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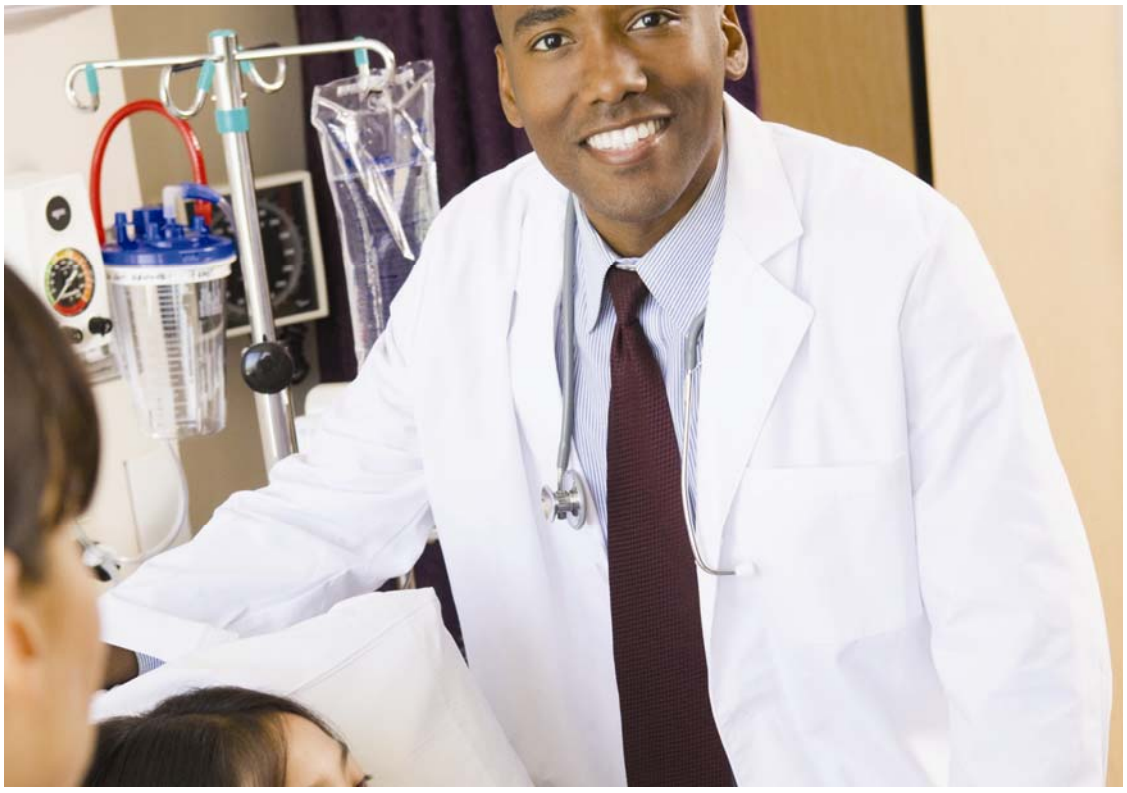

Cost and Coverage Impacts of the American Affordable Health Choices Act of 2009: The July 15th draft

Staff Working Paper #8

By: John Sheils
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Date: July 27, 2009

About The Lewin Group

The Lewin Group is a health care and human services policy research and management consulting firm. We have over 25 years of experience in estimating the impact of major health reform proposals. The Lewin Group is committed to providing independent, objective and non-partisan analyses of policy options. In keeping with our tradition of objectivity, The Lewin Group is not an advocate for or against any legislation. The Lewin Group is part of Ingenix, Inc., which is a wholly owned subsidiary of the UnitedHealth Group. To assure the independence of its work, The Lewin Group has editorial control over all of its work products.

Executive Summary

The American Affordable Health Choices Act of 2009 would require all Americans to have health insurance. To assure access to affordable coverage, the bill expands the Medicaid program and provides premium subsidies for people living through 400 percent of the FPL (e.g., $88,000 for a family of four). It also requires employers to either cover their workers or pay a payroll tax of up to 8.0 percent.

In addition, the bill establishes an "exchange" that presents a selection of health coverage alternatives including a newly created public plan that would compete with private insurers for enrollment. Initially, individuals and small firms are eligible for the exchange, but the newly created "Commissioner of Health Choices" would have the authority to open the exchange to all firms beginning in the third year. The Act also reforms insurance markets by assuring guaranteed issue of coverage and prohibiting plans from using health status in setting premiums.

In this study we provide estimates of the program's impact on premiums, coverage and spending for the federal government, state and local governments, private employers and consumers. Because it is unclear whether the exchange will be opened to all firms, we estimated the impact of the Act under one scenario where all firms are eligible and another scenario where only firms with fewer than 20 workers are permitted to enroll.

Premiums

The Act would create a new public plan that would be available to individuals and employers. The plan would have a substantial price advantage over private insurance because it would pay providers under the Medicare payment methodology. Providers accepting Medicare and public plan reimbursement would be paid at Medicare plus 5 percent.

- Payment levels under the public plan would be 32 percent less than what private insurers pay for the same services and would be 14 percent less for physician services;[1]
- Annual family premiums under the public plan would on average be about $2,148 less for families (about 20 percent lower) than comparable private insurance; and
- For individual policies, the annual public plan premium would be about $1,100 less than comparable private coverage (about 25 percent lower).

Coverage

In the first two years of the program, participation in the new exchange and therefore the public plan is limited to only individuals and small firms. The legislation then gives the newly created Commission authority to determine who is eligible to enroll in the public plan in the third year (i.e., 2015). To illustrate the bill's impacts, we estimated the changes in coverage assuming the program is fully implemented and enrollment is fully matured in 2011.

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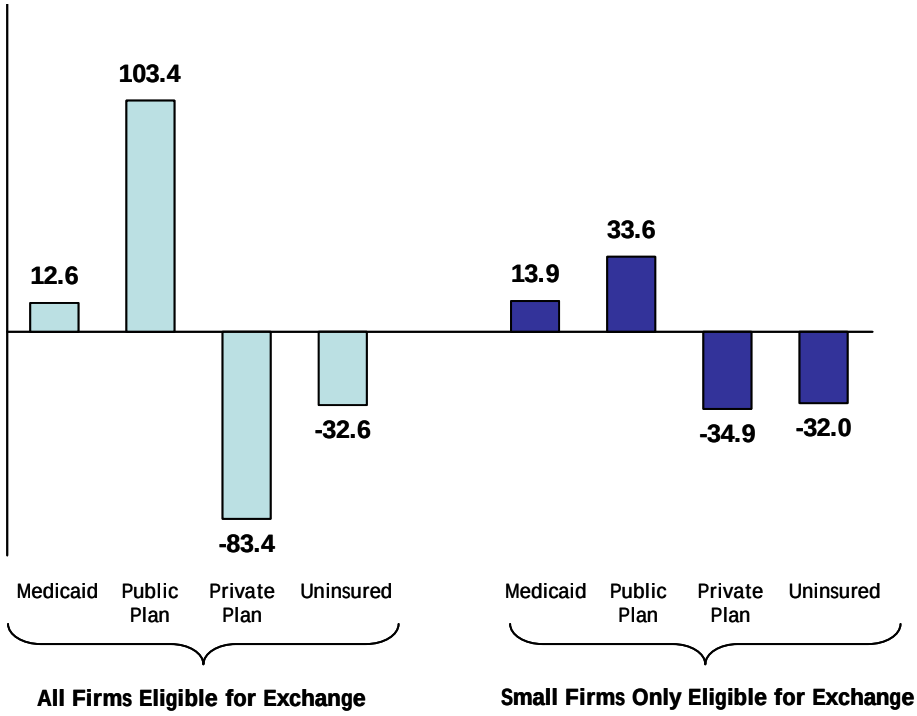
[1] This reflects an additional 5 percent increase in payments under the Act for physicians and other practitioners who agree to treat both Medicare and public plan patients.

- The number of people without health insurance would be reduced by 32.6 million people (***Figure ES-1***). The number of uninsured in 2011 without the Act would be 49.2 million people;
- The Act increases eligibility for Medicaid to 133 percent of the Federal Poverty Level (FPL) for all adults. This increases Medicaid enrollment by 12.6 million people (current enrollment is about 66 million people sometime in the year);

Figure ES-1
Changes in Sources of Coverage under the American Affordable Health Choices Act Assuming Full Implementation in 2011 (millions) [a/]



a/ For illustrative purposes, these estimates assume that the Act is fully implemented and enrollment is fully matured in 2011.
Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

- If the exchange is open to all firms, the public plan would enroll about 103.4 million people. The number of people with private health insurance would fall by 83.4 million people (***Figure ES-1***).
- If only small firms are eligible for the exchange, public plan enrollment would reach 33.6 million people, while private coverage would decline by 34.9 million people.

Federal Costs

The net federal cost of the Act over the 2010 through 2019 period would be $55.3 billion, assuming the exchange is open to individuals and all firms (***Figure ES-2***). If the plan is restricted to individuals and small firms only, the net program cost would be $100.0 billion. Net federal costs differ under these scenarios due to differences in the characteristics of people enrolling in

the exchange and differing levels of savings for private employers, which ultimately affects tax revenues.

These estimates compare with the Congressional Budget Office (CBO) estimate of $239 billion.

The CBO assumed that the public plan would only be about 10 percent less costly than private coverage. We estimate that the public plan would be able to offer an insurance product that is 20 percent to 25 percent less than what comparable private insurance coverage would cost; primarily, because the plan would pay providers substantially less than private plans. In our analysis, we estimate that about 33.6 million people would enroll in the public plan if only individuals and small firms are permitted to enroll in the exchange.

Figure ES-2
Changes in Federal Expenditures and Revenues under the American Affordable Health Choices Act of 2009: 2010-2019 (billions)

	Totals for 2010 - 2019	
	Individuals and All Firms Eligible for Exchange Beginning 2015	**Individuals and Small Firms Only Eligible for the Exchange**
Public Program Cost		
New Program Costs		
Medicaid Eligibility Expansion	$434.9	$450.6
Premium Subsidies	$727.0	$744.9
Employer Tax Credit	$46.9	$43.1
Retiree Reinsurance Program	$10.0	$10.0
Public Plan Start-up	$2.0	$2.0
Total Program Costs	$1,220.9	$1,250.6
Program Offsets		
Employer Pay-or-Play Taxes	$255.7	$327.9
Penalties for Uninsured	$55.6	$56.3
Changes in Other Federal Programs	$3.2	$2.4
Taxes on Changes in Wages	$48.3	-$38.6
Total Offsets	$362.9	$347.9
Net Federal Cost of Programs		
Net Federal Cost	$858.0	$902.7
Financing		
Medicare and Medicaid Payment Reforms [a/]	-$219.7	-$219.7
Tax on High-income [b/]	-$583.0	-$583.0
Net Federal Cost		
Net Federal Cost of Reform	$55.3	$100.0

a/ Congressional Budget Office (CBO)
b/ Joint Committee on Taxation (JCT)
Source: The Lewin Group Health Benefits Simulation Model (HBSM).

This compares with the CBO estimate of 11 to 12 million people, which we have learned assumes that firms with fewer than 50 workers may enroll. This excludes about 77 percent of people who currently have private employer health insurance. Also, the Urban Institute

estimates that the public plan would enroll about 46.7 million people, assuming the exchange is opened to firms with under 50 workers, and other low-income workers.[2]

State and Local Governments

We estimate that the Act would result in savings to state and local governments of about $158.3 billion between 2010 and 2019, assuming the exchange is opened to all employers. State and local governments would save $111.5 billion on spending for safety-net programs that currently provide services to the uninsured. Some state and local government worker health benefits plans would save an additional $55.4 billion by enrolling their workforce in the public plan.

If the exchange is restricted to individual and small employers only, savings to state and local governments would be only about $67.8 billion, reflecting that most state and local governments employ more than 20 workers, and therefore would not qualify for the program.

State and local Medicaid program spending would change little because, under the Act, the federal government would pay the full cost of the expansions in Medicaid.

Private Employers

The Act requires employers to either provide coverage or pay a payroll tax of 8.0 percent on wages for workers that they do not cover. The payroll tax rate is reduced for firms with annual revenues of less than $400,000. Also, the Act provides a tax credit to lower-wage firms with fewer than 25 workers for the purchase of coverage. We used Lewin Group models to simulate the complex incentives created under the bill. Our key findings include:

- If the exchange is available to individuals and all employers:
  - The number of people with employer-sponsored insurance (ESI) would increase by about 1.4 million people;[3]
  - Of those who have ESI, about 88.1 million people are in firms that would shift coverage to the exchange and then enroll in the public plan;
  - Firms that currently offer insurance would save an average of $437 per worker per year (***Figure ES-3***);
  - Costs for firms that do not now offer coverage would increase by an average of about $862 per worker;[4] and
  - Small insuring firms would save up to an average of $1,519 per worker reflecting small employer tax credit, and coverage discontinuations in small firms that find it less costly to pay the payroll tax, which is reduced for small firms.

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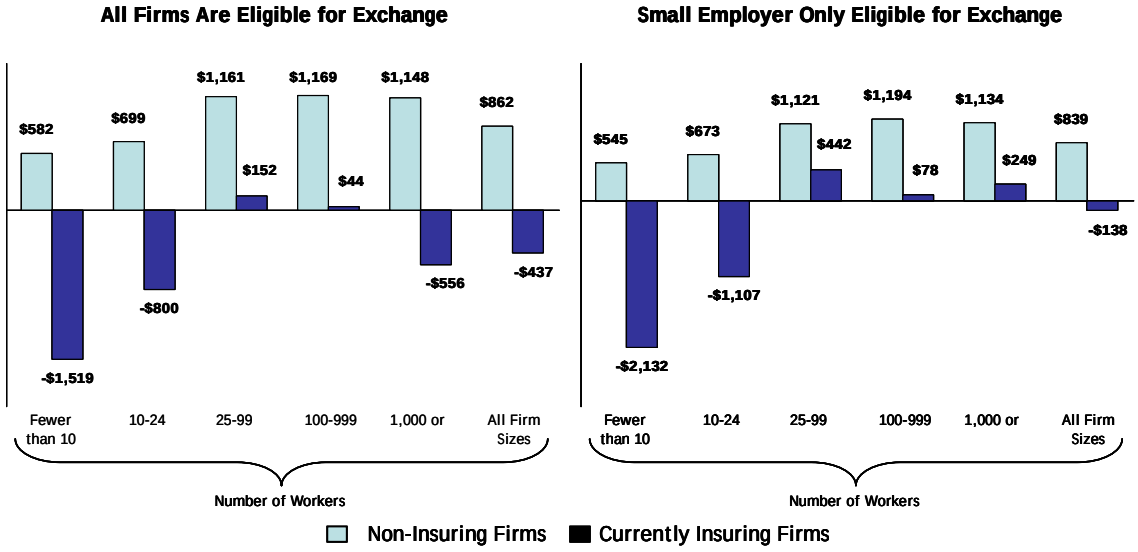
2 John Holahan and Linda Blumberg, "Is the Public Plan Option a Necessary Part of Health Reform?," The Urban Institute, Health Policy Center, July 26, 2009.

3 This is the net change in coverage reflecting that some employers would stop offering coverage while others would start offering coverage.

4 This is the average across firms that start to offer coverage and those who decide to pay the tax.

Figure ES-3
Changes in Employer Costs per Worker under the Act by Current Insuring Status and Firm Size: 2011[/a]



a/ For illustrative purposes, these estimates assume that the Act is fully implemented and enrollment is fully matured in 2011.
Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

- If the exchange is available to individuals and small employers only:
  - The number of people with employer-sponsored insurance (ESI) would decline by 3.9 million people;
  - Of those who have ESI, about 21.9 million people are in firms that would shift coverage to the exchange and then enroll in the public plan;
  - Firms that currently offer insurance would save an average of $138 per worker per year (***Figure ES-3***);
  - Costs for firms that do not now offer coverage would increase by an average of about $839 per worker. This is the average across firms the start to offer coverage and those who decide to pay the tax; and
  - Small insuring firms would save up to an average of $2,132 per worker.[5]
- We estimate a loss of employment of between 260,000 and 600,000 low-wage workers in response to increases in employer costs for low-wage workers under the Act.[6]

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5 Savings for small firms currently offering insurance are larger if the exchange is limited to individuals and small firms only. This is because people in larger firms tend to be older and more costly that the people enrolling in the exchange as individuals. Thus, including larger firms tends to increases the overall premium in the exchange, reducing the savings for small firms.

6 Our range estimate is based upon the range of estimates in the literature of how employers respond to increases in the minimum wage, which we treat as analogous to the impact of a coverage mandate for low-wage workers.

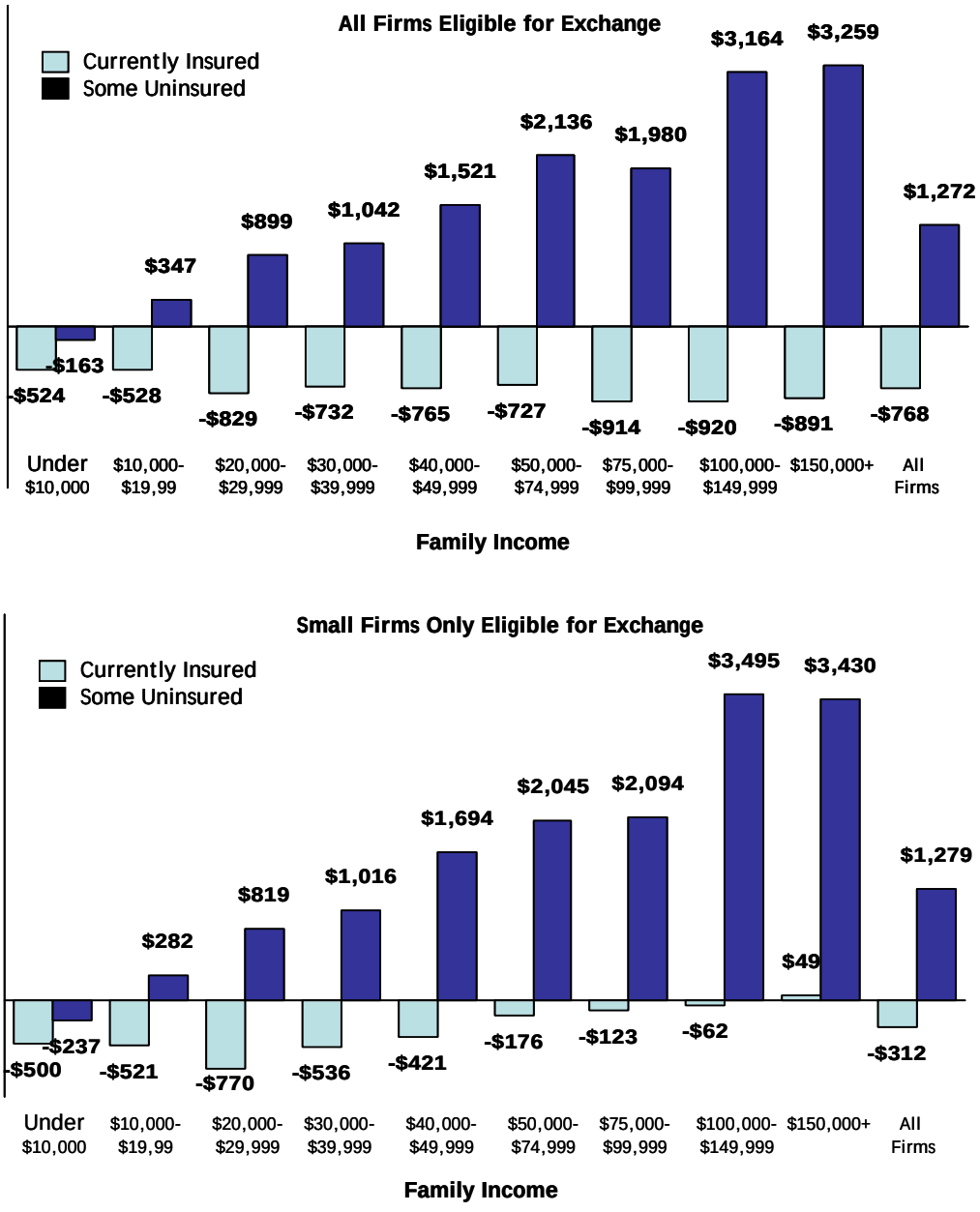
Impacts on Families

Under current law, families will spend an average of about $4,193 per family for health care in 2011. This includes average family premium payments of $2,648, including employee contributions to employer coverage. It also includes average out-of-pocket expenses for insurance co-payments and uncovered health services of $1,544.

