



The LEWIN GROUP

Estimates of the Cost and Coverage Impacts of Proposals to Expand Health Insurance Coverage in New York

Final Report

Prepared For:

**The United Hospital Fund and
The Commonwealth Fund**

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Appendix B

DOCUMENTATION OF THE NEW YORK VERSION OF THE HEALTH BENEFITS SIMULATION MODEL (HBSM)

The Health Benefits Simulation Model (HBSM) is a micro-simulation model of the U.S. health care system developed by The Lewin Group. For this study we adapted HBSM for use in modeling the New York health care system. The model is designed to simulate the impact of a wide range of universal coverage proposals such as single-payer plans and employer mandates. HBSM is also designed to simulate more narrowly designed proposals such as Medicaid/SCHIP eligibility expansions for children or changes in the tax treatment of employer provided health benefits.

The key to the model is a database of households that is representative of the New York population in 2006 under current law, which we refer to as the “baseline” data. This involves bringing together data from several sources to form a single database that replicate key known information on New York’s population and health system such as population demographics, income levels, employment status, sources of health insurance and health spending levels by type of service and source of payment.

In this Documentation, we describe HBSM and explain how it has been adapted to provide analyses of the cost and coverage impacts of Universal Coverage options in New York.¹⁷ In particular we explain how we developed our estimates of health spending, and our estimates of the amount attributed to the uninsured in New York. The data and methods used for this analysis are presented in the following sections:

- Simulating the impact of coverage expansion proposals;
- Household data;
- Employer database;
- Health expenditures in New York; and
- Simulating Coverage impacts of proposals.

A. Simulating the Impact of Coverage Expansion Proposals

HBSM was created to provide comparisons of the impact of alternative health reform models on coverage and expenditures for employers, governments and households. The key to its design is a “baseline” scenario depicting the distribution of health services utilization and expenditures across a representative sample of households under current policy for a base-year such as 2006. In this analysis, the baseline scenario is based on recent Bureau of the Census data for

¹⁷ A detailed documentation of the methods used to simulate the impact of major health reform proposals is presented in “The Health Benefits Simulation Model (HBSM): Uniform Methodology and Assumptions”, (report to the Robert Wood Johnson Foundation (RWJF)), October, 2002.

households in New York.¹⁸ We also “aged” these data to be representative of the population in New York in 2006 based upon recent economic, demographic and health expenditure trends. The resulting database provides detailed accounting of the New York health care system. This baseline data serves as the reference point for our simulations of alternative health reform proposals, such as the coverage expansions options in this analysis.

We estimate the impact of health reform initiatives using a series of methodologies that apply uniformly in all policy simulations. The model first simulates how these proposals would affect sources of coverage, health services utilization and health expenditures by source of payment (*Figure B-1*). Mandatory coverage programs such as employer mandates or single-payer models can be simulated based upon the detailed employment and coverage data recorded in the database. The model also simulates enrollment in voluntary programs such as tax credits for employers and employees, based upon multivariate models of how coverage for these groups varies with the cost of insurance (i.e., modeled as the premium minus the tax credit). In addition, the model simulates enrollment in New York’s Medical Assistance programs including Medicaid, Family Health Plus (FHP), Child Health Plus A (CHP-A), and Child Health Plus-B based upon a multivariate analysis of take-up rates under these programs, including a simulation of coverage substitution (i.e., “crowd out”).

HBSM is designed to facilitate comparisons of alternative health reform initiatives using uniform data and assumptions. For example, take-up rates for Medicaid and various tax credit/premium voucher policies are simulated using uniform take-up equations and modules.

