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Jonathan Gruber

Taking Massachusetts National: An Incremental Approach to Universal Health Insurance

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Taking Massachusetts National:
An Incremental Approach to
Universal Health Insurance

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Abstract

The United States is in the midst of another wave of interest in universal health insurance coverage, this time inspired by efforts at the state level. In this article I review what we know about the uninsured and why we should care about covering them. I then discuss the issues that must be addressed to achieve universal coverage, and discuss the Massachusetts reform which tried to navigate between the right and the left on this important issue. I then lay out a plan for universal coverage at the national level which builds on the Massachusetts model. Such a plan would cost $130 billion per year. I also show that such a plan could be readily financed by restructuring the exclusion of employer-sponsored insurance from taxation.

Contents

1. Introduction

The history of health care reform in the United States is littered with failed attempts at universal health care coverage. The most recent was the Clinton Health Security Act of 1993–94, which proposed an ambitious overhaul of the U.S. health care system; it was defeated soundly in Congress. There has been no serious national attempt at universal coverage since that time. For example, in 2004, Democratic presidential candidate John F. Kerry focused much more on lowering health insurance premiums than he did on broad expansions of coverage.

All of this has changed over the past few years, but this time the states are taking the lead. Most notable has been the health reform plan enacted by Massachusetts in April 2006. This sweeping bill reformed insurance markets, subsidized insurance coverage for a large swath of the population, introduced a new purchasing mechanism (the Health Connector, or the "Connector"), and mandated insurance coverage for almost all citizens. The success to date of the effort in Massachusetts has led to similar proposals in a number of states, most notably the proposal in California by Governor Arnold Schwarzenegger.

The Massachusetts bill, perhaps, has also been the motivation in 2008 for similar proposals from the leading Democratic presidential candidates.

This paper discusses a plan for taking the Massachusetts model to a national scale. I begin by discussing the structure of the Massachusetts reform, and highlighting the major issues that were faced in the first year of implementing this reform. I then discuss how I would resolve these issues in a national plan. I then provide estimates of the cost, coverage, and distributional implications of such a reform, using a microsimulation model developed to assess the cost and coverage impacts of reform proposals.

Next, I turn to the important issue of financing. I estimate that replicating this plan at the national level would cost about $130 billion a year in 2007 dollars. There is a natural source of financing that can more than cover this total: the tax subsidy to employer-provided health insurance. In the final section of the paper, I discuss the important distributional implications of financing universal coverage using this revenue source.

2. Universal Coverage: What Are the Issues?

Who Are the Uninsured?

There are currently 47 million uninsured individuals in the United States. Who are they? According to data from the Current Population Survey (www.census.gov/cps/), the uninsured have lower-than-average incomes: nearly two-thirds of the uninsured are in families with incomes below double the poverty line.[1] Not all the uninsured, however, are low income. Twenty-eight percent of the uninsured are in families with incomes above $50,000 per year. Sixty-three percent of the uninsured are in families where the family head is a full-time, full-year worker, but is either not offered health insurance or does not take it up to cover herself or family members. Several million of the uninsured are undocumented immigrants, who are generally not eligible for public programs. Thus, the modal uninsured person is a member of the *working poor class*: below median income, but not among the poorest in the nation (Employee Benefit Research Institute [EBRI] 2007).

Significantly more than 47 million people lack health insurance at some point during any given year. Although the Current Population Survey data underlying the statistics in the previous paragraph are based on a question asking whether people were uninsured during the entire previous year, most analysts suspect that respondents are replying about current insurance status. For example, the Congressional Budget Office (CBO) finds that other surveys that ask about uninsurance at a particular point in the year provide estimates very similar to the Current Population Survey (CBO 2003). The CBO finds that estimates of uninsurance over an *entire* calendar year are only about one-half to two-thirds as large as point-in-time estimates and that estimates of the number of individuals uninsured *at any point* in the last year are about 40–50 percent higher than point-

in-time estimates. These findings highlight the dynamic nature of uninsurance.

Why Universal Coverage?

Does the simple fact that 18 percent of the non-elderly population lacks health insurance necessarily make that a major social policy problem? Many more than 18 percent of the population do not own their own homes, or are obese. So why should we care about uninsurance in the United States?

1. The classic economic argument for increasing insurance coverage is based on the externalities associated with underinsurance. For example, there are physical externalities associated with communicable diseases; uninsured people are less likely to receive vaccinations and to care for communicable diseases. Since such a small share of medical expenditures is related to communicable disease, however, this is not a major rationale for universal health insurance (as opposed to universal vaccination). There is also a significant financial externality imposed by the uninsured on the insured through uncompensated care. When the uninsured do not pay their medical bills, their costs are passed on to other users of the medical system. Such uncompensated care amounts to $30 billion each year, a small amount relative to the $2 trillion health economy.