- Average family health spending would decline by about $387 per family under the Act, assuming that all firms are eligible for the public plan. This includes:
  - Premium reductions due to subsidies and other changes in premiums of $302 per family;
  - Reduced out-of-pocket spending of $36 per family;
  - Penalty payments for people who remain uninsured of $63 per family; and
  - Net wage increases of $112 per family due to wage adjustments in response to changes in employer costs under the Act.
- Families where all family members currently have insurance would save an average of about $768 under the Act, assuming all firms are eligible for the exchange. If large firms are excluded, savings would average $312 per family. This reflects reductions in premiums and out-of-pocket spending under the Act (***Figure ES-4***).
- Families with one or more uninsured members would on average see an increase in family health spending averaging about $1,250 per family, regardless of whether the exchange is open to all firms, because most of these families would receive coverage through the exchange with or without extending eligibility to larger firms;[7] and
- If the exchange is open to all firms, the increase in spending for families where one or more member(s) is currently uninsured would range from $347 per family with incomes of $10,000 to $20,000, and $3,259 per family for those with incomes of $150,000 or more. If the exchange is limited to small firms, the increase in spending for families where one or more member(s) is currently uninsured would range from $282 per family with incomes of $10,000 to $20,000, and $3,430 per family for those with incomes of $150,000 or more.

[7] This includes primarily the cost of the premium and any lost wages for workers in firms required to contribute to the cost of coverage.

Figure ES-4
Changes in Average Family Health Spending under the Act by Family Income and Current Insured Status With and Without Extending Eligibility to All Firms: 2011 [a/]



a/ For illustrative purposes, these estimates assume that the Act is fully implemented and enrollment is fully matured in 2011.
Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

A. The American Affordable Health Choices Act of 2009

The American Affordable Health Choices Act of 2009 would require all Americans to have health insurance. To assure access to affordable coverage, the bill expands the Medicaid program to cover all adults with incomes below 133 percent of the federal poverty level (FPL) ($29,300 for a family of four), and provides premium subsidies for people living between 133 percent and 400 percent of the FPL (e.g., $88,000 for a family of four). It also requires most employers to contribute to the cost of coverage for their workers.

In addition, the bill establishes an "exchange" that presents a selection of health coverage alternatives including a newly created public plan that would compete with private insurers for enrollment. Insurance markets are reformed to assure guaranteed issue of coverage to all applicants regardless of health status. Furthermore, insurers would be prohibited from changing higher premiums on the basis of health status. The key provisions of the bill are summarized below.

1. Health Benefits Packages

The American Affordable Health Choices Act of 2009 establishes a core benefits package for Americans. To promote health and cost containment, the benefits package would cover preventive services with no cost-sharing. Covered services include:

- Inpatient hospital services;
- Outpatient hospital services;
- Physician services;
- Equipment and supplies incident to physician services;
- Preventive services;
- Maternity services;
- Prescription drugs;
- Rehabilitative and rehabilitative services; and
- Well baby and well child visits and dental, vision, and hearing services for children.

The exchange makes available four different tiers of benefit packages that vary primarily in terms of cost sharing, all of which cover at least the services listed above. The bill denominates these four benefits packages in terms of their "actuarial value." A benefits package that covers all of the services listed above without cost-sharing (deductibles, copayments, etc.) is defined to have an actuarial value of 1.0. The actuarial value of the benefits package falls as the amount of co-payment amounts increase as follows:

- ***Basic Package*:** Includes the core set of covered benefits and a level of cost sharing giving the plan an actuarial value of 0.7 (i.e., where cost sharing parameters are set at the level such that the plan on average covers 70 percent of spending, with the individual paying 30 percent);

- ***Enhanced Package*:** Includes the core set of covered benefits with more generous cost sharing giving the package an actuarial value of 0.85;
- ***Premium Package*:** Includes the core set of covered benefits with cost sharing that puts the package at an actuarial value of 0.95; and
- ***Premium Plus Package***: Includes the core set of covered benefits with the premium package cost sharing, plus additional covered benefits (e.g., dental coverage for adults).

The Basic Benefits package would be the minimum that Americans must have through an employer or through the newly established health exchange. However, the actual cost-sharing requirements under the basic plan are not specified in the Act.

To illustrate, in ***Figure 1*** we present example combinations of deductibles and co-payment amounts for covered services that would correspond to three of the four actuarial value standards. Other combinations of deductibles and co-payments could also meet these actuarial values. (The Act provides little guidance on the content of the Premium Plus package). The Act establishes an independent advisory committee with providers and other healthcare experts to recommend updates to the core package of benefits.

Figure 1
Illustrative Cost-Sharing Amounts Consistent with Actuarial Valuation of Health Plan Options [a/]

	Benefits Packages			
	Without Cost Sharing	**Premium Package**	**Enhanced Package**	**Basic Package**
Actuarial Value	1.0	0.95	0.85	0.70
Hospital Deductible	$0	$0	$250	$1,500
Hospital Coinsurance	0%	0%	10%	25%
Medical Deductible				
Single	$0	$0	$250	$1,500
Family	$0	$0	$500	$3,000
Medical Coinsurance	0%	7%	20%	25%
Prescription Drugs	0%	7%	20%	25%
Preventive Care	0%	0%	0%	0%
Out-of-Pocket Limit				
Single	$0	$5,000	$5,000	$5,000
Family	$0	$10,000	$10,000	$10,000
Per Member Per Month (PMPM) in 2011	$424.25	$402.86	$360.54	$296.84

a/ Estimates developed using MEPS data for people currently covered under employer plans. We assumed that the intent of the bill is to set these benefits on the basis of differences in cost-sharing only and does not include the utilization response at various levels of cost sharing. Cost sharing parameters under these benefits packages would be somewhat lower if the utilization response is incorporated into the estimates.
Source: Lewin Group Estimates using the Health Benefits Simulation Model (HBSM).

2. Reforming the Insurance Markets

The Act would establish a nationwide network of health insurance exchanges. The exchange would provide consumers with a selection of health insurance plans competing on the basis of price and quality. It is designed to provide consumers with a transparent marketplace for coverage that features consumer protections and facilitates enrollment. The exchange would administer premium and cost sharing subsidies under the program, called "affordability credits", for low and middle income individuals and families.

Eligibility to participate in the exchange would be phased-in over three years as follows:

- Year 1: Individuals and employers with 10 or fewer workers;
- Year 2: Individuals and employers with 20 or fewer workers; and
- Year 3: Individuals and employers of any size allowed by a newly established "Health Choices Commissioner."

It is impossible to predict whether the Commissioner would exercise his/her option to extend eligibility for the exchange to all firm size groups in the third year of the program. Because this is pivotal to estimating the impact of the program, we estimated the cost and coverage impacts of the Act under two assumptions. In the first scenario, we estimate the impact of the Act assuming the exchange is opened to all firms. In the second scenario, we estimate the effects assuming only firms with fewer than 20 workers are permitted to enroll.

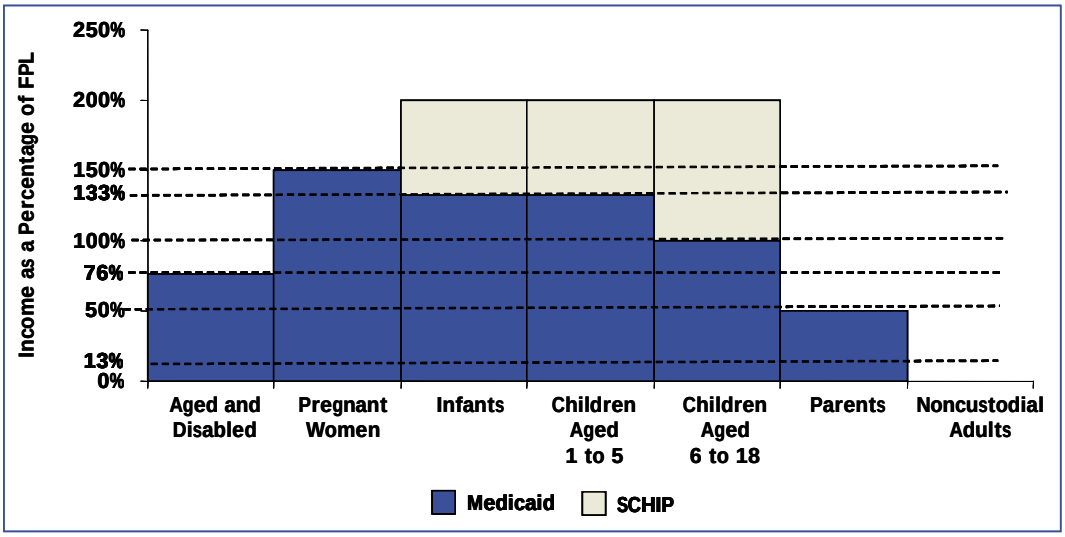
The Act also eliminates the practice of "medical underwriting." This requires insurers to guarantee issue coverage to all applicants without pre-existing health conditions, and prohibits insurers from charging more for people with a history of illness. It permits only a narrow band of variation in premiums based on age (two to one), geographic area and family size. The bill also eliminates lifetime and annual limits on benefits. These insurance reforms apply to all coverage sold inside and outside of the exchange.

3. Individual Responsibility

The program requires that all individuals have insurance. Individuals must show proof of coverage when they file income taxes. People who do not have coverage are required to pay a penalty equal to 2.5 percent of income up to the national average cost of the basic health plan defined in the bill (prorated by months without coverage). To assure affordability of coverage, the bill expands eligibility for Medicaid and provides subsidies for the purchase of insurance in the newly created exchanges.

The Act would expand eligibility for the Medicaid program. Under current law, children are typically eligible for either Medicaid or the Children's Health Insurance Program (CHIP) if their family income is less than 200 percent of the FPL. Although eligibility varies by state, custodial parents are eligible for Medicaid if their income is below an average of about 50 percent of the FPL. Also, in all but a few states, non-disabled adults without custodial responsibilities for children are not eligible at any level of income (***Figure 2***). Under the Act, all individuals and families would be eligible for Medicaid if their income is below 133 percent of the FPL.

Figure 2
Medicaid and SCHIP Eligibility for a "Typical State" Under Current Law [a/]



a/ Figures are roughly based upon average income eligibility levels across states by eligibility group.
Source: CMS program data.

The bill also provides subsidies for the purchase of health insurance for people with incomes that are too high to qualify for Medicaid, but too low to be able to afford the full cost of health insurance. The program provides subsidies to cap family premium spending on a sliding scale with income ranging from 1.5 percent of income for people at 133 percent of the FPL ($29,300 for a family of four), to 11 percent of income for those with incomes at 400 percent of the FPL ($88,000 for a family of four). These spending limits as a percent of family income are:

Income Range	Premium Cap as Percent of Income		Actuarial Value of Plan
	From	To	
133% to 150% of FPL	1.5%	3%	97%
150% to 200% of FPL	3%	5%	93%
200% to 250% of FPL	5%	7%	85%
250% to 300% of FPL	7%`	9%	78%
300% to 350% of FPL	9%	10%	72%
350% to 400% of FPL	10%	11%	70%

The program also limits family out-of-pocket spending by setting cost sharing for the benefits package at levels ranging from an actuarial value of 0.97 for people with incomes between 133 percent and 150 percent of the FPL, to 0.7 percent for people with incomes between 350 percent and 400 percent of the FPL. This has the effect of setting out-of-pocket limits ranging from less than $200 for individuals at 133 percent of the FPL ($400 for families) to $5,000 ($10,000 for families) at 400 percent of the FPL.

These subsidies are available only to those participating in the exchange as individuals. People covered under the exchange by an employer do not qualify for subsidies. However, part-time workers can decline coverage offered by an employer outside the exchange and qualify for subsidies under this program.

The bill requires the Secretary to establish a process for applying for a waiver from the tax penalty described above in cases of "hardship," which is not defined in the bill. In this analysis, we assumed that hardship cases would be defined as those where the cost of the basic benefits package, after employer contributions and available subsidies, would exceed 11 percent of family income. Eleven percent of income is the limit on premium payments for people at 400 percent of the FPL under the premium subsidy program created under the bill (as discussed above). (By comparison, the hardship standard used in the Massachusetts individual mandate program is 10 percent of income.)

4. *Employer Responsibility*

Employers with an annual payroll expense of $250,000 or more are required to contribute to the cost of insurance for their workers. An employer must either provide insurance to their workers or pay a tax equal to a specified percentage of employee wages that varies with firm payroll for the prior year as follows:

Under $250,000 payroll	0 percent
$250,000 to $300,000	2 percent
$300,000 to $350,000	4 percent
$350,000 to $400,000	6 percent
Over $400,000	8 percent

To meet the coverage requirement, the employer coverage must conform to at least the basic benefits package described above. The employer must contribute 72.5 percent of the premium for individuals and 65 percent of the premium for families. The premium contribution percentage is prorated for part-time workers. Employers are permitted to make separate elections by class of business or for full-time and part-time workers. Thus, a firm could elect to provide coverage to their full-time workers while paying the payroll tax for all part-time workers.

The Act also provides employers with fewer than 25 workers a tax credit for the purchase of insurance for their workers. The tax credit is potentially equal to 50 percent of employer contributions for qualified coverage. The amount of the credit is phased-out for firms with average annual earnings per worker between $20,000 and $40,000. The amount of the credit is also phased-out for employers with between 10 and 25 employees.

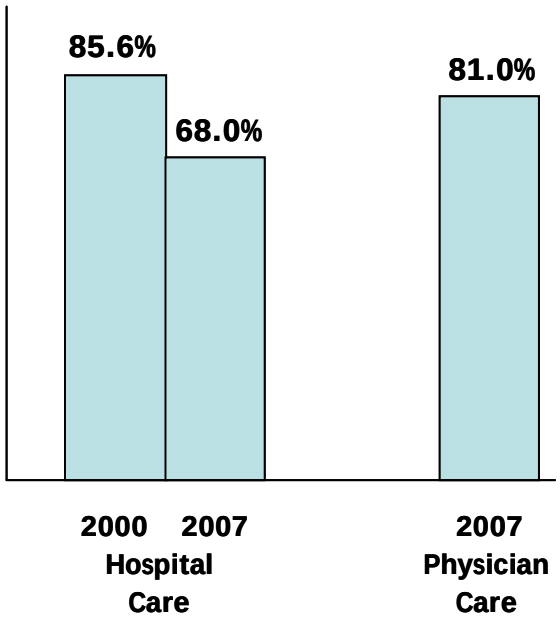
In addition, the Act provides $10.0 billion in funding for a reinsurance program that would assist employers sponsoring retiree benefits plans. The program would cover expenses in eligible firms for individual retirees with high expenditures. The program would cover 80 percent of costs between $15,000 and $90,000.

5. *The Public Plan*

One of the coverage options offered through the exchange would be a new public plan, modeled on Medicare. Participants would pay actuarially determined premiums set at levels required to pay the full cost of coverage under the public plan. The public plan would be available to anyone eligible to enroll in the exchange. Thus, by the third year of the program individuals and all employers could be eligible to enroll in the public plan, depending upon how the Commissioner of Health Choices defines eligibility for participation in the exchange.

The public plan would pay health care providers using the Medicare payment methodology, with an additional 5 percent for those agreeing to see both Medicare and public plan enrollees. As shown in ***Figure 3***, Medicare payments to hospitals are equal to only about 68 percent of what private insurers pay for the same services. In fact, hospital payments as a percentage of private payer rates have declined steadily since 2000. Physician payments are equal to only about 81 percent of what is paid by private insures for comparable services.

Figure 3
Medicare Provider Payments as a Percent of Private Payer Rates



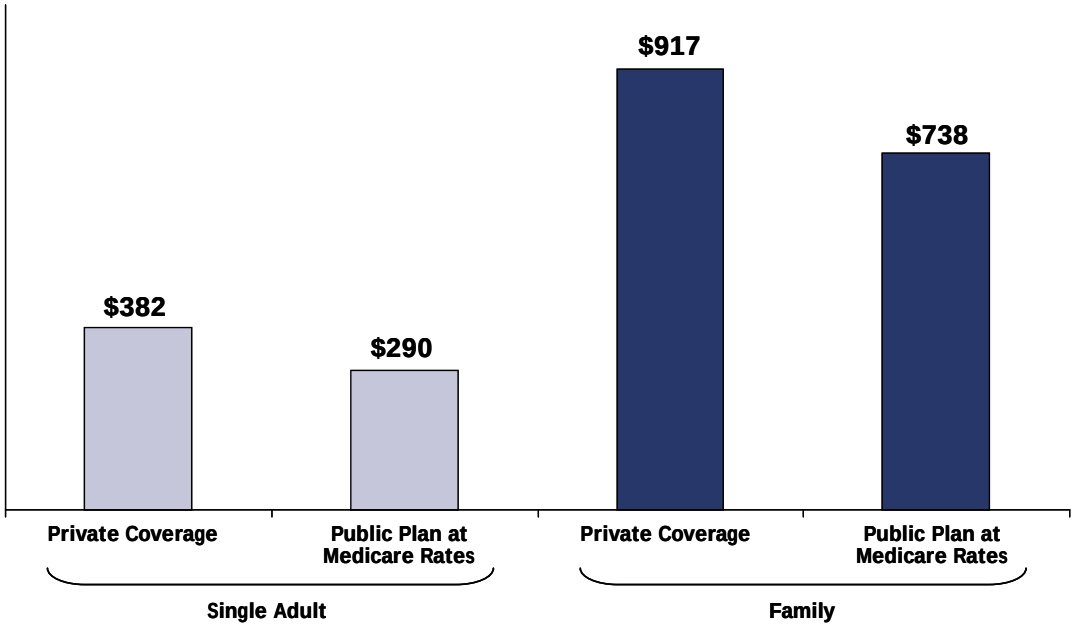
Source: American Hospital Association, "Trends Affecting Hospitals and Health Systems," TrendWatch Chartbook April 2008; "Report to Congress: Medicare Payment Policy," Medicare Payment Advisory Commission (MedPAC), March 2008; and State Health Facts, The Kaiser Family Foundations (KFF), 2003 report.