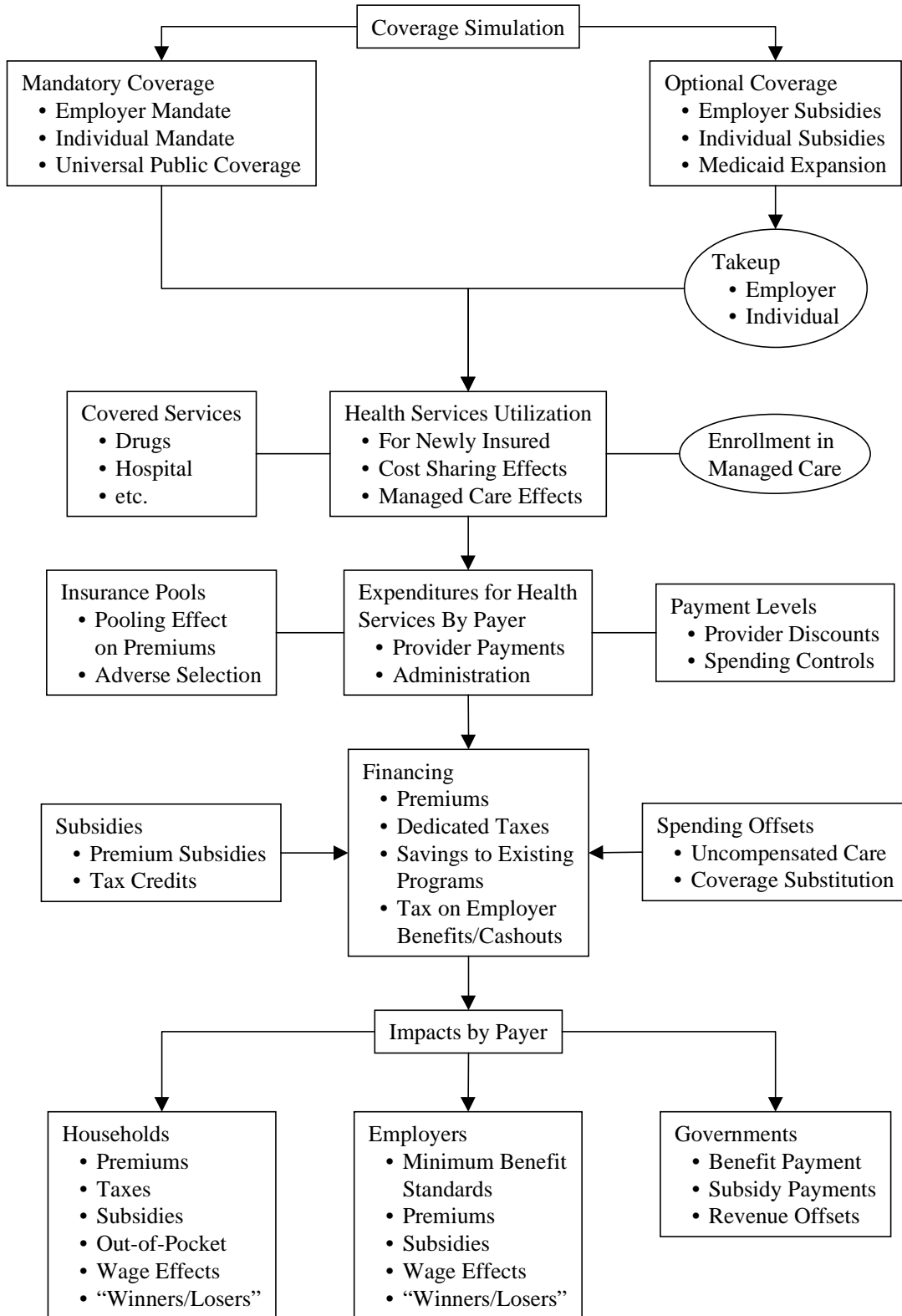
Uniform methods are also used to simulate changes in health services utilization attributed to changes in coverage status and cost-sharing parameters. The model also uses a series of uniform figures (charts and graphs) for reporting the impacts of these policies on households, employers and governments. This uniform approach assures that we can develop estimates of program impacts for very different policies using consistent assumptions and reporting formats. The use of uniform processes also enables us to simulate the impact of substantially different policy options in a short period of time.

The model simulates any “adverse selection” resulting from the design of these policy options. Adverse selection is the disproportionate accumulation of higher cost cases in a given insurance pool. Often, policies that give employers or consumers a choice between different types of coverage models create financial incentives that affect their choice of coverage. For example, there have been several proposals at state and national levels that would give employers the option of purchasing coverage under the Federal Employees Health Benefits Program (FEHBP) or a state worker health benefits plan at a community-rate. This would tend to attract employers with high health care costs who find that the FEHBP community-rated premium is less than the cost of an experience-rated plan for that group in the private market. HBSM simulates these incentives and estimates the cost impacts of these selection effects.

¹⁸ Detailed statistics on health insurance coverage in New York is presented in “Health Insurance Coverage in New York: Trends From 2001 to 2004” (published by the New York Department of Health based on a survey funded by a grant from the Blue Cross Blue Shield of New York Foundation, a State Planning Grant from the Health Resources and Services Administration of the US DHHS, and the New York Department of Human Services), February 2006.

Once changes in sources of coverage are modeled, HBSM simulates the amount of covered health spending for each affected individual, given the covered services and cost-sharing provisions of the health plan provided under the proposal. This includes simulating the increase in utilization among newly insured people and changes in utilization resulting from the cost-sharing provisions of the plan. In general, we assume that utilization among newly insured people will increase to the level reported by insured people with similar characteristics. We also simulate the impact of changes in cost-sharing provisions on health services utilization such as co-payments and deductibles.