2. Second, increasing coverage could eliminate any inefficiencies associated with uninsurance. One such concern is the distortion to the labor market caused by employer-based coverage. It is possible that many individuals are afraid of losing their health insurance coverage, which makes them unwilling to search for or to move to jobs where they would be more productive. This reluctance to change can lead to a mismatch between work-

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1. The U.S. "poverty threshold" in 2008 for a family of four is $20,650.

ers and jobs that can lower overall U.S. productivity. This situation is referred to as *job lock*: the unwillingness of an individual to move to a better job for fear of losing health insurance.[2] Empirical studies, reviewed in Gruber and Madrian (2004), confirm that mobility from job to job is reduced by job lock. Madrian (1994) estimates that job lock may reduce mobility by as much as 25 percent. At the same time, the fact that mobility is reduced does not necessarily have major welfare implications, an issue that has received relatively little attention. Gruber and Madrian (2004) offer some back-of-the-envelope calculations that suggest that the welfare cost is unlikely to be large—about $15 billion to $30 billion. These are very rough calculations, though, and this is an area of considerable uncertainty.

3. A third economic argument in favor of government intervention for universal insurance is the notion that asymmetric information can cause adverse selection, leading to market failure. In the case of health insurance—for example, if the potential insured person knows more about her preexisting conditions than she reveals—insurance companies might offer incomplete insurance in order to deter high-risk types. This situation might even lead to a "death spiral" of rising premiums and an increasingly risky pool of insured persons that eventually leads to the collapse of the market. In these circumstances, government intervention through a mandate or regulation can be welfare improving.

4. A fourth concern with the uninsured is the issue of affordability. As discussed below, health insurance is very expensive, and many individuals who might rationally demand health insurance cannot afford it at current prices. This leads to a distributional argument for covering the uninsured as a form of redistribution.

5. The final motivation for caring about the un-

insured is what economists would call *paternalism*: the concern that individuals without health insurance may be harming themselves by not buying insurance. There is a clear belief among the public and among policymakers that being uninsured is bad for your health. An Institute of Medicine (IOM) study reviewed hundreds of studies documenting the health problems associated with uninsurance (IOM 2001). That study estimates that uninsured individuals use only half as much medical care as the insured use, and have a mortality risk that is 25 percent higher, with more than 18,000 people dying each year because of lack of insurance (IOM). While the studies reviewed by the IOM were mostly observational analyses documenting a correlation between a lack of health insurance and poor health, several other studies have used careful empirical methods to document more carefully a causal impact of health insurance on health (Currie and Gruber 1996a, 1996b; Hanratty 1996; Lurie, Ward, Shapiro, and Brook 1984).

What Are the Issues?

Any approach to universal insurance coverage in the United States must address three critical issues: pooling, affordability, and mandates.

Pooling. The efficient provision of insurance requires large pools of participants that are created independently of health status. Absent such pools, insurers will be reluctant to offer insurance, or will do so only with incomplete coverage or at very high prices, for fear of adverse selection and high-cost exposure. The majority of Americans can access insurance through such pools, either through large firms or through publicly provided insurance. Most of the uninsured, however, do not have access to any such pooling mechanism. For example, most uninsured persons do not work for an employer that offers insurance. Solving the problem of the uninsured requires developing some new pooling mechanism,

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2. See Gruber 2001 for a discussion of the theory of job lock.

either through government insurance or through private insurance–purchasing arrangements such as the Federal Employees Health Benefits Plan. The success of attempts to create a new pool will depend on scale; existing state-level attempts to create pools for small businesses have generally failed because they did not attract a sufficient number of enrollees to deal with concerns about adverse selection and to spread administrative costs.

Affordability. Health insurance is expensive. The average cost to a family for health insurance offered through large firms in Massachusetts is about $12,000 a year. It is even higher for those who work for small firms, and higher still for those who are in the nongroup market. For a family of four with combined income of $40,000 (about 200 percent of the poverty line), for example, family coverage would cost about one-third of family income, a huge share of income to devote solely to health care. What is an "affordable" level of health insurance spending? There is no correct answer for all, but these high costs highlight the fact that it is impossible for the government to reduce substantially the number of uninsured individuals without providing large subsidies to low-income groups to cover the costs of insurance.

Mandates. Even large subsidies for health insurance coverage will not be sufficient to end the problem of uninsurance. More than one-third of the uninsured are eligible for either free public insurance or highly subsidized employer-provided insurance, yet do not take it up. To come close to full insurance in the United States would require an individual mandate—a requirement on individuals to obtain some type of insurance coverage. This mandate would be similar to automobile insurance in most states, where individuals are required to have insurance if they own a car. Some have argued that a mandate would be hard to enforce, but there is considerable evidence that mandates can be enforced. The Netherlands and Switzerland both have compliance rates of 98 to 99 percent with their health insurance mandates. The compliance rate for auto insurance in U.S. states with high levels of

information sharing is about 98 percent (Nichols, Gruber, and Pauly 2007). In addition to addressing the externality, adverse selection, and paternalism arguments set out above, another justification for mandates is that more-effective risk pooling would be accomplished by the implied cross-subsidy of the sick by the healthy.

