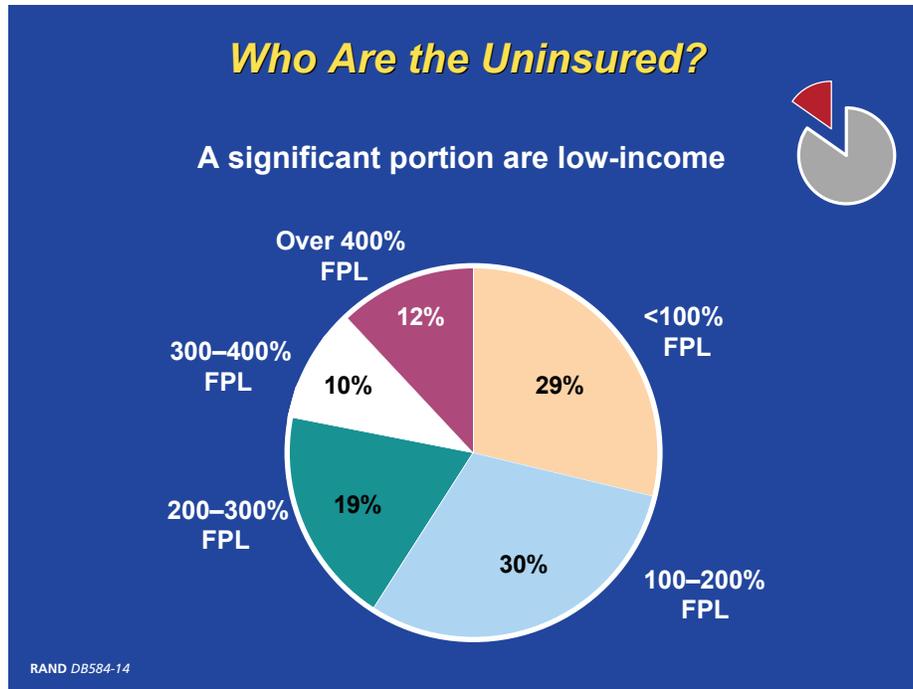
⁷ Sheps Center and North Carolina Institute of Medicine, 2009.



Among those who have health insurance, employer-sponsored or “group” policies are the most common source of health insurance coverage—approximately 186 million people had group policies in 2007. Other major sources of health care coverage include Medicare, Medicaid and SCHIP, and the nongroup market. As described earlier, the nongroup market is the market for health insurance coverage purchased directly from an insurance company, as opposed to through an employer.

The nongroup numbers in this figure include “Medigap” policies for individuals over the age of 65. Medigap policies provide wrap-around coverage for individuals who are insured primarily through Medicare. When we remove individuals over the age of 65 from the nongroup estimate, the number of people with nongroup coverage falls to 16 million.

Note: The numbers reported above do not sum to 252 million (the number of insured individuals in 2007) because some people have multiple sources of health care coverage.



Among those who are uninsured, a significant portion are low income. About 29 percent of uninsured Americans have incomes below 100 percent of the federal poverty level, and another 30 percent have incomes between 100 and 200 percent of the FPL. However, not all uninsured Americans are low income; about 12 percent have incomes above 400 percent of the FPL. Another 10 percent have incomes between 300 and 400 percent of the FPL. These statistics imply that policies to expand coverage will not reach 100 percent of the uninsured population if they are targeted specifically to low-income individuals.

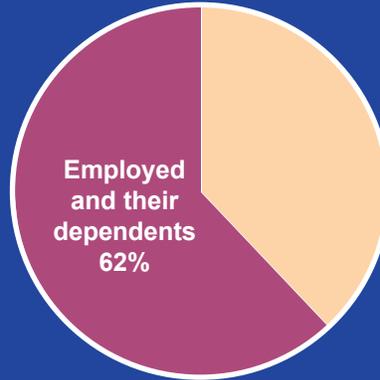
In 2007, the FPL was \$10,590 for an individual, and \$21,203 for a family of four.⁸

⁸ U.S. Census Bureau, "Poverty Thresholds for 2007 by Family Size and Number of Related Children Under 18 Years," Available at: <http://www.census.gov/hhes/www/poverty/threshld/thresh07.html> (Accessed 7/25/09).

Who Are the Uninsured?



Nearly two-thirds are employed or their dependents



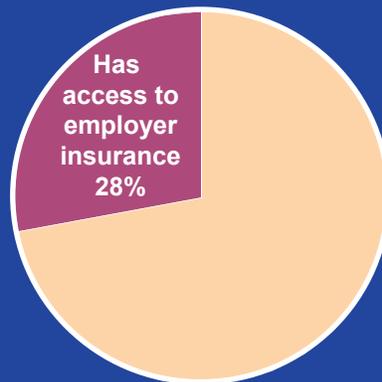
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Many policy proposals to expand health insurance coverage would build on the employer-based health insurance system. Approximately 62 percent of the uninsured population are either employed or dependents of employees. However, attempts to expand access to employer-sponsored coverage will have no impact on the 38 percent of uninsured Americans with no ties to an employer.

Who Are the Uninsured?



More than one in four has access to employer insurance



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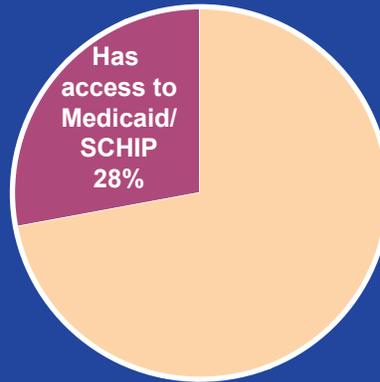
Even among those with access to employer-sponsored health insurance, not everyone enrolls. In 2007, approximately 28 percent of the uninsured population had access to an employer health insurance offer but was not enrolled. Individuals who are offered employer-sponsored coverage may choose not to enroll due to cost-sharing requirements. Many employers require that individuals pay a portion of the total premium. While cost-sharing requirements vary across employers, data from the Medical Expenditure Panel Survey⁹ show that, in 2006, the average total premium for single coverage in the employer-sponsored market was \$4,118 per year, of which employees paid approximately \$788 (19 percent). The average family premium in 2006 was \$11,381, of which employees paid approximately \$2,890 (25 percent).