Figure B-1
Flow Diagram of the Health Benefits Simulation Model (HBSM)



In this analysis, HBSM is based upon a representative sample of households in New York, which include information on the economic and demographic characteristics of these individuals as well as their health services utilization and expenditures. These data are based primarily upon data from the New York Health Access Survey, which we obtained from the New York Department of Health, together with the Medical Expenditures Panel Surveys (MEPS) of households for 1999 through 2001 and the New York sub-sample of the March Current Population Survey (CPS). We adjusted these data to show the amount of health spending in the state by type of service and source of payment as estimated by the Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS), the Governor’s Budget, New York Department of Health (MDH) and the New York Department of Human Services (DHS). The methods used to develop these baseline data are discussed in the following sections.

Changes in employer costs are assumed to be passed on to workers in the form of changes in wage growth over-time. For example, policies that increase employer costs would result in a corresponding reduction in wages for affected workers, and a corresponding reduction in income and payroll tax revenues. Similarly, reductions in employer costs are assumed to be passed-on to workers as wage increases. We assume that this occurs for all workers including unionized and non-unionized labor. HBSM includes a tax module that simulates tax effects due to these changes in wages.

B. Household Data for New York

The HBSM baseline data for New York is derived from a sample of households that is representative of the economic, demographic and health coverage characteristics of the state’s population. Unfortunately, there is no one database that provides all of this information for a representative sample of the New York population. Consequently, we developed a “synthetic” representation of the distribution of the New York population based upon the various available data sources.

The data is based upon the 1999 – 2001 Medical Expenditures Survey (MEPS) data, which we adjusted to reflect Bureau of the Census data on the socio-economic and health status characteristics of the New York population. We statistically match workers in the household data with a representative sample of employers that includes information on both employer characteristics and the socio-economic and health spending data characteristics of each of the workers in these firms.

In this section, we present the data and methods used to develop the data used as the basis of our New York analysis.

1. Population Data

HBSM uses the 1999 through 2001 MEPS data to provide the underlying distribution of health care utilization and expenditures across individuals by age, sex, income, source of coverage, and employment status. We re-weighted this database to reflect population control totals for the

New York population reported in the New York sub-sample of the CPS for 2005.¹⁹ These weight adjustments were done with an iterative proportional-fitting model, which adjusts the data to match approximately 108 separate classifications of individuals by socioeconomic status, sources of coverage, and job characteristics in the New York CPS sub-sample (*Figure B-1*). Iterative proportional fitting is a process where the sample weights for each individual in the sample are repeatedly adjusted in a stepwise fashion until the database simultaneously replicates the actual distribution of people across each of these variables in the state.²⁰

This approach permits us to simultaneously replicate the distribution of people across a large number of variables while preserving the underlying distribution of people by level of healthcare utilization and expenditures as reported in MEPS. These data can be further tuned through the re-weighting process to reflect health service utilization levels (e.g., hospitalizations) in the state. This approach implicitly assumes that the distribution of utilization and expenditures within the population groups in the re-weighting processes are the same as reported in the nationwide MEPS data.

We also “aged” the health expenditure data reported in the New York MEPS database to reflect changes in the characteristics of the population through 2006. These data are adjusted to reflect projections of health spending by type of service and source of payment in New York for the base-year (i.e., 2006). These spending estimates are based upon health spending data for New York collected by the Center for Medicare and Medicaid Services (CMS), which we project to 2006 based upon health spending trend data also provided by CMS. The result is a database that is representative of the base-year population by economic and demographic group, which also provides extensive information on the joint distribution of health expenditures and utilization across population groups.²¹

In addition, we “enhanced” the New York MEPS data to provide the information required to simulate the impact of changes in taxes associated with changes in employer health spending under expansions in coverage. For example, we used the HBSM tax module to estimate income and payroll tax payments for each tax filing unit (i.e., single, head of household and joint filers) to provide the information required to simulate the impact of changes in earnings as employers pass-through the changes in employer health benefits costs to workers under the proposal.²² This includes the filing unit’s federal and state marginal tax rates and the tax expenditures attributed to the employer health benefits tax exclusion.

¹⁹ The 2005 CPS includes a much expanded sample designed improve the reliability of estimates derived from these data.

²⁰ The process used is similar to that used by the Bureau of the Census to establish final family weights in the March CPS.

²¹ Some modelers have imputed health data to the CPS from the MEPS data, rather than aging the MEPS. However, it is extremely difficult to replicate the distribution of health care utilization and expenditures in the CPS with the available imputation methodologies. We feel that it is substantially less difficult to age the MEPS data than it is to impute complex joint distributions of health utilization and spending to the CPS.

²² The imputed tax rates are cross-checked against the distribution of marginal tax rates for insured and uninsured families as reported in the March CPS.