Past (Polarized) Debates

Within the framework of these three issues, we can consider the alternative approaches to universal coverage favored by the left and by the right of the political spectrum.

The Left. The solution favored by many on the left is to move to a single-payer system. Such a system would clearly address all three of the issues raised above. A single-payer system would achieve the largest possible pooling mechanism through including everyone in the U.S. in the pool. Insurance would be affordable because it would be a free entitlement for all. And there would be complete coverage because everyone would be enrolled by default in this program at birth. Moreover, many advocates of a single-payer system highlight the administrative cost savings inherent in such a system. Administrative costs in private insurance average about 12 percent of premiums, whereas administrative costs in the Canadian National Health Insurance program are 1.3 percent (Woolhandler, Campbell, and Himmelstein 2003).

At the same time, there may be disadvantages from having the government set a national benefits package. The limitations of policymakers with incomplete knowledge to tailor benefit packages to individual preferences in the face of rapidly changing technology could be compounded by the politicization of the benefits package selection, potentially resulting in a package that is wrong for most Americans. A lack of innovation in insurance provision could also result in missed opportunities for learning which approaches are best for benefits coverage and provider reimbursement. For example, some of the 10.7 percent differential in administrative costs

between Canada and the United States is money spent on care management, which may be a cost-effective expenditure. Unfortunately, we have little hard data on the allocation. More generally, dynamic solutions to control costs may be more likely to arise from a competitive environment than from a monopoly environment. For example, most of the private firms offering prescription drug coverage through Medicare do not use the government template for their plan, but instead have adopted innovative ideas such as tiered drug pricing for generics and name-brand drugs. Although it is too early for a full welfare evaluation of these innovations, they appear (at least initially) to be effective in controlling costs while maintaining quality.

Beyond the pros and cons on policy grounds, national health insurance also has serious political problems. First, the majority of Americans, particularly those working for large firms with a choice of plans, are content with their private health insurance. It would be a difficult political sell to convince those Americans that they have to give up their insurance plan choices so that a minority of Americans can gain coverage.[3] Second, the private health insurance industry in the United States is a massive entity with more than $500 billion in claims paid annually. It is impossible to conceive of a state of the world where an industry of that size could be legislated out of business. It seems unlikely that we will have health insurance reform in the United States in the near future that does not incorporate private health insurance.

The Right. For many on the right, the problem of uninsurance is addressed best through expanding affordability of private health insurance. For example, individuals could be given tax credits to purchase health insurance from private vendors. Modest versions of this approach were a staple of the Bush administration budget proposals in every year from 2001 through 2006.

Such an approach has the advantage of addressing directly the affordability concern noted above, while maintaining the private health insurance market. This approach explicitly does not address either of the other two issues that must be addressed to move to universal coverage, however. Currently, individuals who do not have access to either large employer pools or public insurance, particularly those without any employer offer, face an insurance market that features high and variable premiums, and insurance coverage that is often incomplete. Providing individuals with more resources without giving them a place to take those resources to buy fairly priced insurance is simply wasting money. Moreover, such an approach cannot provide anywhere near universal coverage. In the type of modeling described below, I find that even very generous subsidy policies cannot cover more than half of the uninsured on a voluntary basis. Indeed, some estimates suggest that subsidies focused solely on nongroup insurance could actually *raise* the number of uninsured through employer erosion that exceeds nongroup enrollment (Gruber 2006a).

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3. Some of the attacks in the early 1990s on the Clinton plan were based on fears of restricted insurance choices.

3. Massachusetts: Synthesizing the Best of the Right and the Left

T he Commonwealth of Massachusetts is not typically regarded as a bastion of centrist thinking. While the state does have a strongly partisan Democratic legislature, however, at the time of reform in 2006 it had been led by a Republican governor for fifteen years. Moreover, the particular Republican who was governor, Mitt Romney, laid out fundamental health care reform as one of the major goals for his administration. In addition, there was a very sophisticated and experienced advocacy community in Massachusetts that had been lobbying for universal coverage for years. This advocacy community was not ostracized, but rather was well integrated and respected by the policymaking community.

Massachusetts also has three other advantages that made universal coverage more than just wishful thinking: First, the state has a relatively low uninsurance rate of about 10 to 12 percent of the nonelderly, compared to 18 percent nationally (EBRI 2007). This implies that fewer subsidies would be required to move to universal coverage. This lower insurance rate partly reflects the much higher rate of employer insurance offering in Massachusetts relative to the rest of the nation.