As discussed above, the Act would pay an additional 5 percent for physicians who agree to see both Medicare and public plan enrollees. This raises physician reimbursement to 86 percent of private payer rates. We assume that physician participation in the public plan would be roughly the same as for the existing Medicare program.

Because Medicare pays providers substantially less than private insurers, premiums for the public plan would be substantially less than comparable coverage in a private plan. We

estimate that the average premium under the "enhanced" benefits package would be $917 per month for private coverage compared to $738 per month under the public plan in 2010 (***Figure 4***). These represent savings of between 20 percent and 25 percent.

Figure 4
Cost of the "Enhanced" Benefits Package for Private Coverage and the Public Plan under the Act [a/]



a/ Premiums are estimated for people with private coverage under current law. Family coverage includes families, couples and single parent households.
Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

These estimates are based upon the demographic and health characteristics of the population eligible to enroll in the exchange. In addition to payment level differences, they reflect differences in administrative costs and the levels of benefit management under plan alternatives. They are adjusted to reflect an increase in cost shifting resulting from the use of Medicare payment rates, which are typically less than the cost of services provided by hospitals to the existing Medicare population. The derivation of these premiums is presented in ***Appendix A***.

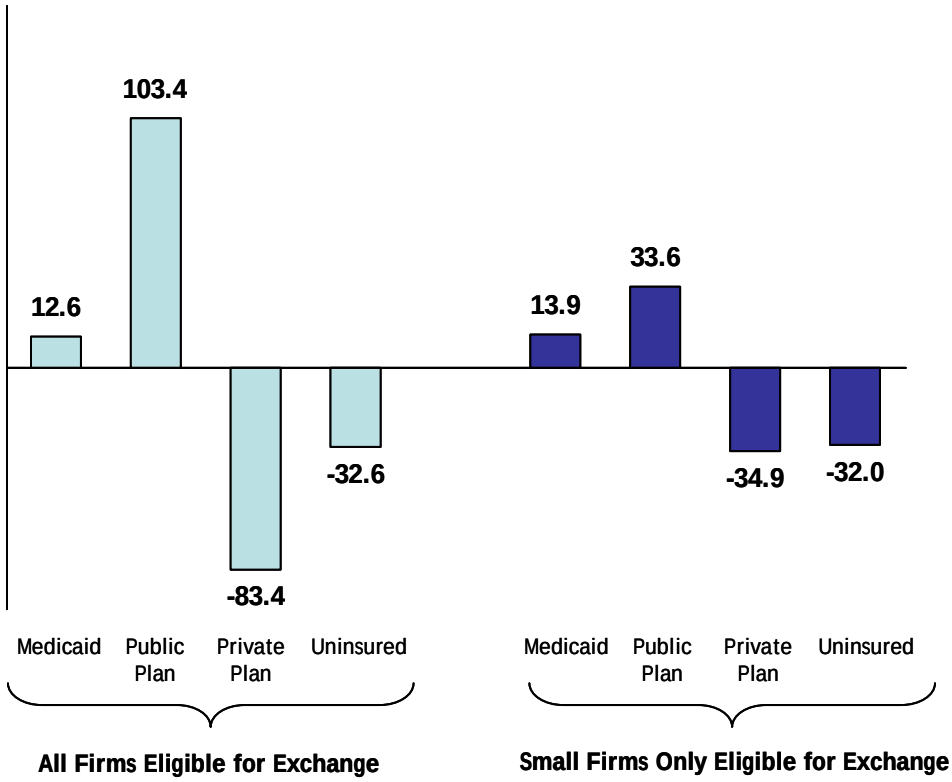
We assume that provider participation in the public plan would be similar to participation under Medicare, where the same payment levels are used (In fact payments in the public plan for physicians will often be Medicare plus 5 percent). As discussed above, we simulate the impact of the public plan with and without extending eligibility for the exchange to all firms (i.e., firms with more than 20 workers).

A. Coverage Effects

We estimate that there will be about 49.1 million uninsured people in 2011. Assuming the exchange is opened to all firms, we estimate that the number of uninsured people would be reduced by 32.6 million people (***Figure 5***). Enrollment in the expanded Medicaid program would increase by 12.6 million people. This includes about 15.5 million newly enrolled people,

less about 2.9 million current enrollees who would become covered by employers who start to offer coverage in response to the mandate.

Figure 5
Changes in Sources of Coverage under the American Affordable Health Choices Act Assuming All Firms are Eligible for the Exchange 2011 (millions) [a/]



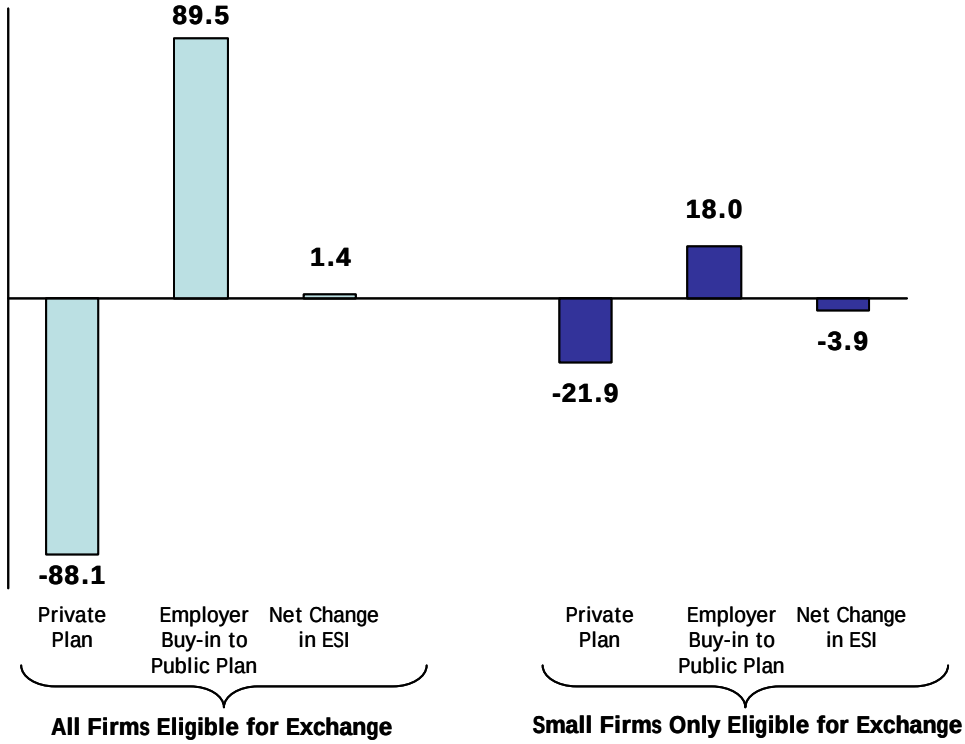
a/ For illustrative purposes, we assume that the program is fully implemented and enrollment full is fully mature in 2011.
Source: The Lewin Group using the Health Benefits Simulation Model (HBSM).

If fully implemented in 2011, we estimate that about 103.9 million people would become covered under the newly established public plan, assuming the plan is open to all firms. Coverage under private insurance would decline by 83.4 million people. This is a 48.4 percent reduction in the number of people with private insurance (currently 172.5 million people).

If eligibility for the exchange is restricted to small firms only, public plan enrollment would be 33.6 million people. The number of people with private health insurance would decline under this scenario by 34.9 million people. The number of people without insurance would also decline by 32.6 million people.

Under current law, there will be about 158.1 million people who are covered under an employer plan as workers, dependents or early retirees in 2011. If the exchange is opened to all firms, about 88.1 million workers would shift from private employer-sponsored insurance (ESI) to the public plan ***Figure 6***. However, about 89.5 million people would become covered under the public plan with an employer paying a share of the premium. This is a net increase in the number of people with ESI, which we define as coverage where the employer is paying a portion of the premium. This reflects the effect of the employer mandate on firm decisions to offer coverage.

Figure 6
Changes in Employer-Sponsored Insurance (ESI) under the American Affordable Health Choices Act Assuming Small Firms are Eligible for the Exchange in 2011 (millions)[/a]



a/ For illustrative purposes, we assume that the program is fully implemented and enrollment full is fully mature in 2011.
Source: The Lewin Group using the Health Benefits Simulation Model (HBSM).

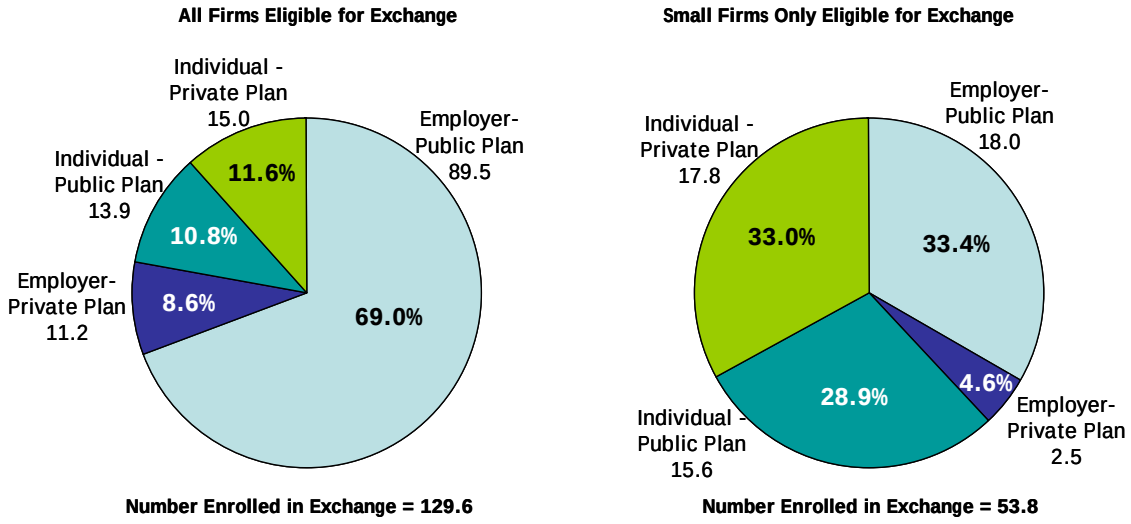
If the exchange is available to small firms only, there is a net decline in ESI of 3.9 million people. About 21.9 million people would no longer have ESI while about 18.0 million people would be covered in the public plan by employers who chose to purchase coverage for their workforce through the exchange.

If the exchange is opened to all firms, about 129.6 million people would obtain coverage through the exchange (***Figure 7***). These include about 100.9 million people obtaining coverage with the aid of an employer premium contribution; which includes 89.5 million people covered under the public plan and 11.4 million taking coverage under a private health plan offered in

the exchange. About 28.7 million people would obtain coverage as individuals in the exchange, of whom about half would be enrolled in the public plan.

If eligibility for the exchange is limited to small employers only, there would about million people covered through the exchange. A detailed analysis of changes in sources of coverage is presented in ***Appendix B***.

Figure 7
Number of People Covered under the Exchange Assuming Full Implementation in 2011 (millions)



Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

In ***Figure 8***, we present a detailed summary of the changes in sources of coverage under both scenarios.

Figure 8
Transitions in Coverage under American Affordable Health Choices Act of 2009 Assuming Full Implementation in 2011 (thousands)[1/a]

Coverage Under Current Law		Coverage Through Exchange				Private Coverage			TRICARE	Medicare	Medicare & Medicaid Dual Eligibles	Medicaid and SCHIP	Uninsured
		Employer - Public Plan	Individual - Public Plan	Employer - Private Plans	Individual - Private Plans	Employer	Individual	Retiree					
Assuming Eligibility for the Exchange the Opened to all Firms													
Employer Workers and Dependents	154,436	79,516	1,763	8,649	8,102	51,541	0	0	0	0	0	4,229	636
Private Non-Employer	14,335	1,463	1,605	473	5,297	714	3,977	0	0	0	0	765	40
Employer Retiree	3,711	0	0	0	0	0	0	3,711	0	0	0	0	0
TRICARE	6,142	0	0	0	0	0	0	0	6,142	0	0	0	0
Medicare	33,195	0	0	0	0	0	0	0	0	33,195	0	0	0
Medicare & Medicaid Dual Eligible	6,811	0	0	0	0	0	0	0	0	0	6,811	0	0
Medicaid and SCHIP	41,673	1,787	0	479	0	608	0	0	0	0	0	38,799	0
Uninsured	49,191	6,743	10,497	1,566	1,657	2,326	0	0	0	0	0	10,517	15,885
Total	309,494	89,509	13,865	11,167	15,056	55,189	3,977	3,711	6,142	33,195	6,811	54,310	16,561
Assuming Eligibility for the Exchange is Opened to Small Firms Only													
Employer Workers and Dependents	154,436	12,958	3,164	1,023	10,698	121,691	0	0	0	0	0	4,266	636
Private Non-Employer	14,335	706	1,659	240	5,391	1,504	3,977	0	0	0	0	777	40
Employer Retiree	3,711	0	0	0	0	0	0	3,711	0	0	0	0	0
TRICARE	6,142	0	0	0	0	0	0	0	6,142	0	0	0	0
Medicare	33,195	0	0	0	0	0	0	0	0	33,195	0	0	0
Medicare & Medicaid Dual Eligible	6,811	0	0	0	0	0	0	0	0	0	6,811	0	0
Medicaid and SCHIP	41,673	820	0	284	0	1,421	0	0	0	0	0	39,148	0
Uninsured	49,191	3,555	10,783	926	1,733	5,306	0	0	0	0	0	10,717	15,885
Total	309,494	18,039	15,606	2,473	17,822	129,922	3,977	3,711	6,142	33,195	6,811	54,908	16,561

a/ For illustrative purposes, we assume that the program is fully implemented and enrollment is fully mature in 2011.
Source: The Lewin Group Estimates using the Health Benefits Simulation Model (HBSM).

B. Federal Spending

As discussed above, we estimated the impact of the program under two scenarios. In the first scenario, individuals and all firms would be eligible to participate in the exchange, while in the second scenario, individuals and small firms only would be eligible to participate. Although the federal subsidy provisions are identical in both scenarios, federal costs would differ due to differences in the characteristics of people enrolling in the exchange and differing levels of savings for private employers, which ultimately affects tax revenues.

If all employers are eligible for the public plan, the insurance coverage provisions of the Act would cost the federal government $858.0 billion over the 2010 through 2019 period (***Figure 9***). This includes spending for new health benefits under the bill of $1.22 trillion over that period. This spending would be offset by about $362.9 billion in new revenues resulting from these coverage expansions. Because the coverage expansions will not be implemented until 2013, nearly all of these costs occur in the last 7 years of this 10-year period.

If the exchange is limited to individuals and small employers, the net federal cost of the program would be $902.7 billion over the 2010 through 2019 period (***Figure 10***). This includes benefits costs of $1.25 trillion less new revenues of $347.9 billion.

The Act also includes two major sources of financing that would be identical under either scenario. The first is a series of changes in Medicare and Medicaid payment policy that would reduce spending under these programs by about $219.7 billion. The proposed surtax on high-income people would raise about $583.0 billion. When these financing measures are considered, the Act would increase the federal deficit by $55.3 billion if the exchange is opened to individuals and all employers, and $100.0 billion if it is opened only to individuals and small firms.

1. New Program Spending

The key elements of new federal spending under the Act include:

- **Medicaid expansion:** Income eligibility levels for parents with custodial children would be increased to 133 percent of the FPL. Non-disabled adults with incomes below 133 percent of the FPL would become eligible for the program in all states. All of the costs for these eligibility expansions would be paid by the federal government;
- **Premium subsidies:** The Act would provide premium and cost-sharing subsidies for private insurance sold through the exchange on a sliding scale with income for people who do not have access to affordable ESI. Workers offered coverage by an employer are not eligible unless the employer coverage would cost the worker more than 11 percent of their income;
- **Small employer tax credit:** The Act includes a tax credit for low-income small employers (fewer than 25 workers) that can be equal to up to half of the employer cost of coverage. As discussed above, the tax credit is phased out for employers with average payroll between 20,000 and $40,000. The credit is also phased-out for firms with between 10 and 25 workers; and

Figure 9
Changes in Federal Expenditures and Revenues under the American Affordable Health Choices Act of 2009: 2010-2019
Assumes All Firms Eligible for Exchange in 2015 (billions)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Public Program Costs											
Medicaid Eligibility Expansion	$0.0	$0.0	$0.0	$22.7	$48.8	$62.3	$67.1	$72.3	$77.9	$83.9	$434.9
Premium Subsidies	$0.0	$0.0	$0.0	$37.2	$80.0	$103.9	$112.2	$121.3	$131.0	$141.4	$727.0
Employer Tax Credit	$0.0	$0.0	$0.0	$2.3	$4.8	$7.0	$7.5	$7.9	$8.4	$8.9	$46.9
Retiree Reinsurance Program	$4.0	$6.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$10.0
Public Plan Start-up	$0.2	$0.8	$1.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$2.0
Total Program Costs	$4.2	$6.8	$1.0	$62.2	$133.6	$173.3	$186.8	$201.5	$217.3	$234.2	$1,220.9
Program Offsets											
Employer Pay-or-Play Taxes	$0.0	$0.0	$0.0	$17.5	$37.0	$35.8	$37.9	$40.1	$42.5	$45.0	$255.7
Penalties for Uninsured	$0.0	$0.0	$0.0	$3.2	$6.7	$8.5	$8.8	$9.1	$9.5	$9.8	$55.6
Changes in Other Federal Programs	$0.0	$0.0	$0.0	$0.2	$0.4	$0.5	$0.5	$0.5	$0.6	$0.6	$3.2
Taxes on changes in wages	$0.0	$0.0	$0.0	-$2.1	-$4.4	$9.8	$10.3	$10.9	$11.5	$12.2	$48.3
Total Offsets	$0.0	$0.0	$0.0	$18.8	$39.7	$54.5	$57.5	$60.7	$64.1	$67.6	$362.9
Net Federal Cost	$4.2	$6.8	$1.0	$43.4	$93.9	$118.7	$129.3	$140.8	$153.2	$166.6	$858.0
Medicare and Medicaid Payment Reforms [a/]	$9.1	$6.2	-$3.8	-$10.6	-$36.8	-$30.9	-$25.8	-$34.3	-$42.2	-$50.6	-$219.7
Tax on High-income [b/]	$1.0	$35.0	$33.0	$59.0	$65.0	$70.0	$74.0	$78.0	$82.0	$86.0	$583.0
Net Federal Cost of Reform	$12.3	-$22.0	-$35.8	-$26.2	-$7.9	$17.8	$29.5	$28.5	$29.0	$30.0	$55.3

a/ Congressional Budget Office, Letter to Charles Rangel, Chairman Committee on Ways and Means, U.S. House of Representatives, July 17, 2009, Estimate of the Effects on Direct Spending and Revenues of Divisions B and C and Section 164 of H.R. 3200, The American's Affordable Health Choices Act, as introduced on July 14, 2009.
b/ Joint Committee on Taxation (JCT), for H.R. 3200, JCX-31-09.
Source: The Lewin Group Health Benefits Simulation Model (HBSM).