Figure B-2
Population and Coverage Estimates Used in New York for 2004 (thousands)^{a/}

Age and Sex		Race/Ethnicity	
Male <10	1,244	White	11,983
Male 10-19	1,387	Black	2,949
Male 20-29	1,320	Hispanic	2,922
Male 30-39	1,316	Other	1,225
Male 40-49	1,463	Total	19,081
Male 50-59	1,074	Hourly Wage	
Male 60-69	704	Less than \$7	1,171
Male 70-79	467	\$7-\$10	1,111
Male 80+	0	\$10-\$15	1,893
Female <10	1,157	\$15-\$20	1,443
Female 10-19	1,346	\$20 and over	3,771
Female 20-29	1,273	Non-worker	9,690
Female 30-39	1,448	Total	19,081
Female 40-49	1,517	Worker Coverage Status	
Female 50-59	1,242	Non-worker	9,690
Female 60-69	810	Covered on Own Job	5,324
Female 70-79	641	Spousal Coverage	1,527
Female 80+	0	No Employer Coverage	2,538
Total	19,081	Total	19,081
Insurance Category		Industry	
Medicare/Other	1,043	Non-worker	9,690
Medicare+Retiree	686	Construction	469
Medicare+Medicaid	519	Manufacturing	843
Medicare/Non-group	429	Transportation	326
TriCare/Military	147	Wholesale Trade	240
Medicaid Only	4,604	Retail Trade	929
Employer/Worker	4,948	Services	3,699
Employer/Dependent	4,050	Finance	704
Retiree	182	Federal Government	197
Non-group	438	State Government	351
Uninsured	2,029	Local Government	1,010
Total	19,081	Self-Employed	582
		Other	33
		Total	19,081

a/ Includes correction for underreporting of Medicaid coverage in the Current Population Survey (CPS).
Source: Lewin Group analysis of the New York sub-sample of the March 2004 CPS data.

Figure B-2
Population and Coverage Estimates Used in New York for 2004 (thousands)

Family Income		Covered by Firm Size		
Less than \$10,000	1,771	Non-worker	9,690	
\$10,000-\$14,999	1,063	Covered 1-9	665	
\$15,000-\$19,999	938	Covered 10-24	377	
\$20,000-\$29,999	1,988	Covered 25-99	620	
\$30,000-\$39,999	1,765	Covered 100-499	696	
\$40,000-\$49,999	1,534	Covered 500-999	290	
\$50,000-\$74,999	3,195	Covered 1,000+	1,485	
\$75,000-\$99,999	2,497	Covered Government	1,189	
\$100,000-\$149,999	2,607	Not Covered 1-9	1,323	
\$150,000 and over	1,718	Not Covered 10-24	526	
Total	19,081	Not Covered 25-99	515	
Marital Status		Not Covered 100-499	432	
Married	7,430	Not Covered 500-999	147	
Divorced	1,172	Not Covered 1,000+	749	
Widowed	1,038	Not Covered Government	371	
Other	9,440	Total	19,081	
Total	19,081	Full-Time/Part-Time		
Income as a Percent of Poverty Level		Non-Worker	9,690	
Under FPL	2,667	Under 65 FT/FY	6,465	
100%-149% of FPL	1,538	Under 65 PT/FY	826	
150%-199% of FPL	1,638	Under 65 FT/PY	1,072	
200%-249% of FPL	1,498	Under 65 PT/PY	635	
250%-299% of FPL	1,541	65 and Over FT/FY	178	
300%-399% of FPL	2,472	65 and Over PT/FY	85	
400% + of FPL	7,724	65 and Over FT/PY	37	
Total	19,081	65 and Over PT/PY	88	
Workers in Family		Total	19,081	
1 Worker	8,655			
2 or More Workers	6,254			
Other	4,171			
Total	19,081			
Northeast				19,081
Midwest				0
South				0
West				0
Total				19,081

a/ Includes correction for underreporting of Medicaid coverage in the Current Population Survey (CPS).
Source: Lewin Group analysis of the New York sub-sample of the March 2004 CPS data.

2. Coverage Data

Our estimates are based on the 2005 New York sub-sample of the Current Population Survey data. We adjusted these data to correct for under-reporting of Medicaid coverage based upon program enrollment data obtained from the Department of Health.^{23,24} Our estimates of the characteristics of the uninsured in New York are summarized below:

- *Figure B-3* presents our estimates of the distribution of New York residents by source of health insurance coverage. Employer-sponsored coverage for workers and their dependents, and retirees is the largest source of coverage in New York.
- *Figure B-4* shows the number and percent of the uninsured population by family income based on our analysis of the CPS data;
- *Figure B-5* presents insurance coverage by age in New York from our analysis. Individuals between the ages of 19 and 44 years are the group with the highest uninsured rate.

Figure B-3
Sources of coverage for New York Residents in 2006
(thousands)

	Number of People ^{b/}
Total Population	19,081
Uninsured	2,804
Medicare	2,677
Medicaid – Average Monthly (Enrolled sometime in year: 5,235)	4,551
Employer Coverage	9,923
Workers	4,718
Dependents	4,294
Medicare Retirees	686
Non-Medicare Retirees	225
Non-Group Coverage	965
Medicare Supplemental	429
Individual Coverage	536
TriCare/Military	483
TriCare Only	144
With Supplemental Coverage	339

a/ Excludes the institutionalized population.