Second, there was a large federal transfer to the state at stake. As part of a Section 1115 waiver to its Medicaid program that began in 1997, the state was receiving a large intergovernmental transfer from the federal government, which arose from matching funds for state transfers to safety-net hospitals. In 2004–05, the Center for Medicare and Medicaid Services (CMS) under the Bush administration was working to crack down on such intergovernmental transfers as a means of reducing federal spending. They threatened to remove the Massachusetts intergovernmental transfer. In response, the Romney administration suggested to the Center that if the money continued to flow it would be transitioned from payments to safety-net providers

toward subsidies to individuals to buy insurance. The Center agreed to consider this alternative, placing a deadline of early 2006 on the state to come up with a plan to use the funds to increase insurance coverage or lose them altogether. This was a time bomb that had a substantial effect on state deliberations.

Finally, Massachusetts already had a ready-made funding source in place: the state uncompensated care pool. As part of an attempt at health care reform in the late 1980s, the state set up a mechanism through which hospitals were able to bill to the state the costs of treating low-income patients rather than absorbing those costs and passing them on to other payers. (Hospitals are forbidden from billing anyone who is pool eligible.) This pool had risen to more than $500 million by 2005. Since universal coverage would lower the ranks of the uninsured, it would obviate the need for a pool of this size. Thus, some of these funds could be rededicated to paying for a universal coverage system.

The Structure of Reform

The reform ultimately crafted and passed almost unanimously by the Massachusetts legislature has several key features.

Privatized Public Insurance for Low-Income Residents. For adults who are below three times the poverty line, a new program was established (Commonwealth Care Health Insurance Program, or "Commonwealth Care") that provides insurance coverage at subsidized rates. The legislation specifies that insurance must be free for adults who are below the poverty line, with minimal copayments of any type, and that it must be subsidized for adults between 100 and 300 percent of the poverty line, with copayments but not deductibles allowed. The exact subsidy levels and benefits were not prescribed other than by mandating that all insurance contin-

ue to include state-mandated benefits. Individuals were to choose from one of four Medicaid managed care organizations, the largest two of which were maintained by the large safety-net hospitals.

New and Improved Insurance Market. There were also major changes to improve the insurance market. First, the nongroup and small group markets were merged to create one large market with guaranteed issue (i.e., insurers must sell to all applicants) and community rating with a two to one (2:1) age band (i.e., insurers cannot differentiate prices across applicants by any factor other than age, and even then the ratio of prices for the oldest to youngest can only be 2:1). Second, the Connector was established as a clearinghouse for individuals to purchase private health insurance. The Connector has no monopoly power, and plans sold inside the Connector must be sold for the same price outside the Connector. It operates as somewhat of a market maker, however, specifying benefits packages that are likely to be emulated elsewhere. In a sense, the Connector operates as the anchor store in the mall, if the "mall" is the merged small group–nongroup market.

Mandates. The law specified that all adults in the state must be covered by health insurance, but only to the extent that such insurance was deemed "affordable" by the board of the Connector. Individuals who did not have coverage by December 31, 2007, would face the loss of their individual tax exemption (worth roughly $218), and those who did not have coverage in 2008 could be liable for a penalty of half of the premiums they would have paid if they had been insured. The law also mandated the charge of $295 per employee on all nonoffering employers with more than ten employees, and mandated that all employers with more than ten employees offer a Section 125 account so that the employees could pay health insurance contributions with pretax dollars.

Within the context of this basic framework, the Connector board has, over the past year, filled in a number of details around how the plan would work in Massachusetts, addressing questions such as, "What premiums should be charged for low-income residents in Commonwealth Care?" "What should define *minimum creditable coverage* for the purposes of qualifying for the insurance mandate?" "Is insurance affordable under the mandate? If not, who should be exempted from the mandate?"

To date, the reform in Massachusetts has been viewed as a success.[4] More than 300,000 of the state's 400,000 to 600,000 uninsured individuals were covered as of the end of 2007, despite the modest penalties in that year. The plans introduced through the Connector have been low priced, with options for young individuals at less than $150 a month, and options for middle-aged persons at around $200 a month. Perhaps most important, all decisions have been made by consensus of the Connector board. This might be why advocacy groups of all stripes continue to be supportive of the evolving plan.

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4. Although, as one of the architects of the law and a member of the board overseeing its implementation, I am far from being an objective observer!

4. Taking Massachusetts National: The Details

A national version of the Massachusetts plan would follow this basic structure. At the same time, there are some limitations in the current structure (such as the restriction of subsidies to those below 300 percent of the poverty line), and there are some decisions made by the Connector board (such as the high rate of subsidization up to 300 percent of poverty) with which I disagree, and for which I make alternative proposals in this national plan.

Public Insurance

Public insurance entitlements—offered through Medicaid and the State Children's Health Insurance Program—would be frozen at their current level, which is typically around 200 percent of poverty for children in most states, and 100 percent of poverty for parents in many states. The federal government would continue to subsidize public expenditures by states through the Federal Medical Assistance Percentages or enhanced Federal Medical Assistance Percentages for those enrollees, with states paying the remainder.