Figure 10
Changes in Federal Expenditures and Revenues under the American Affordable Health Choices Act of 2009: 2010-2019
Assumes Only Small Firms Eligible for Exchange in 2015 (billions)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Public Program Costs											
Medicaid Eligibility Expansion	$0.0	$0.0	$0.0	$22.7	$48.8	$62.3	$70.6	$76.1	$81.9	$88.2	$450.6
Premium Subsidies	$0.0	$0.0	$0.0	$37.2	$80.0	$102.5	$116.5	$125.9	$136.0	$146.8	$744.9
Employer Tax Credit	$0.0	$0.0	$0.0	$2.3	$4.8	$6.1	$6.8	$7.2	$7.7	$8.1	$43.1
Retiree Reinsurance Program	$4.0	$6.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$10.0
Public Plan Start-up	$0.2	$0.8	$1.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$2.0
Total Program Costs	$4.2	$6.8	$1.0	$62.2	$133.6	$170.9	$193.9	$209.3	$225.6	$243.2	$1,250.6
Program Offsets											
Employer Pay-or-Play Taxes	$0.0	$0.0	$0.0	$17.5	$37.0	$46.6	$51.9	$55.0	$58.2	$61.7	$327.9
Penalties for Uninsured	$0.0	$0.0	$0.0	$3.2	$6.7	$8.2	$9.0	$9.3	$9.7	$10.1	$56.3
Changes in Other Federal Programs	$0.0	$0.0	$0.0	$0.1	$0.3	$0.3	$0.4	$0.4	$0.4	$0.5	$2.4
Taxes on changes in wages	$0.0	$0.0	$0.0	-$2.1	-$4.4	-$5.5	-$6.1	-$6.5	-$6.8	-$7.2	-$38.6
Total Offsets	$0.0	$0.0	$0.0	$18.7	$39.6	$49.6	$55.2	$58.3	$61.5	$65.0	$347.9
Net Federal Cost	$4.2	$6.8	$1.0	$43.5	$94.0	$121.2	$138.7	$151.0	$164.1	$178.2	$902.7
Medicare and Medicaid Payment Reforms [a/]	$9.1	$6.2	-$3.8	-$10.6	-$36.8	-$30.9	-$25.8	-$34.3	-$42.2	-$50.6	-$219.7
Tax on High-income [b/]	$1.0	$35.0	$33.0	$59.0	$65.0	$70.0	$74.0	$78.0	$82.0	$86.0	$583.0
Net Federal Cost of Reform	$12.3	-$22.0	-$35.8	-$26.1	-$7.8	$20.3	$38.9	$38.7	$39.9	$41.6	$100.0

a/ Congressional Budget Office, Letter to Charles Rangel, Chairman Committee on Ways and Means, U.S. House of Representatives, July 17, 2009, Estimate of the Effects on Direct Spending and Revenues of Divisions B and C and Section 164 of H.R. 3200, The American's Affordable Health Choices Act, as introduced on July 14, 2009.
b/ Joint Committee on Taxation (JCT), for H.R. 3200, JCX-31-09.
Source: The Lewin Group Health Benefits Simulation Model (HBSM).

- **Reinsurance program:** The bill allocates $10.0 billion to provide reinsurance for high-cost early retirees currently covered under employer health plans. Under the reinsurance coverage provisions of the plan, we estimate that the funds would be exhausted midway through the second year of its availability.

Under the scenario where the exchange is opened to individuals and all employers, new spending under the proposal would include $434.9 billion for the Medicaid expansion and $727.0 billion for the new premium and cost-sharing subsidy program. The employer tax credit would cost $46.3 billion over the 2010 through 2019 period.

Benefits costs would be higher if the exchange is opened to individuals and small firms only. This is because the higher cost of insurance for private insurers will result in fewer employers opting to provide insurance under the mandate leaving more people in the Medicaid and premium subsidy programs. Program costs would include $450.6 billion in Medicaid spending, $744.9 billion for premium subsidies and $43.1 billion for the small employer tax credit.

2. *Spending Offsets for New Program*

The primary source of new revenues under the Act would be payroll taxes paid by employers for workers they do not cover. As described above, the program would require employers who do not provide health insurance to pay an 8.0 percent payroll tax for workers they do not cover. In addition, insuring employers would pay the payroll tax for workers who enroll in the exchange. This would be limited to workers who find that the cost of enrolling in the employer's plan exceeds 11 percent of the worker's income.

Total payroll tax revenues would be $255.7 billion under our scenario where individuals and all firms are eligible for the exchange. If the exchange is limited to only firms with fewer than 20 workers, payroll tax payments for non-insuring employers would increase to $327.9 billion. This is because more employers would decide to pay the tax rather than provide coverage if the exchange and the public plan are not a coverage option for the employer (i.e., firms with 20 or more workers), resulting in more employers paying the tax.

We also project additional income and payroll revenues resulting from savings realized by employers enrolling workers through the exchange and the public plan. Reductions in the cost of covering workers would result in higher net income which would be subject to taxation. The available research indicates that over time these savings would be passed back to workers in the form of increased wage growth, resulting in increased personal income and payroll tax payments.

We estimate that these tax effects would result in increased federal tax revenues of $48.2 billion over the 2010 through 2019 period if the exchange is open to firms of all sizes. However, if larger employers (i.e., 20 or more workers) are not eligible for the exchange, employer costs would increase due to the higher cost of private insurance. Under this scenario, tax revenues would decline by about $38.6 billion over the 10 year period.

Under either scenario, penalty payments for people who decide not to take insurance would be $55.3 billion over the ten-year period, with savings to other federal programs would be $3.2 billion.

3. Other Financing Measures

As discussed above, the Act imposes a surtax on families with taxable incomes in excess of $350,000 (joint filers). The Act creates a progressive tax rate equal to: 1 percent of income between $350,000 and $500,000; 1.5 percent of income between $500,000 and $1.0 million; and 5.4 percent for income over $1.0 million.[8] These revenue provisions would be implemented beginning in 2010. The Joint Committee on Taxation (JCT) estimates that these revenue provisions would raise $583 billion over the 2010 through 2019 period.

The Act also includes over 80 sections that alter Medicare provider payment policies for virtually all types of providers of health services including physicians, hospitals, home health agencies, skilled nursing facilities, rehabilitation hospitals and other health care practitioners. Several of these changes are designed to encourage improved quality and efficiency through bundled payments and quality driven payments such as pay-for-performance.

The Act also revised the competitive bidding process for Medicare Advantage that is designed to reduce current payment levels. The Act also permanently replaces the "sustainable growth rate" (SGR) formula for Medicare payments to physicians and other health practitioners. The Act includes changes to the Medicaid and CHIP programs, including a reduction in Disproportionate Share Hospital (DSH) payments of about $6.4 billion over the 2017 through 2019 period. The Congressional Budget Office (CBO) estimates that these changes would result in savings of $219.7 billion over the 2010 through 2019 period (***Figure 11***).

[8] The tax rates for the first two income groups would increase to 2.0 percent and 3 percent respectively.

Figure 11
CBO Estimates of the Effects of Medicare Reforms under the Act on Provider Incomes: 2010-2019
(billions)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Changes in Expected Payments to Providers											
Hospital	-2.5	-3.6	-6.9	-10.4	-23.6	-24.5	-26.7	-35.5	-41.7	-45.1	-220.6
Physician	1.5	2.9	3.8	4.1	-0.8	1.3	2.8	3.0	3.3	3.8	25.6
Other Professional	0.2	0.5	0.6	0.7	0.0	0.4	0.6	0.3	-0.6	-4.1	-1.5
Dental	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Home Health	0.0	0.2	0.1	-0.1	-1.0	-0.7	-0.5	-0.6	-0.7	-0.8	-4.3
Prescription Drugs	-0.1	-5.6	-7.3	-6.8	-8.5	-6.6	-3.3	-2.5	-2.7	-1.7	-45.3
Other Non-Durables	0.0	-0.4	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.7
Durables	0.0	0.1	0.1	0.1	-0.2	0.0	0.1	0.1	0.1	0.1	0.5
Nursing Home	-0.9	-1.3	-1.4	-1.8	-3.2	-3.2	-3.5	-4.2	-4.7	-5.5	-29.7
All Services	**-1.8**	**-7.3**	**-11.0**	**-14.1**	**-37.4**	**-33.4**	**-30.6**	**-39.5**	**-47.3**	**-53.4**	**-275.8**
Other Effects											
Sustainable Growth Rate	**7.4**	**13.1**	**15.3**	**17.6**	**20.3**	**23.5**	**27.5**	**31.3**	**34.4**	**38**	**228.4**
Medicare Advantage	**0**	**-4.6**	**-10.3**	**-14.9**	**-18.3**	**-19.7**	**-20.9**	**-22.5**	**-24.6**	**-26.7**	**-162.5**
Interactions	**3.1**	**4.8**	**1.9**	**1.1**	**-1.2**	**-1.3**	**-1.6**	**-3.7**	**-4.9**	**-6.2**	**-8.0**
Total	*8.7*	*6.0*	*-4.1*	*-10.3*	*-36.6*	*-30.9*	*-25.6*	*-34.4*	*-42.4*	*-48.3*	*-219.7*

Source: Congressional Budget Office, Letter to Charles Rangel, Chairman Committee on Ways and Means, U.S. House of Representatives, July 17, 2009, Estimate of the Effects on Direct Spending and Revenues of Divisions B and C and Section 164 of H.R. 3200, The American's Affordable Health Choices Act, as introduced on July 14, 2009.

4. Net Federal Costs

We estimate that the costs of the program are largely offset by the new tax revenues and reductions in Medicare and Medicaid spending under the bill. As a consequence, we estimate that the program would increase the federal deficit by about $56.5 billion over the 2010 through 2019 period if all firms are eligible to enroll in the exchange. By comparison, the CBO estimates that the Act would increase the federal deficit by $239 billion. The primary reason for this difference appears to be differences in our estimates of the impact of the public plan.

As discussed above, we estimate that the public plan would be able to offer an insurance product that is 20 percent to 25 percent less than what comparable private insurance coverage would cost; primarily, because the plan would pay providers substantially less than private plans. The CBO assumed that the public plan would only be about 10 percent less costly than private coverage. Also, the CBO appears to have assumed that the public plan would be open only to individuals and firms with fewer than 50 workers. This excludes about 77 percent of those who now have employer coverage.

We estimate that about 33.6 million people would enroll in the public plan if only individuals and small firms are permitted to enroll in the exchange. This compares with the CBO estimate

of 11 to 12 million people. Also, the Urban Institute estimates that the public plan would enroll about 46.7 million people in the public plan, assuming the exchange is opened to firms with under 50 workers, and other low-income workers.[9]

C. Impact on State and Local Governments

If the exchange is opened to individuals and all employers, the Act would result in savings to state and local governments about $158.3 billion between 2010 and 2019 (***Figure 12***). State and local Governments would save $111.5 billion on spending for safety-net programs. Some state and local government worker health benefits plans would save an additional $55.4 billion by enrolling their workforce in the public plan.

If the exchange is restricted to individuals and small firms only, most state and local governments would not qualify for the program. Under this scenario, state and local worker health benefits costs increase by $21.9 billion because the Act requires all employers to contribute to the cost of covering part-time and temporary workers that often are not covered under state-workers plans. Under this scenario, state and local governments would save about $67.8 billion over the 2010 through 2019 period.

Most of the savings are attributed to state and local safety-net programs such as free clinics and public hospitals. Due to the expansion in insurance coverage, safety-net providers would now be reimbursed for the services that under current law they would have provided free to the uninsured. Thus these providers would see an increase in net-income, which could be used either to provide additional services or reduce state and local funding for these providers.

[9] John Holahan and Linda Blumberg, "Is the Public Plan Option a Necessary Part of Health Reform?," The Urban Institute, Health Policy Center, July 26, 2009.

Figure 12
Changes in Spending and Revenues for State and Local Governments under the Act:
2010 – 2019
(billions)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2010-2019
Assumes All Firms Are Eligible for the Exchange Beginning in 2015											
Medicaid and CHIP Programs	$0.0	$0.0	$0.0	$0.9	$1.8	$2.2	$2.0	$2.1	$2.2	$2.4	$13.6
Savings to Current Safety-net programs	$0.0	$0.0	$0.0	-$6.2	-$13.1	-$15.4	-$17.9	-$18.8	-$19.7	-$20.7	-$111.7
State and Local Government Worker Health Benefits Programs	$0.0	$0.0	$0.0	$1.2	$2.8	$3.1	-$14.3	-$15.1	-$16.0	-$16.9	-$55.4
Tax Revenues From Wage Effects (Counted as Offset)	$0.0	$0.0	$0.0	$0.5	$0.7	$0.8	-$1.6	-$1.7	-$1.8	-$1.9	-$4.8
Net Impact on State and Local Governments	$0.0	$0.0	$0.0	-$3.7	-$7.7	-$9.3	-$31.8	-$33.5	-$35.2	-$37.0	-$158.3
Assumes Only Small Firms Are Eligible for Exchange											
Medicaid and CHIP Programs	$0.0	$0.0	$0.0	$0.9	$1.8	$2.2	$2.6	$2.8	$3.0	$3.2	$16.6
Savings to Current Safety-net programs	$0.0	$0.0	$0.0	-$6.2	-$13.1	-$15.4	-$18.0	-$18.9	-$19.8	-$20.8	-$112.3
State and Local Government Worker Health Benefits Programs	$0.0	$0.0	$0.0	$1.2	$2.8	$3.1	$3.4	$3.6	$3.8	$4.0	$21.9
Tax Revenues From Wage Effects (Counted As Offset)	$0.0	$0.0	$0.0	$0.5	$0.7	$0.8	$0.9	$1.0	$1.0	$1.1	$6.0
Net Impact on State and Local Governments	**$0.0**	**$0.0**	**$0.0**	**-$3.7**	**-$7.7**	**-$9.3**	**-$11.0**	**-$11.5**	**-$12.0**	**-$12.5**	**-$67.8**

Source: Lewin Group Estimates using the Health Benefits Simulation Model (HBSM).

Some states also sponsor subsidized insurance programs for low-income people who are not eligible for Medicaid under federal rules. These include the "Basic Health Plan" in Washington, "MinnesotaCare" in Minnesota and county operated programs in California. These programs would be largely superseded by the expanded Medicaid program and the new premium subsidy program under the Act, resulting in savings to these state and local governments.

As discussed above, the federal government would pay the full amount of the cost of the Medicaid eligibility expansion. However, some of those now participating in the program may obtain private health insurance, resulting in some reductions in enrollment for currently eligible people. Conversely, the mandate for coverage is likely to increase enrollment among currently eligible people. Also, some currently eligible but not enrolled children would also become covered as their newly eligible parent(s) enroll in the program. The net impact on state and local governments would be an increase in state spending for Medicaid of $12.3 billion over the 2010 through 2019 period.

D. Private Employer Impacts

The Act requires employers to either offer insurance or pay an 8.0 percent payroll tax on the wages of workers they do not cover (tax rate reduced for smallest firms). In addition, the mandate for all Americans to have coverage is likely to increase worker demand for employer coverage, which can be provided at a lower cost by employers.

However, the availability of the expanded Medicaid program and premium subsidies for lower-wage workers could cause some employers to discontinue coverage, particularly in low-wage firms where workers can obtain publicly subsidized coverage for less than it costs the employer to provide coverage. Also, the availability of lower cost coverage through the public plan would cause many employers to discontinue their current plan and purchase coverage for their workers in the exchange and the public plan.

1. Changes in Employer-Sponsored Insurance (ESI)

As discussed above, we estimate that if the exchange is opened to all employers, there would be a large shift of people from private ESI to the public plan. The number of people with private ESI would decline by 88.1 million people. However, we estimate that about 89.5 million people would be bought into the public plan by their employer, with their employer contributing to the premium. This represents a net increase in the number of people with ESI of 1.4 million people. (Even though the workers obtain coverage through the public plan, we count this as ESI because the employer is making a contribution.)

If eligibility for the exchange is limited to just small firms, the impact on ESI is smaller. Employers covering 21.9 million workers and dependents would discontinue their health plans. About 18.1 million people would become covered under the public plan by an employer. Under this scenario, there would be a net reduction in ESI of 3.9 million people.

2. Employer Health Spending

Total spending for private ESI will be about $452.4 billion in 2011 (***Figure 13).*** This includes the value of the employer share of the cost of health insurance among private employers.[10] Spending for workers and dependents would be $423.6 billion while spending for retiree health benefits will be about $28.8 billion.

Figure 13
Change in Private Employer Health Benefit Costs by Current Insuring Status under the Act if Fully Implemented in 2011 (billions) [a/]

	All Firms Eligible for Exchange			Small Firms Only Eligible for Exchange		
	Currently Insuring Employer	Currently Non-Insuring Employer	All Employer	Currently Insuring Employer	Currently Non-Insuring Employer	All Employer
Private Employer Spending under Current Law						
Current Cost of Coverage						
Workers and Dependents	$423.6	$0.0	$423.6	$423.6	$0.0	$423.6
Retirees	$28.8	$0.0	$28.8	$28.8	$0.0	$28.8
Total Current Law	**$452.4**	**$0.0**	**$452.4**	**$452.4**	**$0.0**	**$452.4**
Private Employer Spending under the Act						
Premiums for Employers in Public Plan	$209.5	$11.8	$221.3	$31.7	$5.7	$37.4
Premiums for Employers in Private Plans	$144.9	$8.3	$153.2	$353.7	$12.3	$366.0
Costs for Retirees	$27.7	$0.0	$27.7	$27.7	$0.0	$27.7
Increased Cost Shift	$13.4	$0.5	$13.9	($1.0)	$0.0	($1.0)
Small Employer Tax Credit	($3.2)	($2.5)	($5.7)	($2.8)	($2.4)	($5.2)
Payroll Tax for Non-Insuring Firms	$22.3	$8.0	$30.3	$31.3	$10.1	$41.4
Total Spending Under The Policy	**$414.6**	**$26.1**	**$440.7**	**$440.6**	**$25.7**	**$466.3**
Net Change in Private Employer Spending						
Net Change	**($37.8)**	**$26.1**	**($11.7)**	**($11.8)**	**$25.7**	**$13.9**

a/ For illustrative purposes, this scenario Assumes that the Act is fully implemented and enrollment is fully matured in 2011.
Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

If all firms are permitted to participate in the exchange, spending for currently insuring firms would fall by $37.8 billion under the Act, assuming it were fully implemented in 2011. Most of this is due to savings from covering employees through the public plan. It also reflects the impact of the small employer tax credit. However, many of the firms that cover full-time workers would pay a payroll tax for their part-time workers rather than cover them, as is

[10] The impact on health benefits costs for government employees is incorporated into our public spending estimates presented above.

permitted under the Act. Thus, there will be employers that pay the payroll tax for their part-time workers, even though they may be providing coverage to their full-time employees.