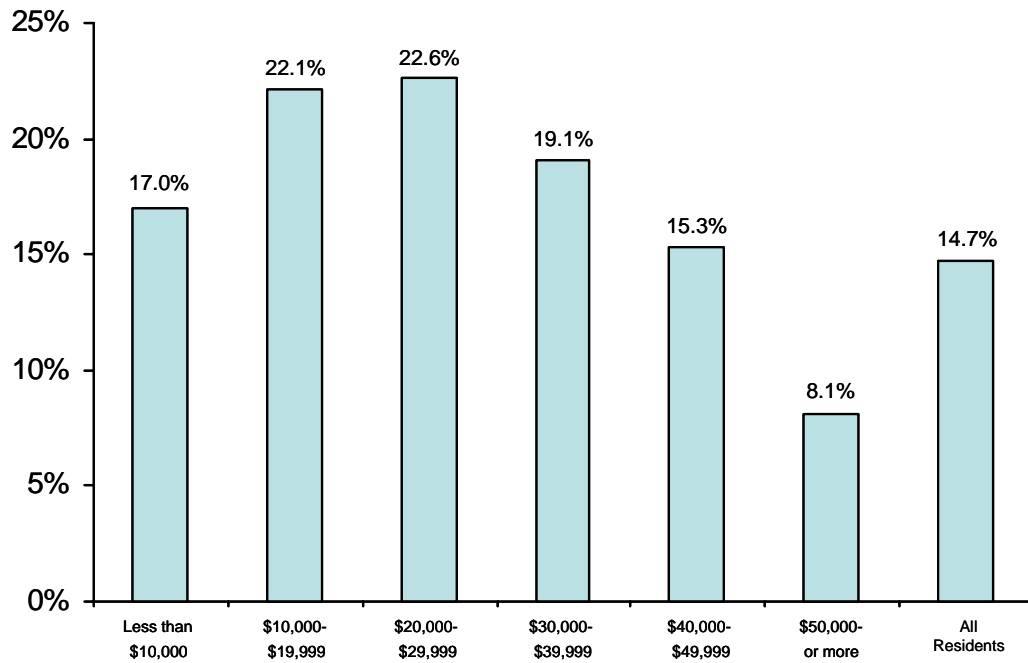
b/ Includes people with each source of coverage sometime in years. Numbers do not sum to total due to overlapping coverage.

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

²³ The Current Population Survey under-reports for Medicaid coverage, therefore, we make adjustments to match program totals.

²⁴ New York Household Insurance Survey Findings 2003-2004, Center for Applied Research and Evaluation, The University of New York. (Survey funded by the 2003 HRSA State Planning Grant).

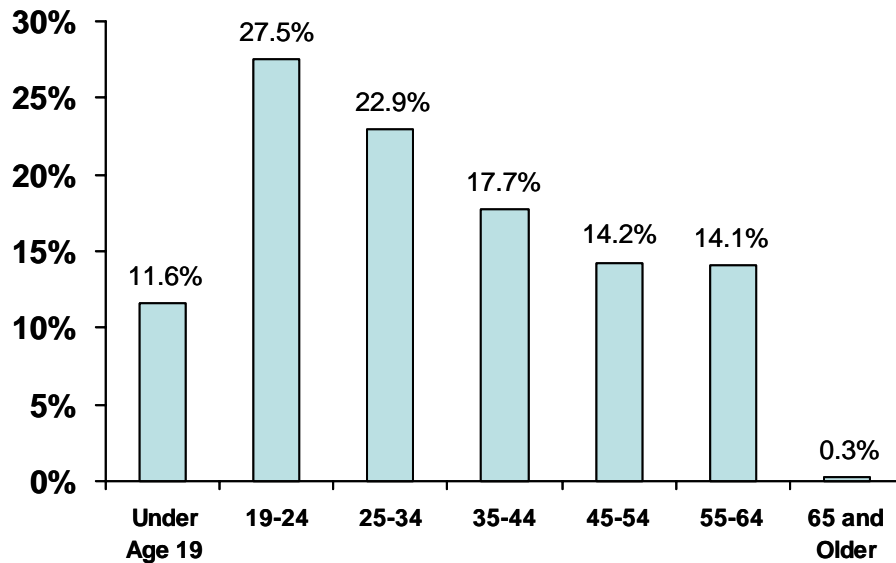
Figure B-4
Percentage of New York Residents without Health Insurance by Family Income



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

Figure B-5
Percentage of New York Residents without Health Insurance by Age



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

3. Families by Income Level in 2006

The HBSM was used to age the household and employer data to reflect projected growth in earnings and income from other sources. This was done in a two step process. The first step simulates the widening gap in income between the highest and lowest income groups in the U.S. In the second step, we adjusted total income by source to match data available for the 2004 distributions in the New York sub-sample of the 2005 CP S data and various other federal agencies. *Figure B-6* presents our projected distribution of New York Residents by family income.