Low-Income Pool

The remainder of low-income individuals in the United States who do not have access to employer-sponsored insurance (ESI) would be enrolled in new state-specific pools. Insurance companies would be eligible to offer insurance in these state-specific pools on a guaranteed issue basis. Within these pools, insurance prices would be completely community rated.

The benefits packages within the pools would vary based on income group. For the lowest-income individuals (those below the poverty line), coverage would be complete, with minimal cost sharing. As income increased, modest cost sharing would be introduced, reaching levels typical of the latest ESI

offerings for the highest-income members of the pool (e.g., a $20 copayment for physician visits or for prescriptions for generic drugs). There would be other cost controls in place, such as selective networks, to offset the more generous benefits provision for lower-income groups. In my modeling, I assume that the cost of insurance in this pool would equal the typical cost of insurance to large firms in each state, and that this would fall to 95 percent of that level for those between 100 and 200 percent of poverty, to 90 percent of that level for those between 200 percent and 300 percent of poverty, and to 85 percent of that level for those between 300 percent and 400 percent of poverty through cost sharing. In this way, there is progressivity in both benefits design and in subsidies (detailed below). There would also be redistribution across plans within this pool to offset cases with very high costs, with all insurers contributing to a fund going to offset part of the highest-cost patients. For example, insurers could pay an assessment as a share of premiums to finance a pool that can be tapped to help pay a share of the costs of any claim (or annual member costs) exceeding a given threshold.

Insurance would be subsidized in this pool by setting a limit as a share of income that individuals must pay for their insurance. These limits would be as follows:

- 2 percent of income, between 100 and 150 percent of the poverty line
- 4 percent of income, between 150 percent and 200 percent of the poverty line
- 6 percent of income, between 200 percent and 250 percent of the poverty line
- 8 percent of income, between 250 percent and 300 percent of the poverty line
- 10 percent of income, between 300 percent and 350 percent of the poverty line
- 12 percent of income, between 350 percent and 400 percent of the poverty line

For comparison purposes, median income in the United States is between three and four times the poverty line, depending on family structure, so this schedule would subsidize insurance up to median income levels.

A problem with this approach is that low-income individuals who are charged high contributions for their ESI would have no way to afford them. This leads to serious equity concerns between those who do and those who do not have access to the subsidized pool. To address this, I propose to use the voucher approach that is part of the Massachusetts legislation (but which has not yet been implemented) and that is part of Governor Schwarzenegger's proposal in California. Under this approach, individuals who are offered ESI and who have incomes below 400 percent of the poverty line can come to the low-income pool, but only if they bring with them their employer contribution toward health insurance to offset state costs. Employers are required to allow their employees to take their contributions with them.

Middle- and High-Income Pools

For many middle-income and all high-income families (above 400 percent of poverty), states would set up a new pooling mechanism, HealthMart, which would replace the existing nongroup insurance market. There would be a separate HealthMart in each state. HealthMart would be guaranteed issue, and there would be no health rating, although insurers could age-rate on a basis of three to one (e.g., the premiums for the oldest enrollees can be no more than three times the premiums for the youngest enrollees). Once again, any insurer participating in HealthMart would contribute toward a risk pool that offsets part of the costs of the highest-cost cases.

While HealthMart would replace the nongroup market, firms would also be allowed to buy in to HealthMart, although if they did so they could not offer their employees any non-HealthMart source of insurance (to avoid sending the worst risks to the

HealthMart). For my microsimulation purposes, I do not model firms as leaving the existing group market to buy through HealthMart. By focusing just on nongroup purchasers, I will understate the reach of HealthMart, but it is difficult to project how attractive this option would be to employers.

HealthMart would offer three levels of benefits, and every participating insurer would have to offer at all levels of benefits to avoid cream skimming. The highest level would be comparable to a low-copayment HMO today. The middle level would have an actuarial value of roughly 80 percent of that level, comparable to a typical plan newly offered by small firms in the United States. The bottom level would have an actuarial value of roughly 60 percent of that level. In Massachusetts, the minimum creditable coverage that forms this lower level features the following:

- Maximum deductible of $2,000 per individual or $4,000 per family
- Maximum out-of-pocket limits of $5,000 per individual or $10,000 per family
- Coverage of physician, hospital, mental health, and prescription drugs (but no coverage of dental or vision)
- At least three covered physician visits (at a copayment) before the deductible
- Generic drugs covered with no deductible

Critics of such plans have labeled such plans "underinsurance," but this is not consistent with available evidence. Health economics research has clearly shown that insurance can be more restrictive than the typical insurance package held today without impacting health in a negative way. The famous RAND Health Insurance Experiment (Newhouse and the Insurance Experiment Group 1996), which I summarize in a report for the Kaiser Family Foundation (Gruber 2006b), showed clearly that for the average person the copayments for medical care could rise significantly without health deteriorating. At the same time, there were some subgroups of ill patients for whom higher copayments did deter needed care—in particular, low-income ill patients.