Firms that currently do not offer coverage to any of their employees would see an increase in spending of $26.1 billion, assuming the exchange is open to all employers. This includes the cost of purchasing insurance in firms that decide to offer coverage and the cost of the payroll tax in firms that decide to pay the tax rather than providing insurance. Overall, health spending for private employers would decline by about $11.7 billion under then Act, assuming the exchange is open to all firms. This reflects the savings resulting from the public plan and reduced spending for employers who discontinue coverage due to the availability of new subsidized coverage for their workers.

If the exchange is available to only small firms, employers would see an overall net increase in health spending for their workers of $13.9 billion. This compares with a net reduction of $11.7 billion if the exchange is opened to all employers. The main reason for the difference is that more employers will be able to take advantage of the public plan if open to larger firms, most of whom already offer coverage. This results in greater overall savings for employers.

These savings estimates also reflect the impact of increased cost-shifting by providers due to the increase in coverage under public programs. As discussed above, public programs such as Medicare typically pay providers 20 percent to 30 percent less than private insurers must pay for the same services. In fact, Hospital payments under Medicare are estimated to be about 10 percent less than the cost of providing these services.[11] We estimate that the movement of large numbers of people to the public plan would result in increased cost-shifting to those with private coverage of about $13.9 billion (includes private employer share only).

3. *Impact on Employer Costs by Industry and Firm Size*

Figure 14 presents our estimates of the average change in employer health spending per worker for private employers by firm size, industry and current insuring status. Firms that now offer insurance to at least some of their workers would save an average of about $437 per worker, assuming the exchange is opened to all employers. If the exchange is limited to only small firms, currently insuring employers would still save an average of about $138 per worker.

By comparison, firms that do not now offer insurance would see an increase in health spending per worker of between $840 and $860 per worker, under both scenarios. This is because the uninsured tend to be concentrated in small firms who will have access to the exchange regardless of whether the exchange is opened to larger firms.

Savings for small firms currently offering insurance are larger if the exchange is limited to individuals and small firms only. This is because people in larger firms tend to be older and more costly that the people enrolling in the exchange as individuals, thus, increasing the overall premium in the exchange.

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[11] American Hospital Association, "Trends Affecting Hospitals and Health Systems," TrendWatch Chartbook April 2008.

Figure 14
Change in Employer Health Spending per Worker under the Act If Fully Implemented in 2011[/a]

	All Firms Eligible for Exchange			Small Firms Only Eligible for Exchange		
	Currently Insuring firms	Currently Non-insuring firms	All Firms	Currently Insuring firms	Currently Non-insuring firms	All Firms
Firm Size (number of Workers in Firm)						
Fewer than 10	-$1,519	$582	-$384	-$2,132	$545	-$687
10-24	-$800	$699	-$123	-$1,107	$673	-$302
25-99	$152	$1,161	$436	$442	$1,121	$634
100-499	$136	$1,249	$332	$162	$1,286	$360
500-999	-$189	$936	-$13	-$133	$926	$33
1,000-4,999	$13	$1,148	$339	$112	$1134	$406
5,000 or more	-$813	$0	-$813	$311	0	$311
Industry of Employment						
Construction	-$395	$1,125	$166	-$223	$1115	$271
Manufacturing	-$709	$1,183	-$451	-$153	$1167	$27
Transportation	-$583	$1,329	-$182	-$181	$1319	$133
Wholesale Trade	$304	$602	$352	$217	$591	$277
Retail Trade	-$302	$647	-$27	-$15	$615	$167
Services	-$359	$753	-$21	-$142	$733	$124
Finance	-$648	$1,046	-$368	-$164	$996	$28
Other	-$723	$1,045	-$112	-$559	$989	-$24
All Private Employers						
Total Private	-$437	$862	-$94	-$138	$839	$120

a/ For illustrative purposes, this scenario Assumes that the Act is fully implemented and enrollment is fully matured in 2011.
Source: Lewin Group Estimates Using the Health benefits Simulation Model (HBSM).

E. Impact on Consumers

Under current law, families will spend an average of about $4,193 per family for health care in 2011 (***Figure 15***). This includes average premium payments of $2,648 and average out-of-pocket expenses for health services of $1,544. Premiums include the amounts paid for individual non-group coverage and employee contributions for ESI. Out-of-pocket expenses include deductibles and co-payments for covered services as well as family spending for services not covered by insurance (including amounts spent out-of-pocket by the uninsured for services.

Figure 15
Average Family Health Spending by Family Income under Current Law in 2011

	Number of Families (thousands)	Spending under Current Law		
		Average Premium	Average Out-of-Pocket	Average Total Spending
Families by Annual Family Income				
Under $10,000	13,257	$479	$717	$1,196
$10,000-$19,999	15,579	$1,124	$831	$1,955
$20,000-$29,999	14,716	$1,828	$1,143	$2,971
$30,000-$39,999	14,434	$2,200	$1,285	$3,485
$40,000-$49,999	11,759	$2,684	$1,576	$4,260
$50,000-$74,999	21,278	$3,055	$1,671	$4,726
$75,000-$99,999	15,403	$3,721	$1,978	$5,699
$100,000-$149,999	16,203	$3,988	$2,103	$6,091
$150,000 or More	13,135	$4,449	$2,540	$6,989
All Families				
All Families	135,765	$2,648	$1,545	$4,193

Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

If the exchange is opened to all firms, average health spending per family would decline by $387 per family (***Figure 16***). Premium expenses would decline by an average of $302, while out-of-pocket spending would decline by about $36 per family. The relatively small reduction in out-of-pocket spending reflects that the basic health plan under the Act has relatively higher cost-sharing than typical employer plans. On average, premium penalty payments would be $63 per family.

In addition, if workers in all firms are given access to the public plan, we estimate that average after-tax wages would increase by $112 per family due to reductions in employer health spending for employers joining the public plan. In this analysis, we assume that changes in employer health benefits costs – whether they are increases or decreases - are passed back to workers in the form wage adjustments.[12] Thus, a reduction in employer costs is passed back to workers as increased wage growth, while increases in employer costs are passed on as reduced wage growth.[13] In ***Figure 16***, we treat the increase in wages due to employer savings as a reduction in family health care costs.

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[12] See, for example, James Heckman, "What Has Been Learned About Labor Supply in the Past Twenty years?" American Economic Review, (May 1993).

[13] See, for example, Jonathan Gruber and Alan B. Kreuger, "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers Compensation Insurance," in Tax Policy and the Economy (1991); Jonathan Gruber, "The Incidence of Mandated Maternity Benefits," American Economic Review, (forthcoming); and Lawrence H. Summers, "Some Simple Economics of Mandated Benefits," American Economic Review (May 1989).

Figure 16
Changes in Family Health Spending under the Act by Family Income in 2011 [a/,b/]

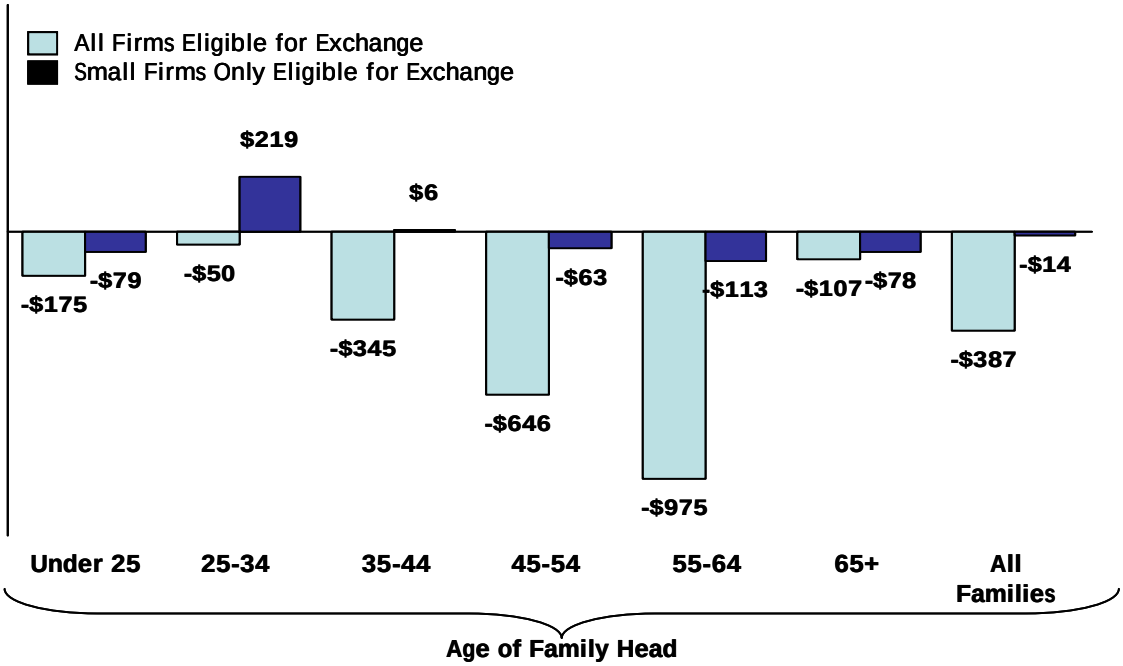
	All Firms Eligible for the Exchange					Small Firms Only Eligible for Exchange				
	Change in Premiums	Change in Out-of Pocket	Penalty Payments	After tax Wage Effects [c/]	Net Change in Spending	Change in Premiums	Change in Out-of Pocket	Penalty Payments	After tax Wage Effects [c/]	Net Change in Spending
Families by Annual Family Income										
Under $10,000	-$193	-$187	$2	$49	-$427	-194	-193	2	44	-429
$10,000-$19,999	-$123	-$194	$16	$8	-$309	-130	-197	17	10	-320
$20,000-$29,999	-$212	-$93	$40	$129	-$394	-203	-86	41	120	-368
$40,000-$49,999	-$294	$10	$59	$75	-$300	-125	42	61	-31	9
$50,000-$74,999	-$258	$57	$87	$119	-$233	-120	159	88	-79	206
$75,000-$99,999	-$443	$38	$103	$237	-$539	-201	163	105	-97	164
$100,000-$149,999	-$502	$55	$117	$158	-$488	-267	204	120	-258	315
$150,000 or More	-$471	-$2	$63	$96	-$506	-268	152	66	-413	363
All Families										
All Families	-$302	-$36	$63	$112	-$387	-182	32	65	-71	-14

a/ For illustrative purposes, this scenario Assumes that the Act is fully implemented and enrollment is fully matured in 2011.
b/ Excludes the impact of the increase in taxes for people with incomes over $350,000.
c/ Increases to wages are counted as a reduction in family health care costs.
Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

Consumer savings would be smaller if only small firms are able to enroll in the exchange. Under this scenario, families would save an average of about $14 per family. This reflects that allowing larger firms to enroll in the public plan would reduce the employee share of the premium for workers in these firms.

If all firms are given access to the public plan, average family health care savings ($387 per family overall) tend to increase with the age. As shown in ***Figure 17***, family spending for families headed by someone under the age of 25 is reduced by $175 per family. Savings increase to $975 per family for families headed by someone age 55 to 64. This reflects that health care costs generally increase with age. These savings largely disappear if only small firms have access to the public plan.

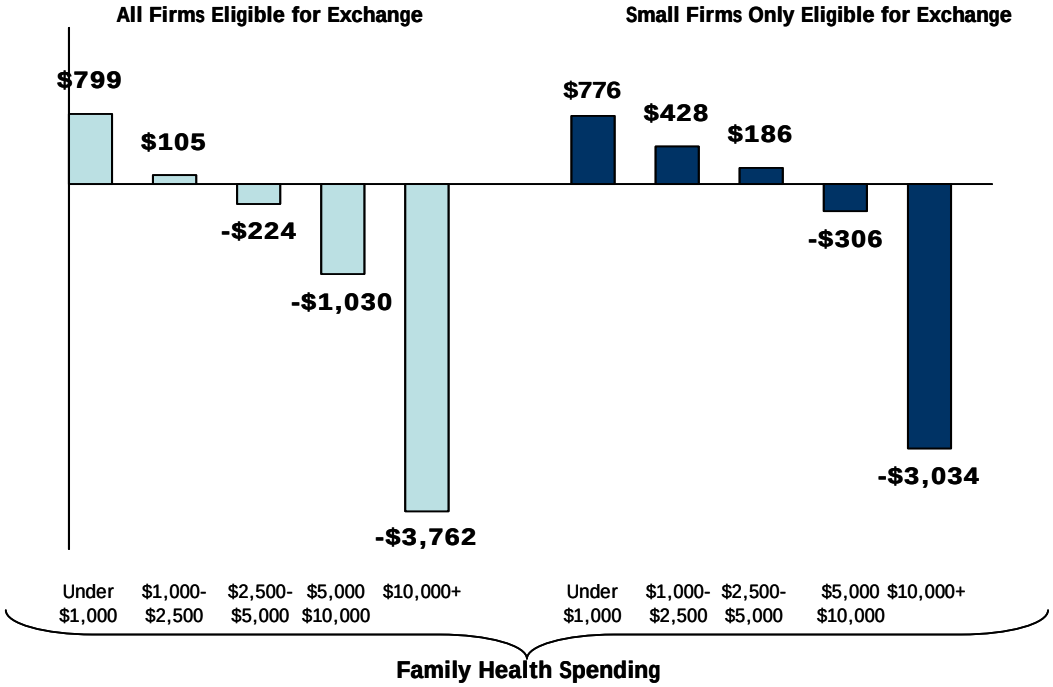
Figure 17
Changes in Average Family Health Spending under the Act by Age of Family Head: 2011



Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

The Act would provide the greatest savings to those who have high health care expenses under current law. If all firms are allowed to access the public plan, the savings would average about $3,760 for those families that would experience total family health spending of $10,000 or more under current law (***Figure 18***). By contrast, families that would have had health expenses of less than $1,000 under current law would spend an average of $799 more per family under the Act.

Figure 18
Changes in Average Family Health Spending by Current Insured Status and Current Family Spending Level under the Act: 2011



Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Family health spending would tend to increase under the Act for the uninsured. Families with one or more uninsured members would see their health spending increase by an average of $1,272 per family, assuming all workers have access to the public plan through the exchange (***Figure 19***). This reflects the cost of complying with the mandate for all Americans to have health insurance. Because the uninsured tend to be younger and relatively low users of health services, the cost of insurance for this group generally would be greater than what they save in out-of-pocket health care costs by having coverage.

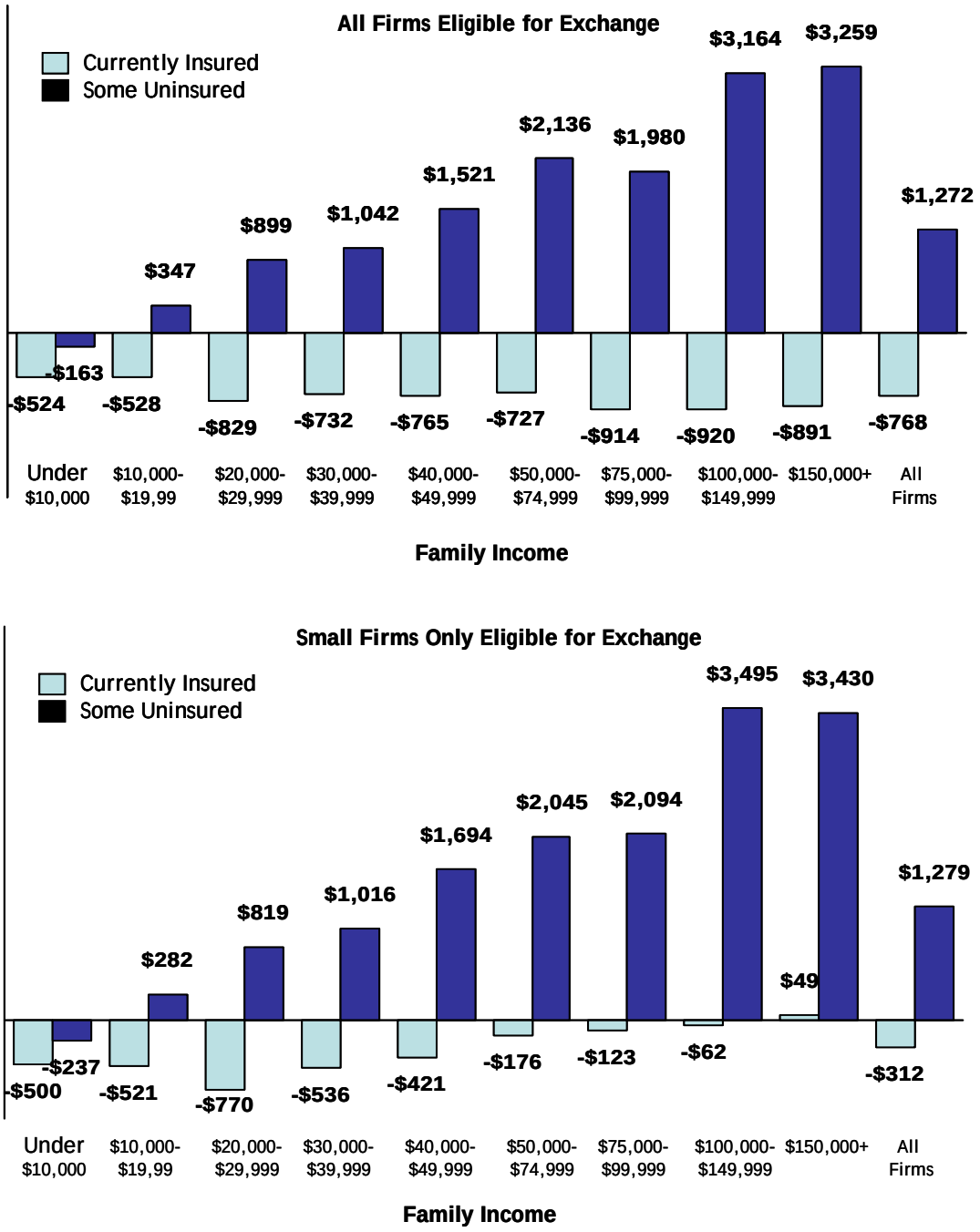
Families that are fully insured under current law (i.e., all family members have coverage) would save about $768 per family, largely due to movement of people from private coverage to the less costly public plan. However, if only small firms have access to the public plan, average savings would fall to $312 per fully-insured family (i.e., all members insured under current law). However, average changes in health spending for families with one-or-more uninsured member would be about the same as if the exchange were opened to all.