In the first step, income for individuals in the MEPS data is increased by the average change in total family income for people by decile ranking of the population between 1999 and 2004, as reported in the 2000 and 2004 CPS data. Thus, incomes for the lowest income decile of the population in the 1999-2004 MEPS data are increased by the change in average income levels for the lowest income decile of the population between 1999 and 2005. Total income for people in other decile groups are adjusted in the same way. This approach is intended to improve upon the practice of simply increasing income for all people in the data by a uniform percentage that does not reflect the uneven rates of growth in personal income across various income strata. In the second step, income from various sources is adjusted to reflect growth in wages and benefits level under public income assistance programs.

In addition, we “enhanced” the New York MEPS data to provide the information required to simulate the impact of changes in taxes associated with changes in employer health spending under expansions in coverage. For example, we used the HBSM tax module to estimate income and payroll tax payments for each tax filing unit (i.e., single, head of household and joint filers) to provide the information required to simulate the impact of changes in earnings as employers pass-through the changes in employer health benefits costs to workers under the proposal.²⁵ This includes the filing unit’s federal and state marginal tax rates and the tax expenditures attributed to the employer health benefits tax exclusion.

Figure B-6
2006 Estimated Number of Households by Income Used in the New York Model
(thousands)

Family Income	Number of People
Under \$10,000	3,021
\$10,000 - \$19,999	2,650
\$20,000 - \$29,999	2,154
\$30,000 - \$39,999	1,872
\$40,000 - \$49,999	1,317
\$50,000 - \$74,999	8,073
Total	19,087

Source: The Health Benefits Simulation Model (HBSM)..

²⁵ The imputed tax rates are cross-checked against the distribution of marginal tax rates for insured and uninsured families as reported in the March CPS.

C. Employer Database

The model includes a database of employers for use in simulating policies that affect employer decisions to offer health insurance. In this project, we used the annual survey of employers conducted by the Kaiser Family Foundation, Health Research and Educational Trust Fund (KFF/HRET) for 1999 through 2004. These surveys include about 2,000 randomly selected public and private employers with three or more workers in the state. They provide information on health plans offered by employers including premiums and other health plan characteristics. In this analysis, we adjusted these data to reflect the distribution of workers in New York by firm size, industry and wage level.

Working individuals in the New York MEPS data are randomly assigned to KFF/HRET employers who report similar workforce and demographic characteristics. Individuals and firms are matched on the basis of reported industry, firm size and other characteristics of an employer's workforce. In addition, we controlled for the income and demographic characteristics of each employer's workforce when matching individuals to employers.²⁶ Thus, if a firm reports that they employ mostly low-wage female workers, the firm generally would be matched to low-wage female workers in the household data. Thus, HRET firms are matched to workers with health expenditure patterns that are generally consistent with the premiums reported by the firm. This feature is crucial to simulating the effects of employer coverage decisions that impact the health spending profiles of workers that would enroll in various "insurance pools."

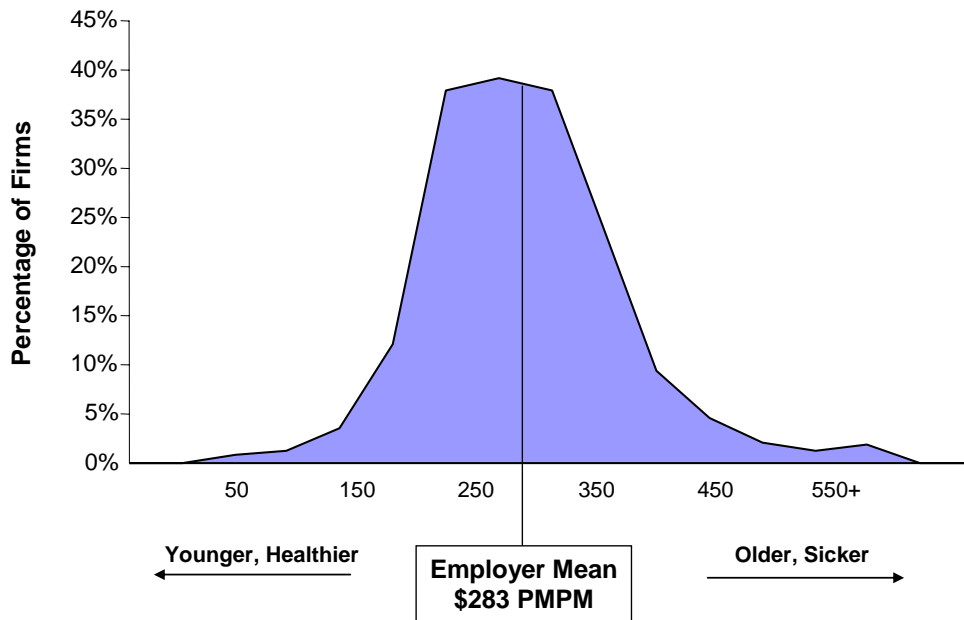
Using these data, we create a database of "synthetic" firms suitable for analyzing policies that affect the relative benefits of employer versus other types of coverage. As discussed above, each worker is assigned to one of the firms in the employer database. The model then "populate" each of these firms with other MEPS workers in the database whose characteristics are consistent with the reported characteristics of the workforce in each firm (i.e., age, gender, part-time/full-time status, single/family coverage, eligibility for coverage and eligible workers who have declined coverage). The resulting firms enable us to simulate how expanding the availability of subsidized coverage would affect the employers' likelihood of offering coverage