⁹ Agency for Healthcare Research and Quality (AHRQ), “Medical Expenditure Panel Survey, Insurance Component National-Level Summary Tables, Private-Sector Data by Firm Size, Industry Group, Ownership, Age of Firm, and Other Characteristics, 2006.” Available at: http://www.meps.ahrq.gov/mepsweb/data_stats/quick_tables_search.jsp?component=2&subcomponent=1 (Accessed 7/25/09).

Who Are the Uninsured?



A similar proportion has access to Medicaid or SCHIP



RAND DB584-17

Similarly, 28 percent of the uninsured population in 2007 had access to an offer of Medicaid or SCHIP, but was not enrolled. These statistics imply that simply offering policies to individuals will not completely eliminate uninsurance. Barriers to enrollment among those who are eligible for Medicaid could include language barriers, administrative paperwork, and stigma.

COMPARE Results: Effects on Coverage

RAND DB584-18

We now turn to our estimates of how the four policies under consideration will affect health care coverage.

Employer Mandate

- **Would require all businesses to offer health insurance or pay a penalty; small firms would be exempt**
- **Effects of an employer mandate depend on**
 - Which businesses are subject to the mandate?
 - What is the penalty for noncompliance?

RAND DB584-19

The first policy that we considered was an employer mandate that would require all businesses to either offer health insurance coverage or pay a penalty. Employer mandates are included in the House Tri-Committee Bill, the Senate HELP Bill, and are currently in effect in Massachusetts and Hawaii. Employer mandates were also considered in a draft policy proposal released by Senator Max Baucus (D-MT) in November 2008. Key design choices that will affect the impact of an employer mandate include rules about which firms are exempt from the mandate and the penalty for noncompliance. Many employer mandate proposals would exempt small firms.

We Model Three Employer Mandate Scenarios

- **Low threshold, high penalty**
 - Firms with fewer than 5 workers exempt
 - Penalty for noncompliance is 20% of payroll
- **Medium threshold, medium penalty**
 - Firms with fewer than 10 workers exempt
 - Penalty for noncompliance is 10% of payroll
- **High threshold, low penalty**
 - Firms with fewer than 25 workers exempt
 - Penalty for noncompliance is 5% of payroll

RAND DB584-20

We model three employer mandate scenarios that vary based on the degree to which small firms are exempt from the mandate and the penalty for noncompliance. The low-threshold, high-penalty scenario requires that all firms with more than 5 workers offer coverage, and the noncompliance penalty is 20 percent of payroll at the firm. We consider a 20 percent payroll tax to be “high” because firms that currently offer insurance usually spend about 10 to 11 percent of payroll on health insurance costs.¹⁰ In the medium-threshold, medium-penalty scenario, all firms with more than 10 workers are subject to the mandate, and the penalty for noncompliance is 10 percent of payroll. Finally, in the high-threshold, low-penalty scenario, all firms with more than 25 workers are subject to the mandate, and the penalty for noncompliance is 5 percent of payroll.

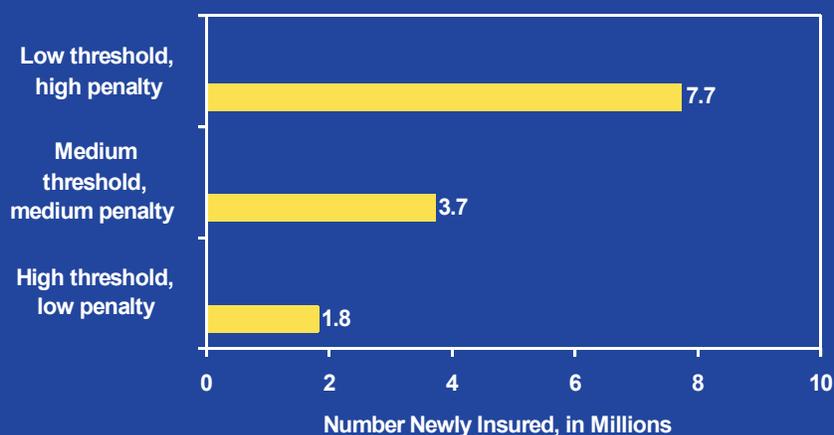
In the House Tri-Committee bill, the penalty for noncompliance is 8 percent of payroll, which falls between our “medium” and “low” penalty scenarios. In the Tri-Committee bill, firms are exempt from the mandate if total annual payroll is below \$250,000, and subject to smaller penalties if total annual payroll is below \$400,000. While there is not a one-to-one correspondence between payroll and firm size, smaller firms tend to have smaller payrolls, both because there are fewer

¹⁰Eibner C, Marquis MS, “Employers’ Health Insurance Cost Burden, 1996–2005,” *Monthly Labor Review*, Vol. 131, No. 6, June 28, 2008, pp. 28–44.

total workers at small firms and because payroll per worker tends to be lower at small firms.

In the Senate HELP bill, the penalty for noncompliance with the employer mandate is \$750 per worker, and firms with fewer than 25 workers are exempt from the mandate. Average payroll per worker would have to be less than \$15,000 for this level of penalty to exceed 5 percent of payroll.

Higher Penalties and Lower Firm Size Thresholds Increase the Number Newly Insured



RAND DB584-21

This graphic shows the estimated effect of the three policy scenarios on health care coverage. Under the low-threshold, high-penalty scenario, nearly 8 million people (17 percent of the uninsured population) would be newly insured. The number newly insured falls as penalties decline and the number of firms eligible for the exemption increases. These findings illustrate that design choices can have a substantial impact on the outcome of the policy—there is a four-fold difference in the number newly insured between the high and low scenarios. In addition, the employer mandate does not fully eliminate uninsurance in the United States; in fact, even in the high scenario, 82 percent of the currently uninsured population would remain uncovered.

There are several reasons for the finding that the employer mandate does not fully alleviate uninsurance. First, as stated previously, about 38 percent of the uninsured population has no affiliation with an employer. Second, even in the upper-bound scenario, some firms are exempt from the mandate. About 3 percent of all workers (4 million people) are in firms with fewer than 5 employees, and over one-quarter of all workers (nearly 37 million) are in businesses with fewer than 25 employees. Similarly, some firms will opt to pay a penalty rather than offer coverage, even when penalty levels are high. Finally, not all workers who are newly offered coverage will enroll in a policy.