As shown in ***Figure 19***, families where all members are insured would generally see an average reduction in family health spending at all income levels under the Act. However, families with uninsured members would on average spend more on health care once they are required to obtain coverage, even with the help of the subsidies, in all income groups except for those with incomes of less than $10,000.

The increase in cost for families with uninsured members would increase with family income reflecting the phase-out of subsidies under the program through 400 percent of the FPL ($88,000

for a family of four). Family spending for families with one or more family member under current law would be $3,259 per family with incomes of $150,000 or more. These estimates do not reflect the surtax on people with annual incomes over $350,000.

Figure 19
Changes in Average Family Health Spending by Family Income and Current Insured Status



Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

F. Employment Effects

The Act creates a new obligation for employers to contribute to the cost of covering their workers, including part-time workers, either by providing insurance or paying a tax. As discussed above, we expect employers to pass-on increases in health care costs to workers in the form of slowed wage growth, while passing on savings in worker health care costs as increased wage growth. When wage reductions for those experiencing increased health benefits costs fully offset the increase in health care costs, there will be little employment effect. However, when wage adjustments are not able to fully offset the effects of higher health care costs because of a binding minimum wage, there would be employment effects.

We define workers employed at the minimum wage to be the group that is "vulnerable" to employment effects, which we define to be workers who are at or near the minimum wage (we assume $7.00 per hour) who do not have ESI under current law. We estimated the loss of employment for this group based upon studies of the effect of the minimum wage on employment. The elasticity estimates of the demand for labor are typically small: in the range of -0.1 to -0.3.[14] These estimates are based upon changes in aggregate employment given a change in the minimum wage.[15]

We estimate that there would be a loss of employment among the vulnerable (i.e., low-wage) population of between 260,000 and 604,000 people if the Act were fully implemented in 2011. ***Figure 20*** presents these estimates of job-loss by firm size and industry. The loss of wages for these workers is reflected in the wage effect estimates presented above.

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[14] See, for example, Charles Brown, Curtis Gilroy, and Andrew Kohen, "The Effects of the Minimum Wage on Employment and Unemployment," Journal of Economic Literature, June, 1982; and Brown, Gilroy and Kohen, "Time Series Evidence of the Effect of the Minimum Wage on Youth Employment," Journal of Human Resources, Winter, 1983. More recent evidence is summarized in Jacob Klerman and Dana Goldman, "Job Loss Due to Health Care Reform," (Rand Corporation) Statement prepared for the Subcommittee on Health of the House Committee on Ways and Means, November 4, 1993.

[15] These elasticity estimates were transformed so that they could be applied to the vulnerable worker population only as represented in HBSM, resulting in elasticity assumptions of -0.2 and -0.5.

Figure 20
Estimated Job Loses Under the Act under Alternative Assumptions in 2011 (thousands) [a/,b/]

	Total Employment	Job Loss	
		Low Range	High Range
Private Employers by Firm Size			
1 - 9	29,845	38	95
10 - 24	14,172	46	105
25 - 99	17,565	41	98
100 - 499	17,227	52	112
500 - 999	6,647	10	25
1,000 - 4,999	15,891	42	102
5,000 or more	25,028	15	28
Government	22,475	16	39
Private Employers by Industry			
Construction	11,387	40	78
Manufacturing	16,926	28	63
Transportation	6,097	13	31
Wholesale Trade	4,613	3	8
Retail Trade	16,648	31	77
Services	54,398	102	245
Finance	10,437	9	22
Government	22,475	16	39
Other	5,873	18	41
Total Private			
Total Private	148,869	**260**	**604**

a/ Assumes an employment elasticity for minimum-wage workers ranging from -0.1 to -0.3, adjusted for use in micro-data simulations.
b/ For illustrative purposes, this scenario Assumes that the Act is fully implemented and enrollment is fully matured in 2011.
Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

G. Impact on National Health Spending

National Health Spending will reach $2.77 trillion in 2011. This includes expenditures for health services, prescription drugs and medical equipment. It includes the amounts spent by all payer groups including the federal government, state and local governments, employers and families. To illustrate the impact of the Act on national health spending, we estimated the Act's effect on health expenditures assuming that the program is fully implemented and enrollment is fully mature in 2011.

We estimate the change in national health spending separately for the scenario where all firms are eligible for the exchange and the scenario where only small firms have access. If all firms are eligible for the exchange, and therefore the public plan, national spending would increase by about $1.3 billion. Thus, the Act would reduce the number of uninsured by 32.6 million people without significantly increasing national health spending (***Figure 21***).

The overall increases in spending for the newly insured would be roughly offset by reductions in provider payments and administrative savings for those covered under the public plan. However, if eligibility for the exchange is limited to only small firms, national health spending under the Act would increase by $48.8 billion.

Under either scenario, we estimate an overall increase in utilization of health services of roughly $42 billion for the newly insured and those obtaining improved coverage. In addition, utilization of health services would increase for people who shift from private coverage to the public plan. This reflects that Medicare, which the public plan is modeled on, does not include most of the utilization controls used by private insurers, such as precertification for high cost services. Studies have shown that these utilization controls can save up to 8 percent. (Our analysis is explained in ***Appendix A***). This utilization effect would be $4.2 billion if only small firms have access to the public plan and $20.5 billion if all firms may enroll.

Figure 21
Change in National Health Spending Under the Act in 2011 (billions) [a/]

	All Firms Eligible for Exchange		Small Firms Only Eligible for Exchange	
National Health Spending in 2011		**$2,770.3**		**$2,770.3**
Changes in National Health Spending				
Net Change in Spending for Health Services		**$62.9**		**$46.1**
Change in Utilization for Newly Insured	$39.4		$38.9	
Change in Utilization due to Improved Coverage	$3.0		$3.0	
Change in Utilization due to Reduced Managed Care in Public Plan	$20.5		$4.2	
Change in Provider Income		**($45.0)**		**$2.9**
Payments for formerly uncompensated care	$17.5		$17.8	
Change in Provider Payment Rates				
Increased Medicaid Payment Rates for Primary Care	$8.4		$8.4	
Enrollees moving from private coverage to Medicaid	($4.5)		($4.5)	
Payment rates for public plan	($96.4)		($16.8)	
Reduced Cost Shifting (Assumes 40 percent passed to Payers)	$30.0		($2.0)	
Change in Insurer Administrative Costs		**($16.6)**		**($0.2)**
Change in Insurer Administration (including Medicaid)	($49.1)		($16.5)	
Public Program Administration	$29.6		$13.3	
Administration of Subsidies	$2.9		$3.0	
Net Change in Health Spending		**$1.3**		**$48.8**

a/ For illustrative purposes, this figure show the impact of the Act assuming the program is fully implemented and enrollment is fully matured in 2011.
Source: Lewin Group Estimates using the Health Benefits Simulation Model (HBSM).

Provider reimbursement for the health services they provide would fall by about $45.0 billion if workers in all firms have access to the public plan. Providers now would be paid for services that under current law would have been provided free as uncompensated care, adding $17.5

billion to provider incomes. The Act also increases reimbursement rates for primary care services under Medicaid to Medicare levels over a three-year period by $8.4 billion.

These increases in reimbursement would be more than offset by reductions in payment for care provided to people enrolled in the new public plan. As discussed above, Medicare hospital payments are about 68 percent of what private insurers pay for comparable services. Physician services are also reimbursed at about 81 percent of private payer levels. By relying upon Medicare reimbursement plus 5 percent, the Act would result in reduced payments to providers for services provided to people who shift from private insurance to the public plan, which we estimate to be $96.4 billion.

If only individuals and workers in small firms are eligible to participate in the public plan, enrollment would be lower resulting in a reduction in provider reimbursement of only about $16.8 billion. In fact, provider reimbursement actually increases by $2.9 billion due to the smaller enrollment in the public plan under this scenario.

A portion of this net reduction in reimbursement will be recovered by providers through increases in charges to those who continue to be covered under private insurance. Studies have documented that about 40 percent of the shortfalls in reimbursement for the uninsured and people covered under government programs are recovered by increasing charges for services provided to privately insured people (see ***Appendix A***). Based upon these results, we estimate that the program would increase the cost-shift by about $30.0 billion, if all firms are eligible to participate in the public plan through the public plan.

Finally, we estimate an overall reduction in insurer administrative costs for private insurance and public programs of $16.6 billion under the scenario where all firms have access to the exchange. This reflects that there are economies of scale that can be realized by providing coverage through an organized purchasing entity such as the exchange. Also, the public plan would have no allowance for insurer profit and insurance agent and broker commissions, thus reducing the public plan premium.

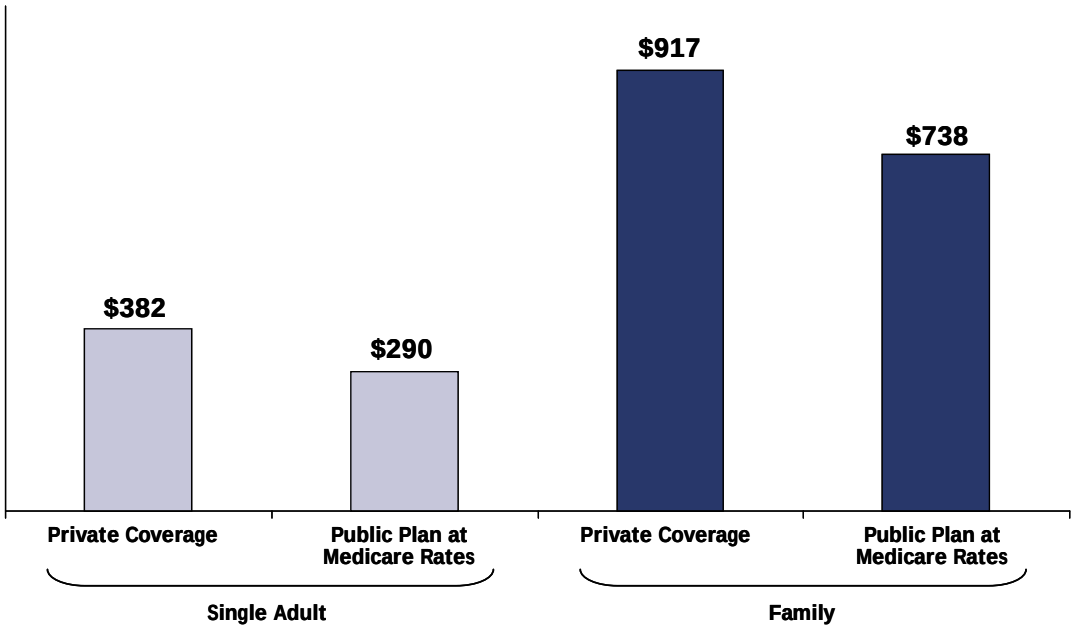
Appendix A

Derivation of Public Plan Premiums

We estimated the premium for private health plans and the public plan under The American Affordable Health Choices Act of 2009. These estimates are based upon the demographic and health characteristics of the population eligible to enroll in the exchange. They also reflect differences in administrative costs and the levels of benefit management under plan alternatives. However, the most important driver of premiums in the public plan will be provider payment levels.

For illustrative purposes, we provide in this section a detailed description of how we estimated premiums for insurance in the exchange assuming that all firms are eligible to participate in the exchange. To assure comparability, both premiums were estimated using an identical benefits package for a uniform population with identical characteristics. These include all people now covered under private insurance. For illustrative purposes, we present our estimates of premiums for the "Enhanced" benefits package under the Act. The average premium per privately insured family in 2010 would be $917 per month for private coverage compared to $738 per month under the public plan (***Figure A-1***).

Figure A-1
Cost of the "Enhanced" Benefits Package under Private Coverage and the Public Plan under the Act [a/]



a/ Premiums are estimated for people with private coverage under current law. Family coverage includes families, couples and single parent households.
Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Thus, premiums for the public plan would be 20 percent to 25 percent less than less than for comparable private coverage. For some individuals and small employers, savings would be 30

percent or more. These savings derive primarily from the fact that provider payment levels under Medicare are substantially lower than for private payers. Also, the public plan would not include an allowance for profit or broker commissions, further reducing the public plan premium.

The premiums for each of the three public plan scenarios were estimated for the populations eligible to participate under each option (e.g., small firms, large firms etc.) For illustrative purposes, we present in a detailed description of the approach used to estimate premiums per policy holder (i.e., average across individual and family policies) using payment levels (***Figure A-2***). In addition to payment levels and administrative costs, these estimates reflect the impact of cost-shifting, risk selection and differences in utilization review practices.

Figure A-2
Monthly Premiums per Policy Holder under Private Insurance and the Public Plan for the "Enhanced" Benefits Package under the Act in 2010 [a/]

	Premiums in Public Plan per Policy Holder			Private Plan Premiums per Policy Holder		
	Benefits Costs	Administration	Total	Benefits Costs	Administration	Total
Public Plan Available to individuals and all Employers						
Current Law Premiums: All Firms	$565.36	$77.45	$642.81	$565.36	$77.45	$642.81
Changes in Premiums						
Payment Level Adjustment [b/]	-$123.52	$0.00	-$123.52	$0.00	$0.00	$0.00
Administrative Savings	$0.00	-$37.89	-$37.89	$0.00	$0.00	$0.00
Selection Effects	$32.99	$0.00	$32.99	-$29.60	$0.00	-$29.60
Reduced Utilization Review	$26.90	-$2.96	$23.94	$0.00	$0.00	$0.00
Cost Shift	$0.00	$0.00	$0.00	$54.12	$0.00	$54.12
Total Premiums Under Public Plan for Individuals and all Employers						
Total	$501.75	$36.6	$538.35	$589.88	$77.45	$667.33

a/ Premiums for policy holders with private coverage under current law. Premiums are an average across family and individual policies.
b/ Assumes provider payment levels are set at Medicare payment levels, with physicians and other professionals receiving an additional 5 percent if they accept patients from both the public plan and Medicare.
Source: Lewin Group Estimates Using the Health Benefits Simulation Model (HBSM).

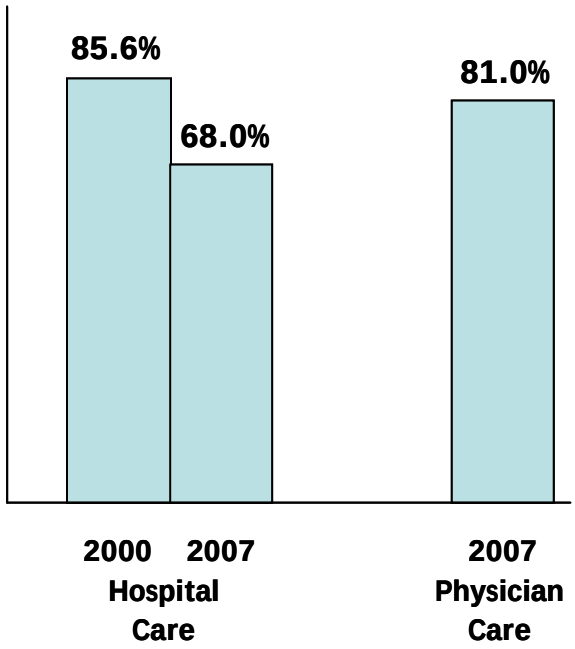
We estimated these premiums in several steps described in the following sections:

- Provider payment levels;
- Administrative costs;
- Utilization review and costs;
- Cost-shifting under the public plan; and
- Enrollment and risk selection.

1. Provider Payment Levels

Provider payment levels for hospital services under Medicare are equal to only about 68.0 percent of what is paid by private health plans for the same services (***Figure A-3***). In fact, Medicare payments to hospitals are equal to only about 91 percent of the actual cost of the services provided.[16,17] For physician services, Medicare pays only about 81.0 percent of what is paid by private health plans for the same services.[18]

Figure A-3
Medicare Provider Payments as a Percent of Private Payer Rates



Source: American Hospital Association, "Trends Affecting Hospitals and Health Systems," TrendWatch Chartbook April 2008; "Report to Congress: Medicare Payment Policy," Medicare Payment Advisory Commission (MedPAC), March 2008; and State Health Facts, The Kaiser Family Foundations (KFF), 2003 report.

For illustrative purposes, we assume that all physicians and other professionals would agree to see both public plan and Medicare patients. Based upon these figures, we estimate that average payments for hospitals and other providers under a public plan using Medicare payment rates would be roughly 25 percent less than under private health plans.

As shown in ***Figure A-3***, the disparity between public and private payments for hospitals has grown in recent years. Medicare payment rates for hospitals have fallen from 85.6 percent of

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16 American Hospital Association, "Trends Affecting Hospitals and Health Systems," TrendWatch Chartbook, April 2008.

17 Lewin Group estimates that Medicare allowable costs were 7 percent to 8 percent less than hospital's reported costs in 2007. Unlike the AHA data used here, this estimate does not include the Medicare non-allowable costs (e.g., advertizing, entertainment, penalties, gifts, donations, employee education, etc.).

18 State Health Facts, The Kaiser Family Foundation (KFF), 2003 report.

private sector payments in 2000 to 68.0 percent in 2007. This disparity could continue to grow into the next decade, suggesting that our use of payment differentials in 2007 may understate our estimate of the impact on provider incomes for 2010.

2. *Administrative Costs*

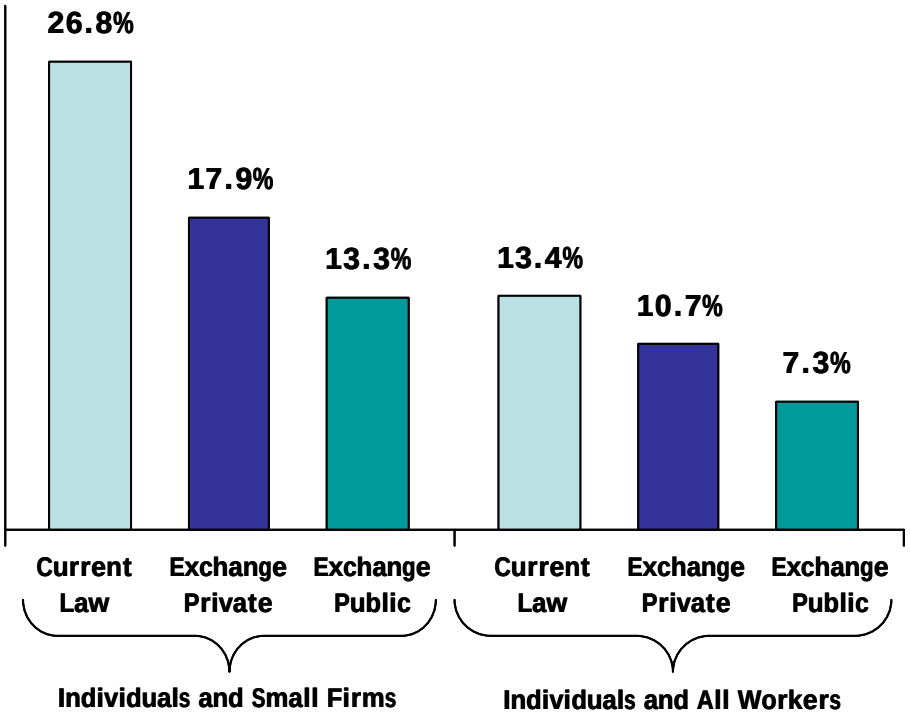
Administrative costs are also expected to be lower in the exchange than in the private market. We estimate that administrative costs for individuals and small firms under current law equal 26.8 percent of benefits costs (i.e., claims costs). We estimate that administrative costs in the exchange for individuals and small firms would be equal to 17.9 percent of benefits costs (***Figure A-4***). This is based upon actuarial estimates of how administrative costs are reduced through economies of scale in insurance pools.[19]

We assume that administrative costs in the public plan would be the same as for other plans in the exchange, with the exception that the public plan would not include an allowance for insurer profit and insurance agent and broker commissions and fees. Administrative costs for individuals and small employers in the public plan would be about 13.3 percent of benefits costs. If extended to employers of all sizes, administrative costs in the public plan would average about 7.3 percent of claims costs.