The model simulates health insurance premiums for each synthetic firm based upon the rating rules used in each state and reported health expenditures for workers and dependents assigned to each firm. Premiums are estimated for each firm based upon the rating rules that apply in the firm's state of residence. This includes the use of age rating and rating bands in the small group market where applicable, experience rating for larger firms and costs for self-funded plans. This simulation of the premiums employers face in the marketplace is crucial to analyses of proposals that would modify rating practices, or offer coverage alternatives such as small employer pools using their own rating methods.

²⁶ The KFF/HRET data contains only some of this information. To use these data in our analysis, we statistically matched the KFF/HRET data with employers surveyed in the 1994 Health Insurance Association of America (HIAA) which is the most recent employer survey to provide detailed information on the characteristics of their workforce. We controlled for worker wage levels, industry, firm size and other characteristics reported in the KFF/HRET data.

Figure B-7 presents the distribution of employers in HBSM by average benefits costs per-member per-month (PMPM) under a standard benefits package. We estimate average premiums of about \$283 PMPM in 2006, which includes benefits and administrative costs for employer health plans over the number of covered workers and dependents. There is wide variability in health plan costs due to differences in administrative costs, claims experience, health status rating and variations in rating practices across states.

Figure B-7
All Insuring Employers by Premium Cost PMPM in 2006:
Includes Benefits and Administration ^{a/}

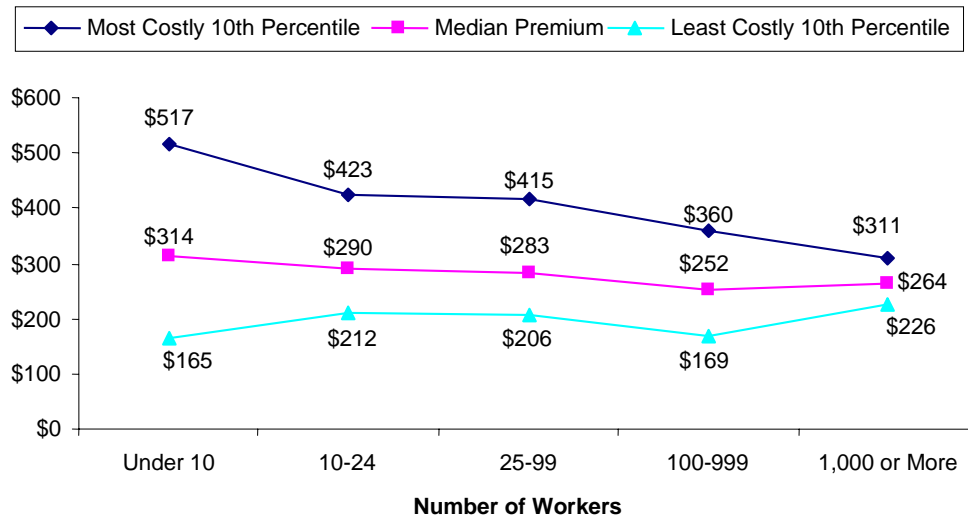


a/ Estimates for a standard benefits package.

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

Figure B-8 illustrates that the variability in PMPM premium costs varies widely across employers by size of group. For example, among firms with fewer than 10 workers, PMPM premiums range from about \$517 for firms in the 10 percent most costly firms compared with average costs of \$165 for firms in the 10 percent least costly firms. By comparison, PMPM premiums in firms with 1,000 or more workers vary from \$311 for the 10 percent most costly groups to \$226 for the least costly 10 percent of firms.

Figure B-8
Estimated Average Health Insurance Costs (PMPM) for the Most Costly and Least Costly
10 Percent of Employer Groups in 2006:
Includes Benefits and Administration ^{a/}



a/ Estimates for a standard benefits package.