Medicaid and SCHIP Expansion

- We assume eligibility is based on family income relative to the federal poverty level (FPL), and consider 4 cutoffs:
 - <400% FPL
 - <300% FPL
 - <200% FPL
 - <100% FPL
- Effect is largely determined by the magnitude of the expansion, and assumptions about who would take Medicaid if offered
- Likelihood of taking Medicaid given eligibility is determined based on
 - Data analysis

RAND DB584-22

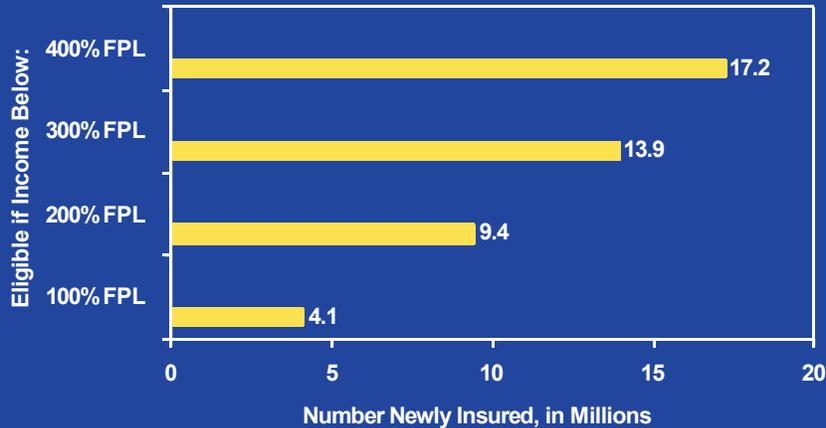
The second policy that we consider is a Medicaid and SCHIP expansion. The impact of this policy will depend on the new rules regarding eligibility. We assume that the policy extends coverage to everyone below a fixed percentage of the federal poverty level, and we allow thresholds to vary between 100 and 400 percent of the FPL to illustrate how design choices affect coverage outcomes.

In addition to the eligibility thresholds, the impact of the Medicaid expansion is determined by assumptions regarding which individuals will enroll Medicaid if eligible. In the COMPARE microsimulation model, these assumptions are based on historical data and studies that have considered variation over time and across states in Medicaid eligibility thresholds. Using these data and studies, we can predict which individuals are likely to take coverage when they become eligible. A caveat to this analysis is that we did not include an adjustment factor to account for the possibility that new Medicaid enrollees might have limited access to health care under a Medicaid/SCHIP expansion. A 2006 study found that about 19 percent of physicians were not accepting any new Medicaid patients, and only about half of physicians were accepting all new Medicaid patients, suggesting that some patients with Medicaid coverage may find it difficult to get care.¹¹

¹¹ Cunningham PJ, May JH, “Medicaid Patients Increasingly Concentrated Among Physicians,” Center for Studying Health System Change Tracking Report #16, August 2006.

The Effect of Medicaid and SCHIP Expansions on Coverage Depends on Eligibility

Eligibility Based on Income Relative to the Federal Poverty Line (FPL)



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This slide shows the number of people newly insured due to the Medicaid and SCHIP expansion. As expected, the number newly insured is highest when the eligibility threshold is set at 400 percent of the FPL, and declines as the eligibility threshold falls. Compared to the employer mandate, the Medicaid and SCHIP expansion has a larger impact on coverage—in the high scenario, 17.2 million people would be newly insured, a 38 percent reduction in the current uninsurance rate. This slide also shows that there is substantial variation between the high and low estimates—if the eligibility threshold were set at 100 percent of the FPL, only 4.1 million people would be newly insured.

Even in the high scenario, 62 percent of the currently uninsured population remains uninsured. Some of these individuals have incomes that exceed the Medicaid/SCHIP eligibility threshold. In addition, some people who are eligible for Medicaid and SCHIP fail to enroll, possibly due to administrative barriers or stigma. Currently, only about half of Medicaid-eligible individuals enroll in Medicaid, and—of those who are not enrolled—over one-third have no other source of coverage. In our modeling, we increase take-up rates slightly over what would be predicted based on data analysis alone, to account for the possibility that stigma would decrease if Medicaid became more widely available. However, even with increased take-up rates, a Medicaid expansion does not achieve universal coverage. Moreover, some new Medicaid enrollees may have difficulty receiving care due to provider access constraints.

Individual Mandate

- All individuals required to obtain health insurance or pay a penalty
- Individual mandate is supported by a “health insurance exchange”
 - Regulation in the nongroup market to make insurance more accessible, and to reduce premium price variation across enrollees
 - Subsidies for low-income individuals
- Effect of reform depends on
 - Penalty for noncompliance
 - Subsidy for low-income individuals
- We assume that those with access to employer-sponsored coverage are not eligible to purchase on the exchange

RAND DB584-24

We now turn to an individual mandate, which would require all individuals either to obtain health insurance or pay a penalty. The individual mandate would be supported by a national health insurance exchange. While the specific details of a health insurance exchange vary across proposals, we assume that regulation accompanying the implementation of an exchange would include guaranteed issue and rate regulation designed to limit premium price variation across enrollees. If a public health insurance plan were implemented as a part of national health care reform, it would be included as an option available on the health insurance exchange. However, we do not currently model a public plan.

Consistent with current legislative proposals, low-income individuals who purchase health insurance coverage on the exchange would be eligible for subsidies. The ultimate effect of the individual mandate on health insurance coverage will depend on the size and eligibility limits for the subsidies, as well as the size of the noncompliance penalty. In our estimates, we vary these design choices to determine their influence on coverage outcomes.