Exempting prevention and maintenance from the deductible in this way met the needs of this group, although ultimately a better solution would be to move toward treatment-specific copayments along the lines of Fendrick, Smith, Chernew, and Shah (2001).

While the plan above is not so different from plans offered by many insurers today, eventually an even better approach would be to move to the kind of income-related out-of-pocket limit approach advocated by Furman (2007). This plan, which involves individuals paying half their health care costs until they reach 7.5 percent of income, allows for strong income protection, while making individuals price-sensitive over a large range of their health spending.

Individual Mandate

Finally, all individuals in the United States would be required to purchase health insurance. This individual mandate would be enforced through the tax code. All individuals would be issued forms acknowledging their health insurance coverage; these forms could be attached to tax forms (as with W-2 forms). Any individual who does not have insurance would be assessed a fine equal to the cost of insurance for that individual. The monies collected from such fines would be a source of financing for the residual care pool.

A major issue with a mandate is affordability. As detailed in Gruber (2007), the share of income contributed by individuals who are below 400 percent of poverty under the schedule above is affordable for almost all individuals. For those above 400 percent of poverty, the government would set an affordability limit of 15 percent of income. If the cost of the bottom-level plan exceeds this level for any individual or family, then the government would subsidize the difference to bring them to that level. These subsidies would be applied ex post through a tax rebate for individuals who have exceptionally high medical costs.

An important question for dynamic analysis of this type of proposal is how both the subsidy levels and the affordability limit evolve with the inevitable rapid rise in health care costs.

5. The Impacts: Microsimulation Results

To assess the impacts of a plan such as this, I turn to a microsimulation model that I have developed to model the effects of government intervention in insurance markets on insurance coverage and public sector costs. This model allows the user to input a set of policy parameters, and to output the impact of that policy on public sector costs and the distribution of insurance coverage. This modeling approach is similar to that used by the Treasury Department, the CBO, and other government entities. This approach consists of drawing on the best evidence available in the health economics literature to model how individuals will respond to the changes in the insurance environment induced by changes in government policy. Gruber (2005) describes the model in detail.

It is important to highlight that the behavioral assumptions embedded in this model are based on the existing literature, which in turn derives estimates based on observed changes in prices and other insurance market characteristics. The plan I am modeling here is well beyond anything that has been implemented in U.S. insurance markets, so this is an out-of-sample prediction. While we have no strong basis for incorporating systematic changes in behavioral assumptions for this type of reform relative to past changes, the range of uncertainty around these behavioral assumptions is higher than for modeling more modest reforms.

Another issue that is not fully addressed here is the coverage of undocumented immigrants to the United States. For the purposes of this modeling, I assume that all individuals in the country will be able to access subsidies and will be subject to the mandate. To the extent that these assumptions are not true for undocumented immigrants, I am overstating the cost and reach of the proposal.

"Universal Access" Plan

I begin by analyzing a version of the plan that does not have an individual mandate, but that has subsidies and market reform. It is important to highlight a key assumption of this modeling: that market reform can work effectively in the absence of a mandate. There is a significant concern that this will not be the case, as noted earlier. That is, if the government tries to impose the market reforms described above without a mandate, it may lead to rapidly rising prices and potentially even to a death spiral in insurance markets. I do not model this possibility, but there are real risks that it can arise.

The results of this analysis are presented in Table 1. Panel 1 shows the distribution of insurance coverage, Panel 2 shows federal government expenditures, and Panel 3 shows the distribution of net (of tax changes) federal spending. Column 1 shows baseline values. All dollar figures are for year 2007 and are expressed in 2007 dollars.

TABLE 1.

Effects of Alternative Approaches to Expand Insurance Coverage for the Nonelderly and Nondisabled

	Column 1 Baseline values[a]	Column 2 No mandate, no finance	Column 3 Mandate, no finance	Column 4 Mandate, remove exclusion	Column 5 Mandate, neutral financing[b]
Pane 1: Distribution of insurance coverage (millions of persons)					
Employer insured	160	144	153	136	136
Nongroup insured	11	4	5	4	4
Public	28	21	25	25	25
New pool	0	53	62	78	78
Uninsured	47	24	1	1	1
Panel 2: Federal government expenditures (billions of 2007 dollars)					
Public insurance (nonelderly/disabled)	58	43	50	50	50
Low-income subsidies	0	127	147	165	165
Income tax revenues on nonelderly	721	727	724	834	799
Payroll tax revenues on nonelderly	597	602	601	677	677
Net federal revenues	1,260	1,159	1,128	1,296	1,261
Change in net federal cost		101	131	−36	−1
Change in net state cost		−12	−7	−14	−14
Panel 3: Distribution of net federal spending (billions of 2007 dollars)					
Less than poverty line		50	63	63	63
One to two times poverty line		39	49	43	43
Two to three times poverty line		14	20	0	0
Three to four times poverty line		1	2	−28	0
Four to five times poverty line		−1	0	−28	−21
More than five times poverty line		−3	−2	−87	−87

Source: Author's calculations.
Note: Numbers may not sum exactly due to rounding.
a. As of 2007.
b. Neutral financing via transitional tax credits for those with incomes between three and five times the poverty line. See text.