Thus, our administrative cost estimates are based upon costs for private health plans rather than Medicare, which we adjusted for the elimination of profits and agent/broker commissions. We chose this approach because the Medicare administrative cost figures for the existing Medicare program do not reflect the cost of administering changes in coverage over time as people change jobs.

[19] Hay/Huggins data as appeared in: "Cost and Effects of Extending Health Insurance Coverage," The Congressional Research Service, 1989.

Figure A-4
Administrative Costs as a Percent of Claims Cost



Source: The Lewin Group estimates.

3. *Utilization Review and Costs*

Premiums in the public plan would also differ from private plans due to differences in the level of utilization management. Private insurers typically employ utilization management programs designed to avoid unnecessary utilization of health services. These include pre-certification for high-cost procedures, disease management, concurrent utilization review and discharge planning. These approaches are also emphasized in integrated delivery systems such as HMOs to keep patients healthy and to improve efficiency.

While the Medicare program does have some pre-certification requirements, they are less extensive than those used in most private plans. Therefore, we adjusted the public plan premiums to reflect that these utilization review processes are less widely used in Medicare.

At the beginning of Title XVIII of the Social Security Act, it reads:

> *Nothing in this title shall be construed to authorize any Federal officer or employee to exercise any supervision or control over the practice of medicine or the manner in which medical services are provided, or over the selection, tenure, or compensation of any officer or employee of any institution, agency, or person providing health services; or to exercise any supervision or control over the administration or operation of any such institution, agency, or person.*

The language essentially precludes the Centers for Medicare & Medicaid Services (CMS) from administering prior authorization procedures in the Medicare FFS program. In fact, the Government Accountability Office (GAO) recently recommended that CMS consider a front-end payment safeguard mechanism such as prior authorization in response to the rising utilization of advanced imaging procedures.[20] We have even seen prior authorization for imaging services as a recommendation in President Obama's budget projections and scored by the Congressional Budget Office, but at this point CMS is basically limited to setting coverage limits and retrospective medical necessity payment reviews and has acknowledged that prior authorization may not be applicable in the Medicare FFS program.[21] For this reason, the Medicare program does not utilize as many payment safeguard mechanisms as can be utilized in the private insurance sector.

Studies of private utilization management programs have shown that these programs reduce health spending. A study by Feldstein et al. showed that these utilization review methodologies reduced plan costs by 8.4 percent.[22] They found that these programs saved plans eight dollars for every dollar spent by the insurer to administer them. A study by Wickizer showed savings of six percent.[23] Another more recent study showed savings of about four percent in PPOs and eight percent in HMOs.[24] These estimates do not include the provider's cost of complying with utilization review.

In this study, we assumed that Medicare engages in about one-third of the utilization review used in private health plans. This resulted in an average increase in costs once enrolled in the public plan of 5.4 percent. We assumed that administrative costs in the public plan are reduced by 0.5 percent of benefits costs to reflect administrative savings from less extensive utilization review programs.

4. Cost-Shifting under Public Plan

The coverage expansions and the public plan would affect provider payments for private coverage through the "cost-shift." In today's system, hospitals and physicians provide a substantial amount of free care to uninsured people called "uncompensated care." Also, payments for Medicare and Medicaid are usually less than the cost of the services provided resulting in payment shortfalls. Hospitals and physicians cover the cost of uncompensated care and payment shortfalls under public programs by increasing charges for private health plans in a process known as cost-shifting.

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20 Government Accountability Office. June 2008. *Medicare Part B Imaging Services: Rapid Spending Growth and Shift to Physician Offices Indicate Need for CMS to Consider Additional Management Practices*. GAO-08-452 <Available as of June 22, 2009 at http://www.gao.gov/new.items/d08452.pdf>.

21 Congressional Budget Office. December 2008. *Budget Options Volume 1: Health Care*; Government Accountability Office. June 2008. *Medicare Part B Imaging Services: Rapid Spending Growth and Shift to Physician Offices Indicate Need for CMS to Consider Additional Management Practices*. GAO-08-452 <Available as of June 22, 2009 at http://www.gao.gov/new.items/d08452.pdf>.

22 Feldstein, P., Wickizer, T. and Wheeler, J., "The Effects of Utilization Review of Health Care Use and Expenditures," ***NEJM***, 1988; 318:1319-4, Volume 3.

23 Wickizer, Thomas, "The Effects of Utilization Review on Hospital Use and Expenditures: A Covariance Analysis," *Health Services Research*, May 16, 1991.

24 Stapleton, D., "New Evidence on Savings from Network Models of Managed Care," (a report to the Healthcare Leadership Council), The Lewin Group, Washington, DC, May 1994.

In this analysis, we assumed that a portion of the reductions in uncompensated care resulting from an expansion in coverage would be passed back to privately insured people as a reduction in the cost-shift. This would take the form of a reduction in the rate of growth in provider charges. However, a public plan that pays providers at Medicare levels would increase shortfalls in reimbursement, resulting in increased cost-shifting to private payers. The net effect on provider incomes will depend upon the amount of the payment shortfall relative to the savings in uncompensated care.

The available research shows that not all of uncompensated care and government payment shortfalls are passed on to private payers as higher charges. There are two separate studies indicating that about one-half of hospital payment shortfalls are passed on to private payers in the form of higher charges.[25] However, two other studies showed considerably less evidence of hospital cost-shifting, although they did not rule out a partial cost-shift.[26] One study of physician pricing by Thomas Rice et al., showed that for each one percent reduction in physician payments under public programs, private sector prices increased by 0.2 percent.[27]

Our own analysis of hospital data indicates that about 40 percent of the increase in hospital payment shortfalls (i.e., revenues minus costs) in public programs were passed-on to private-payers in the form of the cost-shift during the years studied.[28] Based upon this research, we assume that 40.0 percent of changes in uncompensated care and payment shortfalls are passed on to private payers in the form of reduced charges.

We estimate that premiums for privately insured people would increase by about $460 per privately insured person under a public plan available to all individuals and employers using Medicare payment rates. This reflects the shortfalls in payments under the new public plan which is partially offset by the reduction in uncompensated care resulting from expanded coverage and increases in Medicaid reimbursement for primary care services under Medicaid.

5. Enrollment and Risk-Selection

In this step, we use HBSM, a micro-simulation model of the US health care system, to identify privately insured individuals and employers who would be eligible to purchase coverage at a lower cost through the public plan. We then simulate their decision to shift to the public plan based upon studies of how people respond to changes in the relative price of insurance within

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25 Dranove, David, "Pricing by Non-Profit Institutions: The Case of Hospital Cost Shifting," *Journal of Health Economics*, Vol. 7, No. 1 (March 1998); and Sloan, Frank and Becker, Edward, "Cross-Subsidies and Payment for Hospital Care," *Journal of Health Politics, Policy and Law*, vol. 8., No. 4 (Winter 1984).

26 Zuckerman, Stephen, "Commercial Insurers and All-Payer Regulation," *Journal of Health Economics*, Vol. 6. No. 2 (September 1987); and Hadley, Jack and Feder, Judy, "Hospital Cost Shifting and Care for the Uninsured," *Health Affairs*, Vol. 4 No. 3 (Fall 1985).

27 Rice, Thomas, et al., "Physician Response to Medicare Payment Reductions: Impacts on public and Private Sectors," Robert Wood Johnson Grant No. 20038, September 1994.

28 Sheils, J., Claxton, G., "Potential Cost Shifting Under Proposed Funding Reductions for Medicare and Medicaid: The Budget Reconciliation Act of 1995," (Report to the National Coalition on Health Care), The Lewin Group, December 6, 1995.

employer groups offering a choice of health plans.[29] We simulate these shifts in a two step process that allocates affected people into one of the following three groups:

- People who remain with their current private health plan rather than shifting to the public plan;
- People who drop private coverage to enroll in the public plan due to the lower premiums; and
- People who leave the public plan to enroll in a lower cost HMOs.

In the first step, we model the shift of privately insured individuals to the lower cost public plan. We do this using "plan change price elasticity" estimates developed by Strombom et al., showing that on average, a 1.0 percent decrease in the price of an alternative source of coverage is associated with a 2.47 percent migration of enrollees to the lower cost health plan.

The study shows that younger and healthier people are more likely to change plans in response to a change in premiums. This is consistent with the idea that older and sicker people are more likely to resist changing plans if it means their physician is not in the plan's provider network. These estimates are consistent with other studies showing that people leaving fee-for-service (FFS) health plans for HMOs and other managed care plans tend to have lower costs than those who remain with FFS plans.[30]

In the second step we model risk selection against the public plan. Some managed care plans would develop products that tend to attract younger and healthier people through benefit designs or marketing practice. This would tend to leave the public plan with higher cost individuals. We simulate this by assuming that private HMOs are able to offer a product that is four percent less costly than the premium for the public plan. This assumption is based upon research showing that utilization of health services in HMOs is about four percent less than in PPO and other FFS plans.

Using this approach, we estimate that the public plan would experience adverse selection of about 7.1 percent. This would be met with favorable selection of about 5.0 percent in the remaining private insurance markets (including private plans in the exchange). This is a differential of about 12.7 percent between the two groups, over and above what is corrected for with age rating. In this scenario, we have assumed the use of age-rating with a 2 to 1 ratio between the highest and lowest cost age groups, with no premium adjustment for health status.

The Strombom results were within the range of the available estimates of the price response due to changes in the relative prices of insurance. Several estimates of price elasticity of demand from previous research have ranged from -0.8 to -6.175 depending on the types of plans

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[29] Strombom, B., Buchmueller, T., Feldstein, P. "Switching Costs, Price Sensitivity and Health Plan Choice," *Journal of Health Economics*, 21 (2002), 89-116.

[30] David M. Cutler and Richard J. Zeckhauser, "Adverse Selection in Health Insurance," National Bureau of Economic Research, working paper 6107, July 1997; and Paolo Belli, "How Adverse Selection Affects the Health Insurance Market," Harvard School of Public Health.

analyzed, as well as variations in the models used to estimate the price elasticity.[31] We selected the work of Strombom et al. because it allows us to show how the price response varies with age and health status.

6. Competitive Response by Insurers.

It is often argued that private health plans would become more efficient in order to be able to compete. While some of this is sure to occur, the expectation that private insurers could close the premium gap with enhanced cost containment is unrealistic in the context of how insurers control costs.

Insurer bargaining leverage is diminished under the program. Insurers typically negotiate "volume" discounts with providers. Thus the amore people a plan covers the more bargaining leverage it has in obtaining these discounts. Because millions of people move to the public plan, insurer bargaining leverage is diminished.

Consolidations across hospitals and physician groups have eliminated provider competition in some areas, thus reducing the plan's ability to leverage discounts. For example, a plan has little leverage in negotiating discounts if there are no other hospital systems in the area.

The effectiveness of provider networks is diminished by the program. Key to the effectiveness of networks is the plan's ability to channel patients to the providers who are participating in the plan's cost containment efforts. However, provider network formation is experienced by patients as restrictions on access. Increased reliance on these approaches would further alienate patients resulting in a greater shift to the public plan. Intensification of insurer utilization management practices would also further alienate patients and providers.

This discussion reveals other competitive advantages for the public plan. For example, it is difficult to imagine people enrolling in a plan with expanded managed care practices when the alternative is a public plan where people can see any doctor they want any time they want, all a lower premium. This is a huge competitive advantage to the public plan. Also, provides are unlikely to reduce their fees for private insurers if the plans are going to increase their use of utilization management practices that would further erode provider autonomy.

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[31] Royalty AB and Solomon N. 1999. "Health Plan Choice: Price Elasticities in a Managed Competition Setting," *The Journal of Human Resources*, 34(1): 1-41; Buchmueller TC and Feldstein PJ. 1996. "The Effect of Price on Switching Among Health Plans," 16(1997): 231-247. Cutler DM, Reber S. 1996. "Paying for Health Insurance. The Tradeoff between Competition and Adverse Selection," *NBER Working Paper #5796*.

Appendix B

Simulation of The American Affordable Health Choices Act of 2009

We estimated the cost and coverage impacts of The American Affordable Health Choices Act of 2009 using The Lewin Group Health Benefits Simulation Model (HBSM). To facilitate comparison of these proposals, we adopted a standard set of data and assumptions that were applied uniformly across the two plans. While it is difficult to predict the precise impact of these proposals, the use of a standard methodology assures that comparisons of results across plans reflect differences in program design rather than mere inconsistencies in assumptions.

The HBSM is a micro-simulation model of the US health care system. Central to its design is a "base case" scenario depicting the distribution of health insurance coverage, as well as expenditures across a representative sample of households in the US under current policy for a base year. We assumed the base year to be 2010. The resulting database provides a detailed accounting of coverage and spending in the US health care system for consumers, employers, state and local governments and the federal government.

We used the model to simulate the effect of the bill on the number of people with health insurance from public and private sources. We estimated changes in health care costs for major payers for health services including households, employers and governments. The impact of each proposal is determined by calculating the difference between coverage and health spending levels under each proposal and coverage and spending levels under current law (i.e., our baseline simulation). Estimates of employer effects are provided by firm size, industry, earnings levels and current insuring status. Changes in consumer spending are provided by income, age, current insured status and various demographic characteristics.

In this analysis, we projected the impact of each health reform proposal on health spending and the federal budget for the 2010 through 2019 period. In developing these projections, we used assumptions developed by the Office of the Actuary of CMS on the growth in Gross Domestic Product (GDP), population growth and the growth, in health spending by type of service and source of payment. A full documentation of HBSM and the data used is available upon request.

A. Population Data

Our baseline household data is based upon the Medical Expenditures Panel Survey (MEPS) data for 2002 through 2005, which are the most recent complete MEPS data now available. These data provide detailed information on health insurance coverage, health spending by type of service and source of payment, income and employment status and the demographic composition of the population. These data were adjusted to reflect more recent information on the distribution of the population by source of coverage, income, employment status and other socio-demographic characteristics provided in the Current Population Survey (CPS) for 2007.[32]

[32] Both the MEPS and the CPS data are corrected for under-reporting of Medicaid coverage, which is quite severe in the CPS. These databases provide comparable variable definitions that permit us to perform these necessary adjustments.

These data were then "aged" to be representative of the US population in 2006, which is the base year of the analysis. We used population growth projections from the Bureau of the Census and income growth assumptions consistent with those used by the Office of the Actuary of the Center for Medicare & Medicaid Services (CMS) in developing their health spending projections. We then adjusted the health spending data reported by households in the MEPS to replicate the distribution of total personal health expenditures by type of service and source of payment.

B. Simulation of Medicaid Eligibility and Enrollment

The bill includes an expansion in eligibility for the Medicaid and SCHIP programs. We simulated this using the CPS data for 2007. We used these data to identify people eligible for these programs under current law using the actual income eligibility levels used in each state under current law by class of eligibility (i.e., children, parents and childless adults). We then used the model to identify the number of people who would be eligible for coverage under the plan including parents and non-custodial adults living below 150 percent of the FPL.

The impact of these expansions will vary across states, due to the wide variation in income eligibility levels under the current Medicaid program. Although eligibility levels vary considerably across states, children are usually covered up to 200 percent of the FPL. Parents are eligible if their income is below levels averaging about 50 percent of the FPL. Noncustodial, nondisabled adults generally are not eligible at any income level, except in about 6 states that have been granted waivers to cover this population.

Once we identified the newly eligible population, we estimated the number of people who would enroll using multivariate analyses of historical enrollment levels under the existing program. These analyses show how enrollment varies with age, income, eligibility group and whether they have access to employer-sponsored insurance (ESI). The model also shows how enrollment levels are affected when participants are required to pay a premium, as is done in some states for people at the higher end of the eligibility scale.

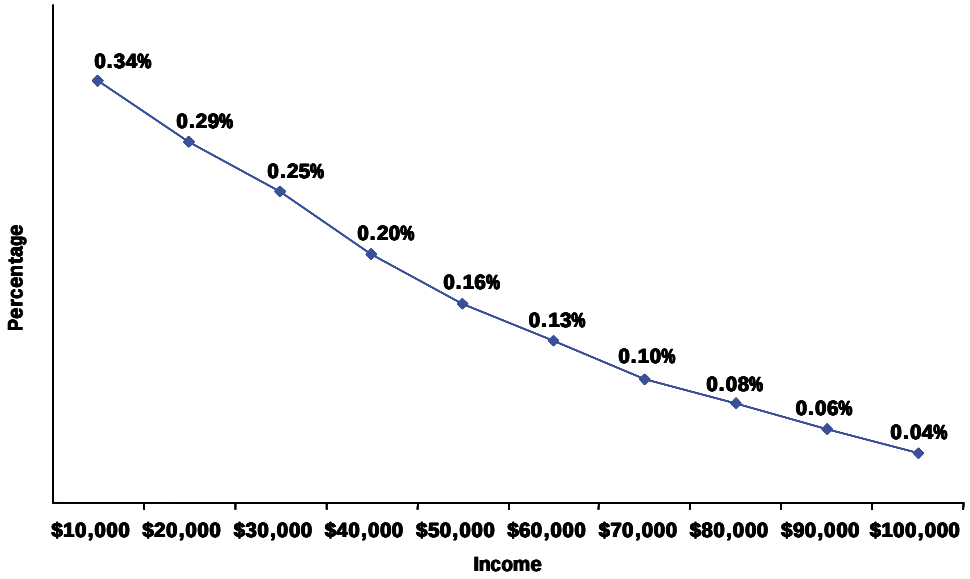
Our program cost estimates were estimated using the health spending data in HBSM for those who are simulated to become covered under the expansion. For newly insured people, we assumed that their utilization of health services would increase to the levels reported by insured people with similar age, gender, income and health status characteristics.