An important assumption underlying the individual mandate modeling approach is that individuals with access to employer-sponsored coverage are not permitted to purchase health insurance coverage on the exchange. This restriction, sometimes called a “firewall,” would insure that workers would not drop employer-sponsored coverage to take subsidies on the health insurance exchange, an occurrence that would increase government costs without the desired effect of

increasing insurance enrollment. Many proposals that include individual mandates incorporate similar measures to restrict workers who already have insurance offers from taking health care coverage on the exchange. For example, in Massachusetts, workers with access to qualifying employer policies are ineligible for subsidized coverage offered through the exchange.¹²

¹²Lischko AM, Bachman SS, Vangeli A, “The Massachusetts Commonwealth Health Insurance Connector: Structure and Functions,” The Commonwealth Fund, May 2009. Available at: <http://www.commonwealthfund.org/Content/Publications/Issue-Briefs/2009/May/The-Massachusetts-Commonwealth-Health-Insurance-Connector.aspx> (Accessed 7/25/09).

We Model Four Individual Mandate Scenarios

- High penalty, no subsidy
 - Penalty is 80% of insurance premium
- High penalty, high subsidy
 - Penalty is 80% of the insurance premium
 - <100% FPL fully subsidized
 - Partial subsidies available up to 400% FPL
- Medium penalty, medium subsidy
 - Penalty is 50% of the insurance premium
 - <100% FPL fully subsidized
 - Partial subsidies available up to 300% FPL
- No penalty, low subsidy
 - <100% FPL fully subsidized
 - Partial subsidies available up to 200% FPL

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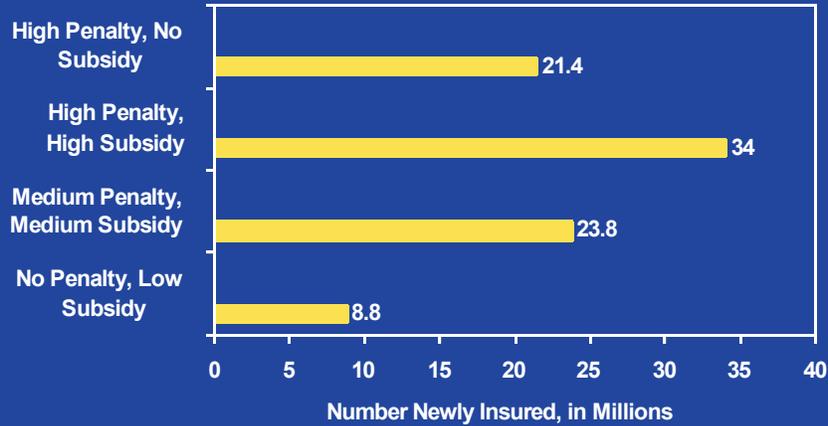
We model four individual mandate scenarios that vary depending on the amount of the penalty and the extent of the subsidies. In the high-penalty, no-subsidy scenario, we assume that the penalty for noncompliance is 80 percent of the premium that the individual would pay on the health insurance exchange, but there is no subsidy. In the high-penalty, high-subsidy scenario, we assume that the penalty for noncompliance is 80 percent of the exchange premium, but that full subsidies would be available to all individuals with incomes below 100 percent of the federal poverty level, with partial subsidies available on a sliding scale for individuals between 100 and 400 percent of the FPL. In the medium-penalty, medium-subsidy scenario, the penalty is 50 percent of the exchange premium, and partial subsidies are available for individuals up to 300 percent of the FPL. Finally, the no-penalty, low-subsidy scenario makes full subsidies available to everyone below 100 percent of the FPL, with partial subsidies available on a sliding scale between 100 and 200 percent of the FPL.

The assumptions evaluated in the individual mandate scenarios take cues from the current policy discussion. Both the House Tri-Committee and the Senate HELP bills would make partial subsidies available for individuals with incomes below 400 percent of the FPL who purchase coverage through the exchange. In Massachusetts, the only state to have enacted an individual mandate, individuals with incomes below 300 percent of the FPL are eligible for subsidies. In the House Tri-Committee bill, the penalty for noncompliance is a tax equal to 2

percent of adjusted gross income. The HELP legislation that passed out of committee on July 15 included a minimum noncompliance penalty of \$750 per individual; however, in the CBO analysis of an earlier version of the HELP bill,¹³ the noncompliance penalty for individuals was set at 50 percent of the minimum premium in the exchange. In Massachusetts, noncompliance penalties are currently 50 percent of the exchange premium.

¹³ U.S. Congressional Budget Office, “A Preliminary Analysis of the HELP Committee’s Health Insurance Coverage Provisions.” Released July 2, 2009. Available at: www.cbo.gov/ftpdocs/104xx/doc10431/07-02-HELP1tr.pdf (Accessed 7/25/09).

Reforms with High Penalties and High Subsidies Are the Most Effective at Expanding Coverage



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With a high penalty and high subsidies, the individual mandate could reduce uninsured by 34 million people (or, a 75 percent reduction in uninsurance). While 11 million individuals would remain uninsured, 96 percent of Americans would be insured under this policy. However, as with the other policies discussed in this briefing, the effect of the individual mandate will depend on design choices, including subsidy and penalty amounts. In the low scenario, with no penalty and a small subsidy, only 8.8 million people are newly insured, leaving 36 million Americans without insurance.

At least two of the bills under consideration in Congress, the Senate HELP bill and the House Tri-Committee bill, would extend partial subsidies to individuals with incomes below 400 percent of the FPL, which is consistent with the “high-subsidy” scenario modeled above. In our model, premiums on the health insurance exchange exceed \$2,000 per year for most adults, so the penalties that we have modeled typically exceed \$1,000 annually. In other analyses, we have found that low-income uninsured individuals are very sensitive to subsidy levels when making enrollment decisions, while higher-income individuals are motivated more by penalties.

Refundable Tax Credit

- **A refundable tax credit would provide a tax refund for individuals who purchase health insurance on the nongroup market**
- **The effect of the credit depends on**
 - Who is eligible?
 - How big is the credit?

RAND DB584-27

The final policy that we consider is a refundable tax credit for individuals who purchase health coverage in the nongroup market. Although tax credits for individuals do not figure prominently in the current debate, they were previously proposed by both President George W. Bush and Senator John McCain in his Presidential campaign. In our model, tax credits would refund expenditure on nongroup health insurance coverage up to a maximum amount. Individuals would be eligible for the full amount of the refund even if it exceeded their tax liability. Eligibility for tax credits would be based on income. The effect of tax credits on coverage will depend both on the income limits for eligibility and the maximum refund permitted.