This policy reduces the number of uninsured in the United States by 23 million. The increase in the pool, 53 million persons, minus the decrease in public insurance, 7 million persons, means that 46 million additional persons are receiving some federal subsidy. Comparing the 46 million persons receiving new subsidies to the 23 million–person reduction in the number of uninsured suggests that the rate at which this policy crowds out private purchase is roughly 50 percent. Note that this crowd-out represents net new federal spending, the large majority of which goes to help families who earn up to 200 percent of the poverty line pay for health insurance. Thus, it may be considered a desirable feature by policymakers who care about more than achieving the maximum insured increase per new dollar spent.

This policy covers less than half of the total stock of uninsured, despite these generous subsidies and the comprehensive reform. This reflects the fact that many uninsured are not interested in obtaining coverage even at very high subsidy rates. Although this is clearly an out-of-sample prediction, this result is consistent with the large number of uninsured who are eligible for free public insurance but who do not enroll, as well as the large number of uninsured who are eligible for highly subsidized employer-provided insurance but who do not enroll. Universal access does not lead to anywhere near universal coverage.

At the same time, there is a large shift in where people get insurance. The number of individuals with ESI falls by 16 million under this scenario. Although this may seem like a large number, it is actually only 10 percent of the 160 million people who have ESI today. There is a much larger decline in the nongroup market, which shrinks by 7 million persons, or more than half. The new HealthMart pool increases by 53 million persons, which is more than both of these declines combined. The annual (fully phased-in) costs of this policy are presented in Panel 2 of the table. The baseline costs, such as $58 billion in public insurance (federal Medicaid) expenditures, are low relative to numbers typically used, since my calculations focus only on the non-elderly and nondisabled. Similarly, the tax revenues apply only to the nonelderly.

This plan induces a modest reduction in traditional public insurance spending and a modest increase in income and payroll tax revenues. At the same time, there is a large new expenditure on the low-income subsidies to those in the pool (with a small share of those expenditures arising from the 15 percent cap on premiums above 400 percent of poverty). On net, the federal government spends $101 billion a year on this program. (Note that, while the top rows in the third panel are levels of spending, the row for federal government spending is the net change in expenditures to the federal government.) State governments save about $12 billion a year in lower public insurance expenditures and higher taxes.

The distributional implications of this policy are shown in Panel 3. The policy is targeted, with virtually all of the benefits accruing to those below three times poverty. The benefits are negative at higher-income levels because lower levels of ESI imply higher wages, and therefore higher tax payments.

"Universal Coverage" Plan

Column 3 shows the results for the same schedule of subsidies but includes the individual mandate, converting this plan from "universal access" to "universal coverage." This change has a number of noticeable effects on the results. First, the plan provides nearly universal coverage (once again, by assumption of a very effective mandate).[5] Second, there is much smaller erosion in ESI because the decline due to the availability of subsidies is offset by increased enrollment among those eligible, previously uninsured, who are now mandated to get coverage. Similarly, there is a much smaller reduc-

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5. I model the mandate by running the universal access version of the model, where individuals make voluntary choices, and then imposing that 95 percent of the remaining uninsured obtain coverage because they are mandated to do so.

tion in the number on public insurance. On net, 59 million persons receive new federal subsidies, compared with a 46 million–person reduction in the uninsured, for a crowd-out rate of only 28 percent.

The net federal cost of this plan is higher, at $131 billion. What is striking here, though, is that there is a 30 percent increase in cost for a doubling of incremental insurance coverage. In part this reflects the fact that the newly insured through the mandate are somewhat healthier than those who signed up with the new subsidies without the mandate, but for the most part this reflects that individuals who did not sign up before the mandate are largely unsubsidized. In this sense, the mandate forces most of those without insurance to pay for some or all of their coverage.

Financing the Plan: Removing the Tax Subsidy to ESI

A new $131 billion-a-year federal expenditure would place a strain on a federal budget that is already stretched thin to pay for other domestic and foreign initiatives. A natural source of financing for this initiative is available, however: the tax subsidy to ESI. While wages received are taxed, employer expenditures on health insurance received are not. Thus, individuals receive a large tax break by not being taxed on a particular form of their compensation.