C. Premium Subsidies

The bill would provide subsidies to assist people in purchasing private insurance coverage. In our analysis, we assume that people treat these subsidies as a reduction in their cost of health insurance. We assume that these subsidies induce some of the uninsured to choose to purchase non-group coverage. We estimate the number of people who obtain insurance, based upon a multivariate analysis of how the likelihood of purchasing coverage increases as the cost of insurance, is reduced.

These data show that, on average, each 1 percent reduction in the price of insurance is associated with a 0.34 percent increase in the percentage of people purchasing coverage.[33] However, as shown in ***Figures B-1*** and ***B-2,*** these data indicate that the magnitude of the price response tends to decline at higher income and age levels. These price response factors are used as probabilities to select eligible people in the model to take coverage in response to the subsidies.

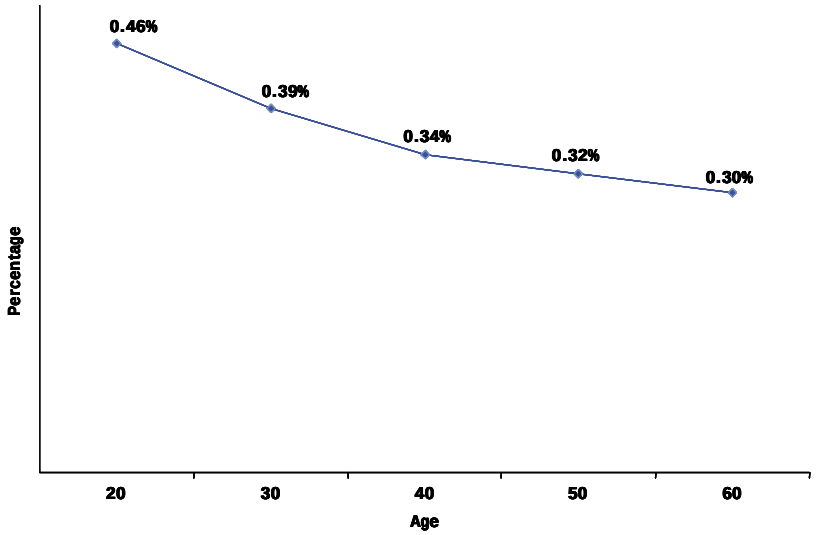
Figure B-1:
Percentage Increase in Coverage Resulting from a One Percent Reduction in Premiums by Income Level[a/]



a/ Indicates a price elasticity ranging between –0.55 to -0.09 by income.
Source: The Lewin Group estimates.

[33] Students of economics will recognize this as a price "elasticity."

Figure B-2:
Increase in Coverage Resulting from a One Percent Reduction in Premiums by Age[a/]



a/ Indicates a price elasticity ranging between –0.46 and –0.30 by age.
Source: The Lewin Group estimates.

Once changes in sources of coverage are modeled, HBSM simulates the amount of covered health spending for each affected individual based upon the health utilization and spending data reported for each individual selected to become covered. This includes simulating the increase in utilization among newly insured people. In general, we assume that utilization among newly insured people will increase to the level reported by insured people with similar characteristics. The benefit costs are estimated from these spending data based upon the covered services and cost-sharing provisions of a typical health plan, or the minimum benefits package that is specified under the legislation.[34]

D. Employer Impacts

The bill provides a tax credit to small employers for up to half of premium contributions and establishes a governmental reinsurance program that reduces the cost of employer health insurance. Both plans also include provisions designed to reduce health care costs (e.g., malpractice reforms, etc.) that would influence employers, decisions about offering coverage.

Modeling these effects requires a representative sample of employers with detailed information on the characteristics of each employer, together with information on the characteristics of each worker and dependent in the firm, including health spending information. Because no one database provides this combination of employer and employee data, we developed "synthetic firms" from the available data. We also developed a model of insurance markets that simulates

[34] For illustrative purposes we use the Blue Cross/Blue Shield "Basic" plan provided under the Federal Employees Health Benefits Program (FEHBP) to estimate benefit costs.

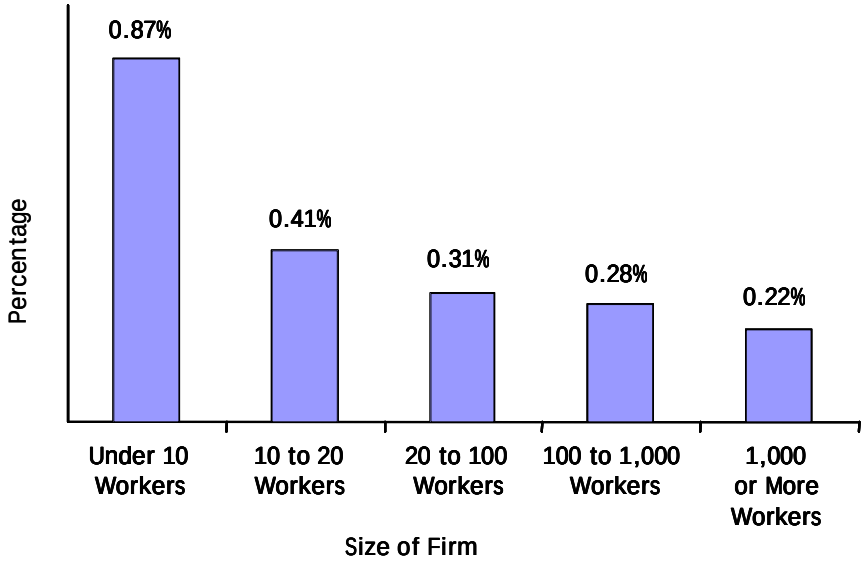
the process of rating health plans, based upon the insurance market rating laws in the 50 states and the District of Columbia.

Our approach was to match each working individual in MEPS to one of the firms in the 2006 Kaiser Family Foundation and the Health Research and Educational Trust (HRET) survey of 2,000 employers, including insuring and non-insuring firms. We statistically matched these plans with a sample of employers in the 1997 Robert Wood Johnson Foundation (RWJF) to provide data on workers characteristics. Workers were assigned to firms that are consistent with the demographic and income characteristics of the employer's workforce.[35] We then "populated" each firm that an individual is matched to by randomly assigning additional MEPS workers to the firm who match the firm's workforce characteristics. This provided complete employer units with all of the information required to simulate employer decisions.

The employer tax credit was modeled assuming that it will be treated by employers as a reduction in the price of insurance. We estimated the number of non-insuring firms that respond by offering coverage based upon a Lewin multivariate analysis of how the percentage of employers offering coverage changes as the price of insurance changes. As shown in ***Figure B-3***, for firms with 10 or fewer workers, a 1 percent reduction in premiums is associated with a 0.87 percent increase in the number of employers offering coverage. It also shows that the price response for employers declines rapidly as firm size increases, and that there is very little price response in the largest firm size groups.

[35] The Kaiser/HRET data provide information on the distribution of workers by wage level only. We statistically matched the Kaiser/HRET data with employers surveyed in the 1991 Health Insurance Association of America (HIAA) employer survey data, which provides detailed information on the characteristics of each employer's workforce including number of workers by part-time/full-time status, age, gender, medical policy type and the coverage/eligibility status of employees.

Figure B-3:
Percent Increase in Firms Offering Coverage With a One Percent Reduction in Premiums



Source: The Lewin Group estimates.

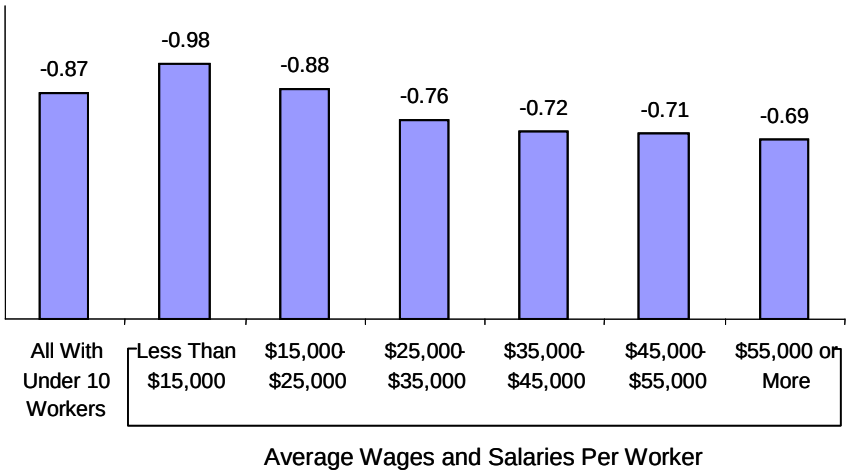
We also used these data to estimate the impact of the various elements of bill that would reduce employer health insurance premiums including the employer tax credit and the reduced premiums under the public plan. These features would generally reduce the cost of employer insurance. We simulated the impact of these changes in premiums on the number of employers offering insurance based upon the price response assumptions shown in ***Figure B-3***.

The model reflects variations in firm price elasticity depending upon the characteristics of the firm. For example, the model shows that the firm price elasticity tends to decline as age and income rise, as shown in ***Figures B-4*** and ***B-5***. This results in a lower estimated price elasticity among currently insuring firms -- averaging about -0.56 for firms with 10 or fewer workers -- because the employers that offer coverage tend to have older and more highly compensated workers.

In addition, we estimated multivariate models predicting the percentage of the premium paid by the worker using the RWJF employer data. These equations measure how premium shares vary with the characteristics of the firm, their workforce and the amount of the total premium. These amounts are used to estimate the cost of insurance for workers in each firm selected to offer coverage in response to the program.

Once firms are selected to offer coverage, we simulate enrollment among workers assigned to these plans. The enrollment decision is simulated with a multivariate model of the likelihood that eligible workers will take the coverage offered to them based upon

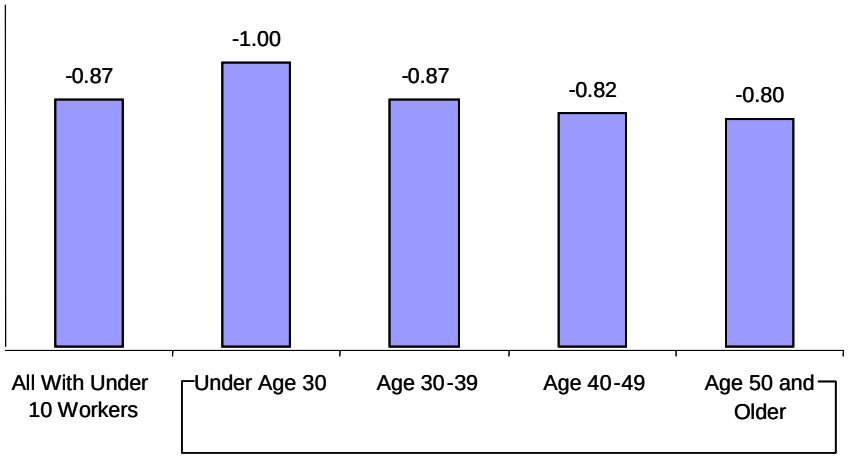
Figure B-4
Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers by Average Wages and Salaries per Worker [a/]



a/ Based upon multivariate analysis of the 1997 Robert Wood Johnson Foundation (RWJF) Survey of Employer Characteristics. "Health Benefits Simulation Model (HBSM)," The Lewin Group, August 2003.

Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Figure B-5
Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers



by Age of Workers [a/]

a/ Based upon multivariate analysis of the 1997 Robert Wood Johnson Foundation (RWJF) Survey of Employer Characteristics. "Health Benefits Simulation Model (HBSM)," The Lewin Group, August 2003.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

data reported in the 1996 MEPS data for people offered coverage through an employer. The model measures how take-up varies with the characteristics of the individual as well as the employee premium contribution required by the employer.

Finally, based upon a review of the economic literature, we assume that changes in employer costs resulting from these proposals would be passed on to workers in the form of changes in wage growth over time. For example, policies that reduce employer costs would result in a corresponding increase in wages for affected workers. Similarly, increases in employer health benefits costs are assumed to be passed on to workers as wage increases.[36] HBSM also simulates the impact of these changes in wages upon federal and state tax revenues.

E. Simulating Effects for Individuals and Self-employed

We simulate the individual's decision to enroll in the public plan by estimating the premium that these individuals would pay in the current private market for the benefits offered in the public pool. The public plan could increase coverage if it provides coverage to uninsured people at a lower cost than in the current market. This can also result in shifts in coverage from existing sources to the public plan.

1. Simulating Changes in Number with Coverage

We begin by estimating the program's effect on the number of people with coverage. We first identify uninsured people who would now be able to purchase coverage at a lower price than they would pay in the individual market under current law. We interpret this as a reduction in premiums that will cause some people to take coverage. We simulate their decision to take that coverage using research on how changes in premiums affect the likelihood of taking coverage. We assume that newly insured people will enroll in whichever coverage option is least costly.

In the next step, we identify currently insured people who would now face a higher premium. This would occur in cases where the availability of the public plan is coupled with changes in insurer rating regulations affecting the premiums in both the private market and the public plan. For example, the Obama proposal would prohibit medical underwriting, which will generally increase premiums for relatively healthy individuals now covered in the individual market. We also simulate losses of coverage for these people using the same research on how price affects the individual's decision to take coverage.

2. Allocation to Public and Private Coverage

In this step, we identify privately insured people who would be eligible to purchase coverage at a lower cost through the public plan. We then simulate their decision to shift to the public plan based upon studies of how people respond to changes in the relative price of insurance within

[36] Marginal tax rates are imputed to the MEPS household data based upon the tax rate data collected in the CPS data.

employer groups offering a choice of health plans.[37] We simulate these shifts in a two step process that allocates affected people into one of the following three groups:

- People who remain with their current private health plan rather than shifting to the public plan;
- People who drop private coverage to enroll in the public plan due to the lower premiums; and
- People who leave the public plan to enroll in a lower cost HMO.

In the first step, we model the shift of privately insured individuals to the lower cost public plan. We do this using "plan change price elasticity" estimates developed by Strombom et al., which averages about -2.47. This means that on average, a 1.0 percent decrease in the price of an alternative source of coverage is associated with a 2.47 percent migration of enrollees to the lower cost health plan. As shown in ***Figure B-6***, the likelihood of shifting to a lower cost plan is lowest for older and sicker people, reflecting that these groups are typically less willing to change providers. Individuals were randomly selected to shift to an HMO based upon these price changes and these price elasticity estimates.[38]

Figure B-6
Health Plan Change Price Elasticity Assumptions by Age and Health Risk

	All Insured Groups		HMOs Only	
	Low Risk	High Risk a/	Low Risk	High Risk a/
Under 31	-5.8	-5.3	-7.0	-8.0
31 – 45	-3.9	-3.6	-5.9	-6.4
Over 45	-2.4	-2.1	-4.3	-4.5

a/ The study defines high risk people as those who have selected illness or hospitalizations. In our model, as a proxy for this definition, we assumed that people with expected spending in excess of the 80th percentile of spending are "high risk".
Source: Strombom, B., Buchmueller, T.,Feldstein, P. "Switching Costs, Price Sensitivity and Health Plan Choice," *Journal of Health Economics* 21 (2002) 89-116.

These estimates are consistent with other studies showing that people leaving fee-for-service (FFS) health plans for HMOs and other managed care plans tend to have lower costs than those who remain with these FFS plans. Similarly, people who leave HMOs for a FFS plan tend to have higher costs than those who remain with the HMO.[39]

In the second step we model risk selection against the public plan. Some managed care plans would develop products that tend to attract younger and healthier people through benefits

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[37] Strombom, B., Buchmueller, T., Feldstein, P. "Switching Costs, Price Sensitivity and Health Plan Choice," *Journal of Health Economics*, 21 (2002), 89-116.

[38] Newly insured people were randomly assigned to HMOs based upon the percentage of privately insured people who are in HMOs after we have executed our simulation for currently insured people.

[39] David M. Cutler and Richard J. Zeckhauser, "Adverse Selection in Health Insurance," National Bureau of Economic Research, working paper 6107, July 1997; and Paolo Belli, "How Adverse Selection Affects the Health Insurance Market," Harvard School of Public Health.

design or marketing practice. This will tend to leave the public plan with higher cost individuals. We simulate this by assuming that private HMOs are able to offer a product that is four percent less costly than the premium for the public plan. This assumption is based upon research showing that utilization of health services in HMOs is about four percent less than in PPO and other FFS plans.

We simulate the shift of individuals from the public plan to these HMOs using the plan change price elasticity estimates presented above in ***Figure B-6***. This approach tends to leave higher cost individuals in the public plan, with lower cost individuals shifting to HMOs.

F. Simulating Effects for Employers

Under the public plan scenarios presented above, some or all employers would have the option of covering their workers under the public plan by paying a premium. In some cases, non-insuring employers would start to offer coverage in response to the lower premium available in the public plan. Also, many currently insuring employers will shift to the public plan to take advantage of the lower public plan premium. The approach we use to simulate the impact of the public plan on employer coverage is similar to that used to simulate coverage decisions in the individual market.

1. Simulate Changes in the Number of Employers Offering Coverage

We first identify non-insuring employers who would now be able to purchase coverage at a lower price than they would pay in the current insurance market. We simulate their decision to take that coverage due to the price reduction using studies of how changes in premiums affect the likelihood that a firm will offer coverage. We assume that newly insured people will enroll in whichever coverage option is least costly.

In the next step, we identify firms that would now face a higher premium. Under the Obama-like health reform proposal modeled here, the elimination of medical underwriting would increase premiums for younger and healthier groups while reducing premiums for older and sicker groups. We simulate losses of coverage for these people using the studies of the effect of changes in premiums on the firm decision to offer insurance.

2. Re-allocation to Public Plan

In this stage, we identify privately insured firms that would be eligible to purchase coverage at a lower cost through the public plan. We simulate these shifts in a two step process that allocates affected people into one of the following three groups:

- Employers that remain with their current private health plan rather than shifting to the public plan. (These will tend to include employers with older and less healthy workers who decide not to change their source of coverage, perhaps to retain their current physician);
- Employers that drop private coverage to enroll in the public plan due to the lower premium; and
- Employers that leave the public plan to enroll in a lower cost HMO.

In the first step, we simulate the employer decision to switch to the lower cost public plan based upon the plan change price elasticity estimates used in our individual market simulations (see ***Figure B-6*** above). We do this by estimating the plan change price elasticity for each worker in the firm based upon the age and health status of each worker. We then use this average price change elasticity for workers in each firm to simulate the employer decision to change their source of coverage.

In the second step we model risk selection against the public plan. We assume that managed care plans would develop products that tend to attract younger and healthier people through benefits design or marketing practice. This will tend to leave the public plan with higher cost individuals. We simulate this by assuming that private HMOs are able to offer a product that is four percent less costly than the premium for the public plan. This assumption is based upon research showing that utilization of health services in HMOs is about four percent less than in PPO and other FFS plans. We simulate the shift of individuals from the public plan to these HMOs using the plan change price elasticity estimates presented above.

This approach tends to leave higher cost individuals in the public plan, with lower cost individuals shifting to HMOs. This accumulation of a disproportionate share of higher cost individuals in a given plan is called "adverse selection."