We Model Four Tax Credit Scenarios

- **Small credit, limited eligibility**
 - Credit is \$1000 for individuals, \$2500 for families
 - Individuals with incomes <\$15,000 eligible for full credit; <\$30,000 eligible for partial credit
 - Family limits are \$30,000 for full and \$60,000 for partial credit
- **Medium credit, limited eligibility**
 - Credit is \$2500 for individuals, \$6250 for families
 - Income eligibility same as above
- **Large credit, limited eligibility**
 - Credit is \$5000 for individuals, \$12,500 for families
 - Income eligibility same as above
- **Large credit, expanded eligibility**
 - Credit is same as above (\$5000; \$12,500)
 - Individuals with incomes <\$100,000 eligible for full credit; <\$200,000 eligible for partial credit
 - Family limits are \$200,000 for full and \$400,000 for partial credit

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We consider four tax credit scenarios. In the small-credit, limited-eligibility scenario, the maximum credit is \$1,000 for individuals and \$2,500 for families. Individuals are eligible for the full amount of the credit if their income is below \$15,000, and partial credits are available on a sliding scale for individuals with incomes below \$30,000. Family income eligibility limits are double the individual limits, so that full credits are available for families with incomes below \$30,000, and partial credits are available for families with incomes between \$30,000 and \$60,000. The medium-credit, limited-eligibility scenario increases the credit to \$2,500 for individuals and \$6,250 for families, with no change in the eligibility rules. Similarly, the large-credit, limited-eligibility scenario increases the credit to \$5,000 for individuals and \$12,500 for families, again with no change in eligibility. In the large-credit, expanded-eligibility scenario, credits are \$5,000 for individuals and \$12,500 for families, all individuals with incomes below \$100,000 are eligible for the full credit, and those with incomes between \$100,000 and \$200,000 are eligible for partial credits. Family limits are double the individual amounts, so all families with incomes below \$200,000 are eligible for the full credit, and partial credits are available for families with incomes between \$200,000 and \$400,000. In the expanded eligibility scenario, the vast majority of Americans would be eligible for the full credit.

In our model, premium prices for nongroup policies vary depending on age, health status, family size, and state of residence. For individuals, annual premiums

in our model can be as much as \$7,000, although even here we have constrained price variation somewhat, since our status quo assumptions incorporate some rate-banding in the nongroup market.¹⁴ Family premium prices vary depending on family structure, but could reach levels as high as \$15,000 and beyond. As a result, even in the high-credit scenarios, some individuals and families will incur out-of-pocket spending on health insurance premiums that is not refundable.

¹⁴ Girosi F, et al., “Overview of the COMPARE Microsimulation Model,” RAND Working Paper WR-650, January 2009. Available at: http://www.randcompare.org/downloads/COMPARE_Model_Overview.pdf (Accessed 7/30/2009).

Credit Size and Eligibility Both Affect Outcomes

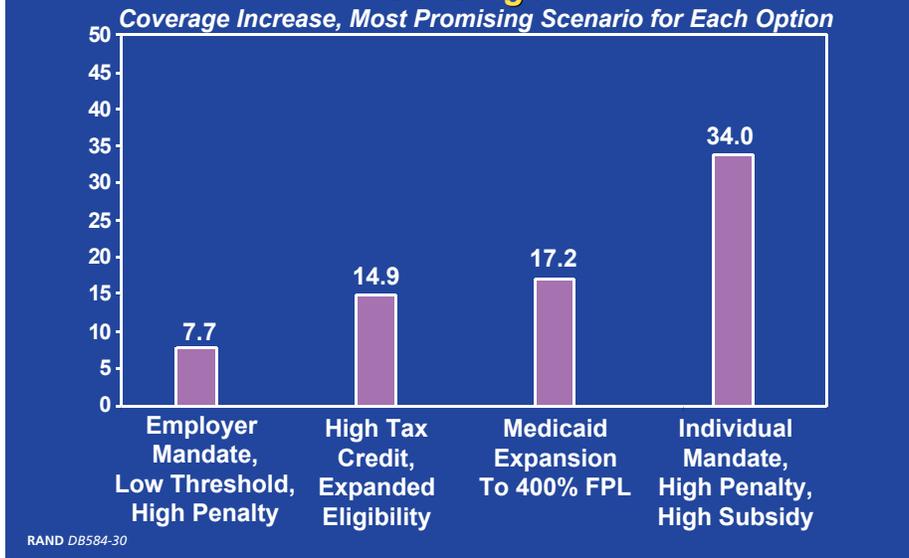


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This slide shows the estimated increase in health insurance coverage under the four modeled scenarios. In the large-credit, expanded-eligibility scenario, 15 million people are newly insured, decreasing the uninsurance rate by roughly one-third. The number of newly insured individuals falls as eligibility is restricted and the size of the credit declines. In the small-credit, limited-eligibility scenario, only 2.3 million people are newly insured.

As with the other modeled policies discussed in this briefing, the number of newly insured varies substantially depending on specific policy design choices. Additionally, even in the large-credit, expanded-eligibility scenario, refundable tax credits do not achieve universal coverage. People may fail to take tax credits because their incomes exceed eligibility limits, or because they do not wish to shoulder the additional out-of-pocket spending that could be required over and above the refund amount. We also assume that some people will not take the credit because they are unaware of it, because the hassle associated with claiming the credit is too large, or because they are ineligible for coverage due to nongroup underwriting practices. (We assume that—in some states—individuals can be denied coverage if insurers believe they represent too much of a risk.)