This large subsidy to ESI is regressive, since it is worth the most to the higher-income individuals with the highest tax rates (and since higher-income individuals are more likely to be insured and to have insurance that is more expensive). In addition, this subsidy to ESI induces inefficient insurance purchase, since individuals can buy excessively generous insurance with pretax dollars. Of course, in the absence of any other pooling mechanism for workers, the ESI tax subsidy may be a necessary price to pay to keep the ESI market intact. With a new pooling mechanism, however, reductions in ESI are not problematic. It does not matter whether or not individuals obtain insurance through employers, as long as they have access to some group insurance mechanism.

In addition, the tax subsidy to ESI has a major advantage over other sources of financing, in that it ensures that the health plan will continue to be paid for, into the future. Since the savings from repealing the tax exclusion rise at the same rate as health care costs, a health plan funded through this mechanism would be covered in each year of its operation. Any other source of financing, such as taxes on high-income earners, would only rise at the rate of the economy. With health care costs rising more quickly than the economy, these alternative sources of financing would eventually fall short of the revenue needed to finance the plan into the future.

I therefore consider the impact of funding the national Massachusetts plan by removing this tax subsidy. More specifically, employer expenditures on health insurance would be included in taxable wages for individuals. An important issue to resolve with such a policy is whether ESI expenditures would be included for both income and payroll tax purposes and, if included for both, whether the resulting revenues would be dedicated to the social insurance programs financed by these payroll taxes or recaptured for use in funding the universal coverage plan. I assume the latter, removing the exclusion for both income and payroll tax purposes, and ignoring the fact that higher payroll tax revenues would ultimately imply higher Social Security benefits obligations.

The results of incorporating this financing are presented in Column 4 of Table 1. There is now a substantial disruption to employer-provided insurance, with coverage in this market falling by about 15 percent compared to the baseline value. This represents roughly 32 million persons who lose ESI due to firms no longer offering coverage, or due to switching from ESI to the subsidized low-income pool, and about 8 million persons moving onto ESI due to the mandate. In these cases, wages rise by an amount equal to the reduction in health insurance outlays, and affected individuals use those extra wages to pay for health insurance through the new pool. The changes in public and nongroup insurance are similar to Column 2, while the new pool

has grown to 78 million persons. Once again, it is important to highlight that this is an attempt to use a model based on historical experience to predict a major new policy change, so there is considerable uncertainty around these estimates. In particular, if removing the ESI exclusion changes the entire equilibrium in the insurance market, there could be a race to the bottom: firms might stop providing insurance more broadly.

The impact on government expenditures and tax revenues is shown in Panel 2 of Column 4. The costs of the low-income subsidies have risen from $147 billion in the case of no financing to $165 billion a year with financing, since the size of the low-income pool expands. At the same time, there is a rise in income tax revenues of $110 billion, and of payroll tax revenue of $76 billion. Therefore, if all of these tax revenue increases were dedicated to financing the plan, there would be a net federal surplus of $36 billion (even ignoring the $14 billion net gain to the states).

Of course, such a policy would have large distributional consequences. The spending would be targeted to the lower parts of the income distribution, while the higher taxes would be borne by higher-income groups. In fact, while there would be sub-

stantial gains for those below two times the federal poverty line, there would be losses at three or more times the federal poverty line. (Median income in the United States is between three to four times the poverty line, depending on family structure.) Thus, such a policy would be a net loser for more than half the families in the United States.

In principle, however, the extra tax revenues raised by this policy could be used to help cover the losses below five times the poverty line. Most directly (if not politically realistically), we could introduce a transitional tax credit to assist those who are at between three and five times the poverty line who would be disadvantaged by this change. This credit would be equal to $380 per individual and $950 per family for those between 300 and 400 percent of poverty, and would fall to $120 per individual and $300 per family for those between 400 and 500 percent of poverty. Column 5 shows that, compared to the policy without the tax credit, adding such a credit would lead to no net losses between three and four times poverty, and would reduce by 25 percent the losses for those with incomes between four and five times poverty. Thus, by recycling revenues, we could finance universal coverage in the United States in a way where there are net gains to all income classes below median incomes.

6. Conclusion

The political and economic environment in the United States is as favorable for universal health insurance coverage now as it has been for several decades. States are moving forward aggressively toward universal coverage, and many are advocating that the federal government follow suit. In this paper, I have laid out one approach to universal coverage that both guarantees affordable coverage for all Americans and is consistent with market principles by relying on private insurance markets. Such a plan is working in Massachusetts and can work for the nation as a whole.

It is important to note that there are principally two problems with the health care system in America: a lack of coverage, and poor cost effectiveness. The health industry knows how to solve the first problem, but not how to solve the second. There is important ongoing research about cost effectiveness, which is measured as quality of care relative to cost of care, including geographical variation in health care spending and the cost-saving potential of electronic medical records. This type of research should continue, but we should not hold uninsurance—a problem that we know how to solve—hostage to a problem that we do not know how to solve.

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