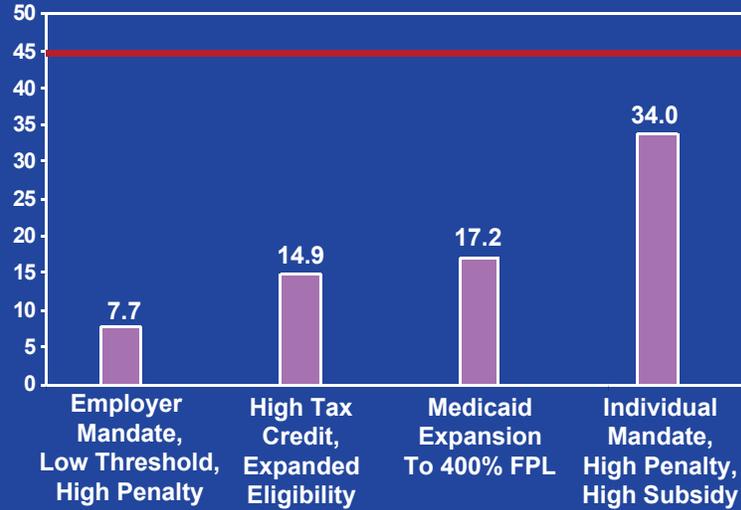
Of the Four Options Individually Modeled, Individual Mandates Have the Highest Potential to Expand Coverage



In this chart, we rank the policy options according to their maximum impact on coverage in the “high” modeled scenario, based on the combination of design features that achieved the largest increase in coverage. Of the four options considered, individual mandates have the highest potential to expand coverage, with 34 million people newly insured. Employer mandates, in contrast, have the smallest impact in the upper bound, with 7.7 people newly insured.

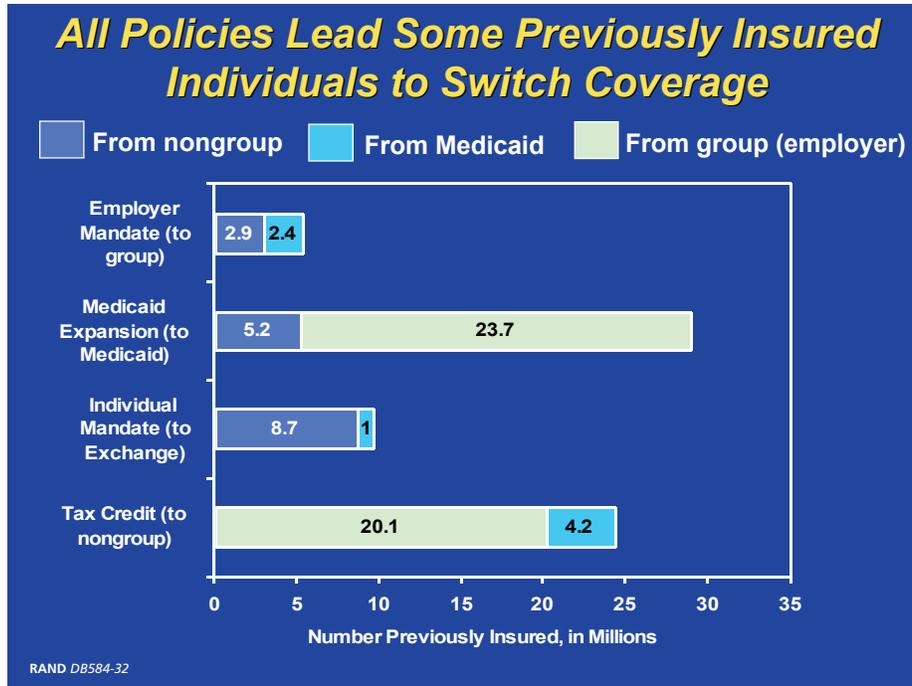
None of the Options Achieve Universal Coverage for the Current 45 Million Uninsured Americans

Coverage Increase, Highest Modeled Scenario for Each Option



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The red line on this chart represents the 45 million individuals who are uninsured in the status quo. This chart shows that, even in the high scenarios, none of the policy options considered in this briefing—by themselves—would achieve universal coverage.



In addition to expanding coverage, all of the policies under consideration could cause some previously insured individuals to switch from one type of plan to another. The top bar on the above chart shows predicted switching behavior under the employer mandate. Because the employer mandate will cause some firms to begin offering health insurance coverage, some previously insured individuals who work in those firms will opt to switch from their prior source of coverage onto the newly available employer (group) plan. Specifically, 2.9 million individuals will switch from the nongroup market onto employer plans as a result of this policy, and 2.4 million people will switch from Medicaid onto employer plans.

Under the Medicaid expansion, some individuals who were previously ineligible for Medicaid or SCHIP will now be eligible to take public coverage. As a result, 5.2 million people will move from the nongroup market onto Medicaid, and another 23.7 million people will switch from employer-sponsored policies into the Medicaid program.

The individual mandate introduces the option to purchase coverage through the health insurance exchange, causing 8.7 million people to switch from nongroup coverage onto the exchange, and 1 million people to switch from Medicaid onto the exchange. No one switches from employer-sponsored coverage onto the exchange because, by assumption, this type of switching is prohibited.

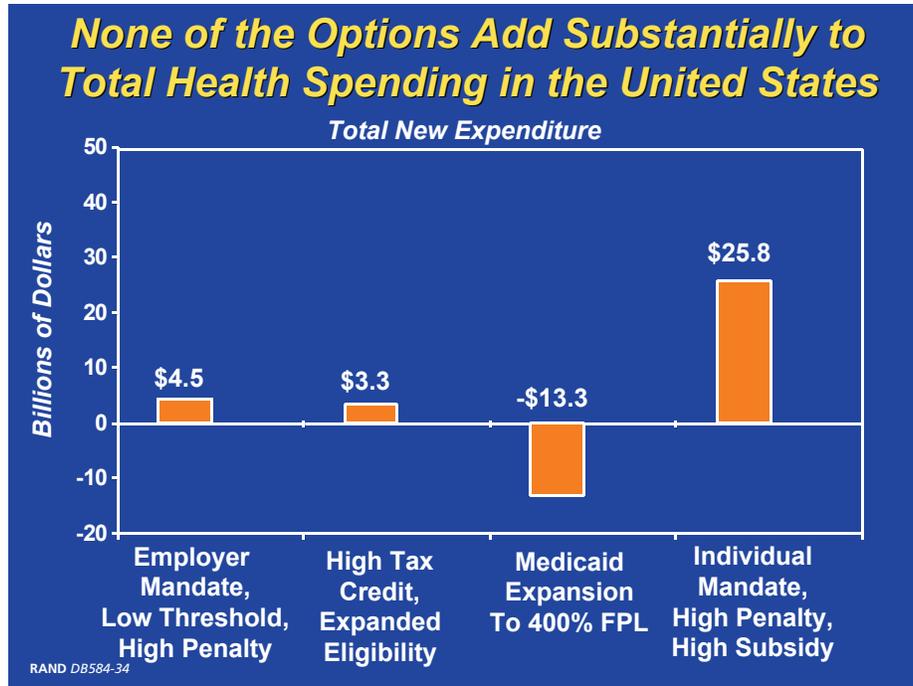
Finally, under the refundable tax credit, coverage in the nongroup market becomes more attractive due to newly available tax refunds. These refunds cause 20.1 million people to switch from employer-sponsored coverage onto the nongroup market, and 4.2 million people to switch from Medicaid onto the nongroup market.

The analysis shown above is based on the high-coverage scenarios modeled in the previous slides. Although the results shown above will have no effect on the number of individuals who become newly insured, they have important implications for spending.

COMPARE Results: Effects on Spending

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We now turn to the predicted effects on spending. In all of the subsequent analyses, we focus on the “high” coverage scenarios for each of the four policy options considered.



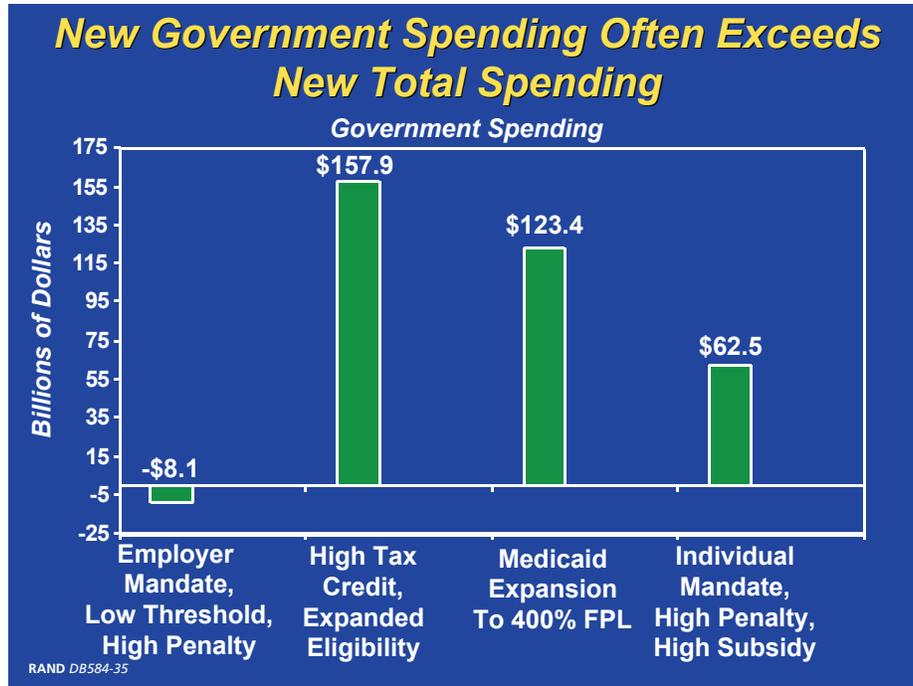
This chart shows the predicted change in total health spending for each of the four policy options, including spending by all individuals, firms, the federal government, and state governments. Changes in spending are driven by new health care utilization by the previously uninsured, as well as changes in utilization that occur when individuals switch from one source of coverage to another. Currently, the National Health Expenditure Accounts—the official estimates of total annual health care spending in the United States—indicate that we spend approximately 2.2 trillion dollars annually on health care.¹⁵ Because total spending in the United States is so high, predicted spending changes are close to negligible relative to current spending. New spending under both the employer mandate and the tax credit scenarios is low because the total number of newly insured individuals is low (with tax credits, the large number of people switching from employer-sponsored to nongroup coverage also causes a reduction in spending that tempers the increase due to newly insured individuals). Under the Medicaid expansion, we see a decline in health spending—this is because nearly 24 million people switch from employer-sponsored plans onto the Medicaid program in response to this policy change. Prior work has shown that Medicaid enrollees

¹⁵ Centers for Medicare and Medicaid Services, “National Health Expenditure Data, Historical,” Available at:

http://www.cms.hhs.gov/NationalHealthExpendData/02_NationalHealthAccountsHistorical.asp (Accessed 7/28/2009).

tend to use less care than enrollees in employer coverage, possibly due to benefit limitations, access constraints in the Medicaid program, or lower reimbursement rates for providers. The individual mandate yields the biggest change in expenditure, with 25.8 billion dollars in predicted new health spending. Yet, this is still less than 2 percent of total national health expenditure.

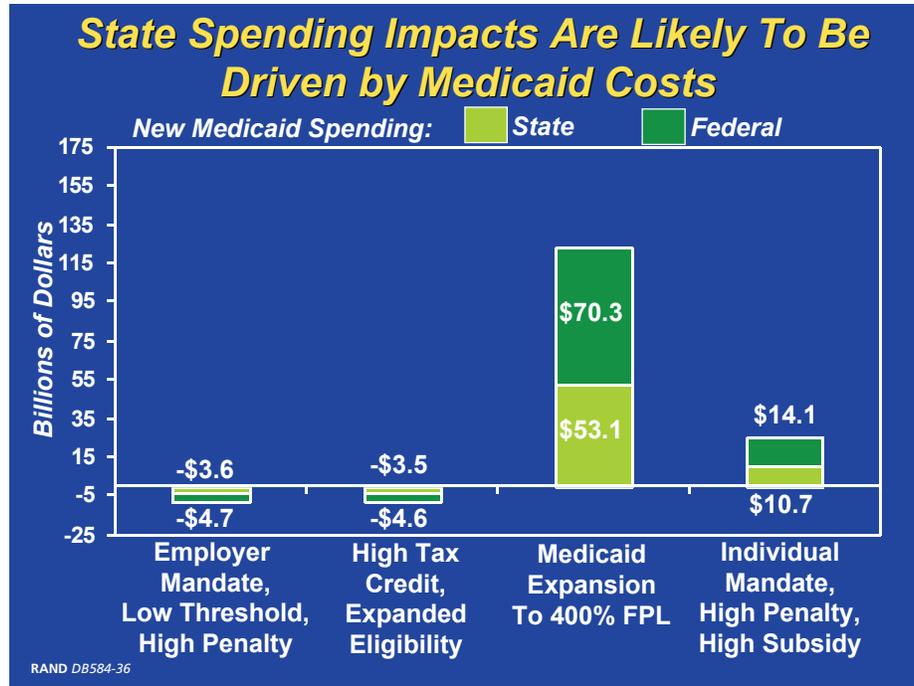
The spending projections shown above are not comparable to CBO projections for a number of reasons. First, the CBO models policy options contained in bills that have been introduced in Congress. As mentioned previously, our scenarios are different from those in the current bills being considered by Congress. Second, we present one-year spending estimates, while CBO typically presents cumulative spending between 2010 and 2019. Third, our spending estimates are reported in 2007 dollars, while CBO projects spending using current dollars that incorporate trends in health care cost inflation. Finally, the analysis shown above shows the total change in national health spending, while CBO limits its analysis to changes in federal spending.



Above, we show predicted new government spending that results from the policy changes. These figures include both state and federal government spending. Government spending falls due to the employer mandate because some individuals who were previously enrolled in Medicaid switch to employer-sponsored coverage.

For the remaining three policy options, government spending increases; in fact, new government spending substantially exceeds new total spending (shown on the previous slide). New government spending is higher than new total spending because, under all three options, the government is now providing subsidies, tax credits, or Medicaid eligibility to people who were previously enrolled in either employer-sponsored coverage or the nongroup market. The government incurs new spending for these individuals without causing a substantial change in total national health expenditure. New government spending under the individual mandate is lower than new government spending with tax credits or a Medicaid expansion because individuals with employer-sponsored coverage are precluded from taking government-funded subsidies in the health insurance exchange. However, individuals who were previously insured in the nongroup market are eligible for government subsidies in the individual mandate scenario. High government costs are also driven by the fact that the government is now assuming out-of-pocket costs that were previously borne by the uninsured population.

Again, these figures cannot be directly compared with CBO estimates for several reasons. First, we are considering a different set of policies than analyzed by the CBO. Second, we are estimating one-year spending; CBO considers ten-year cumulative spending. Third, we report spending estimates using 2007 dollars, while CBO uses current dollars that account for health care cost inflation over time. Finally, our figures include state and federal spending, while CBO calculates the federal impact only. To put these results in perspective, if we limit our figures to federal spending only, and consider the percent increase relative to federal spending as reported by the National Health Expenditure Accounts, the individual mandate leads to a 6.9 percent increase in federal spending. Cumulatively over 10 years, the CBO estimates for the House Tri-Committee bill suggest an 8 percent increase in federal spending.



In order to show one likely impact on state spending, in this chart we isolate the change in Medicaid and SCHIP spending that would result from each policy option. The light green part of each bar shows the anticipated change in state spending assuming that states bear 43 percent of new Medicaid and SCHIP costs; the dark green part of each bar shows the predicted change in federal spending. These results show the cumulative spending effect across all states—the effect for each individual state would vary depending on the size and characteristics of the Medicaid population, as well as the state-specific contribution to Medicaid and SCHIP expenditure. As discussed earlier, while on average states pay for 43 percent of all Medicaid spending, the range varies from 24 to 50 percent depending on the individual state.

Total Medicaid spending falls with both the employer mandate and the tax credit, because some individuals who were previously enrolled in Medicaid or SCHIP switch to employer coverage (in the case of the employer mandate) or to nongroup coverage (in the case of the tax credit). New Medicaid spending is highest under the Medicaid expansion, with states spending an additional \$53.1 billion as a result of the policy. Medicaid spending also increases with the individual mandate. Although the individual mandate does not affect Medicaid and SCHIP eligibility rules, some individuals who were previously eligible for Medicaid but not enrolled opt to enroll following the individual mandate due to the penalties associated with being uninsured.

Summary of Findings

- **Substantial variability in effect of policies, driven by design choices**
- **Of the four options considered, individual mandates have the largest impact on health care coverage**
- **No option achieves universal coverage, even with upper-bound assumptions**
- **Refundable tax credits and Medicaid expansions are the costliest options from a federal government perspective**
 - **Medicaid expansion is costliest option for states**

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In summary, we analyzed four policy options frequently discussed in the context of health care reform to estimate their potential effects on insurance coverage and health spending. For each option, we found that the impact on coverage varies substantially depending on how the policies are designed. Features such as eligibility rules for subsidies and penalties levied for noncompliance with mandates can have a large effect on the outcome of health care reform.

None of the policy options considered would achieve universal coverage. However, an individual mandate with high subsidies and a high noncompliance penalty could reduce uninsurance by roughly 75 percent. Implementing such a mandate could result in approximately 96 percent of the U.S. population becoming insured. However, the effect of the individual mandate will depend both on the size of subsidies and the magnitude of the noncompliance penalty.

From the government standpoint, tax credits and Medicaid expansions could lead to the largest increases in spending, since some individuals who were previously enrolled in either employer-sponsored or nongroup coverage may switch policies in order to take advantage of new programs. State budgets could be affected by Medicaid and SCHIP expansions, if states are required to fund part of the new coverage. Costs associated with tax credits would likely be borne by the federal government.

Where Do We Go From Here?

- We are in the process of analyzing bills as they move forward
- Updates will be posted on the COMPARE website as new results become available
- We have the ability to do state-specific analyses and will look for more opportunities in the future
 - A report on health care cost containment for Massachusetts was released in August 2009

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We are currently in the process of analyzing new federal bills and proposals as they move forward. When they are completed, our results will be posted on the COMPARE website (www.randcompare.org).

Although most of the COMPARE analysis we have done to date has focused on national-level reforms, we have the ability to generate state-specific estimates and will look for opportunities to do this type of work in the future. In August 2009 we released our first major state-level report, an evaluation of health care cost containment options for Massachusetts.¹⁶

¹⁶Eibner CE, Hussey PH, Ridgely MS, McGlynn EA, *Controlling Health Care Spending in Massachusetts: An Analysis of Options*, Massachusetts Division of Health Care Finance and Policy, Boston, MA, Publication #09-219-HCF-01, August 2009. Available at: http://www.mass.gov/Eeohhs2/docs/dhcfp/r/pubs/09/control_health_care_spending_rand_08-07-09.pdf (Accessed August 2009).



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