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

D. Health Expenditures in New York

Once the New York MEPS data were re-weighted for population and coverage, we adjusted the health spending data in the file to match the aggregate level of health spending by type of service and source of payment in the state. The Lewin Group developed estimates of coverage and health expenditures in New York for 2006, under current policy. This includes current law spending by state and local governments, employers, households and the federal government.

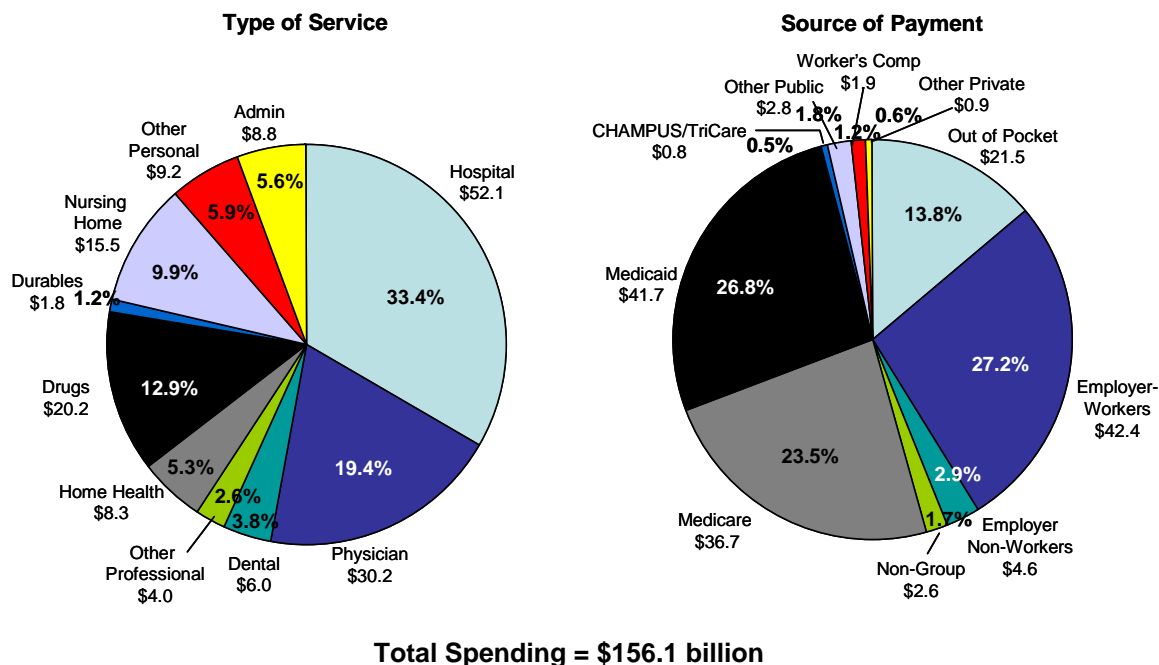
In addition, the CMS Office of the Actuary (OACT) has developed estimates of total health spending by type of service for each state between 1980 and 2004, and provides separate information on state health spending for Medicare and Medicaid by type of service through 2004. We used the CMS OACT data published in May 2006 which shows health spending by type of service in New York in 2004 to derive estimates of program spending for each service type. Estimates of private health spending were developed using the CMS health spending data in conjunction with the MEPS survey of employers and household survey data on health care utilization.

Unfortunately, the CMS data is limited in detail. It provides spending data for only three categories including Medicare, Medicaid and all other. This required us to collect data on spending by employers and other public and private sources of payment. Thus, it was necessary to piece together estimates of health spending by source of payment and type of service from the data that were available. We used data from the governor’s budget, the department of health and other sources.

The process of estimating current state health expenditures also required converting some of the health spending data from these various sources to be comparable to the total health spending data reported by CMS for New York. This included: converting government program spending from government-fiscal-year to calendar-year dollars; projecting CMS health spending estimates to 2006; eliminating all double counting of expenditures for public programs; and adjusting the government program data to exclude non-health items that are included in national health spending estimates.

Figure B-9 presents our estimates of spending by type of service and source of coverage in New York. Total health spending in New York for 2006 is \$156.1 billion, which includes insurer and program administration.

Figure B-9
Projected Spending in New York by Type of Service and Source of Coverage in 2006^{a/}



a/ We estimate that there is about \$1.3 million in free or uncompensated charity care which is embedded in payments by other payers through the cost-shift.

Source: Lewin Group estimates using data provided by Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS).

The data and methods used to develop these estimates are presented in the following sections:

- Spending by type of provider;
- Health Spending under Public Programs;
- Health Spending for Private Payers;
- Administrative Costs; and
- Spending for the uninsured in New York.

1. Spending by Type of Provider

The Office of the Actuary of CMS provides estimates of health spending by type of provider in 2004. Total health spending in New York was about \$125.1 billion in 2004 (*Figure B-10*). This includes spending for New York residents through all payers in the state including individual out-of-pocket payments, spending for hospitals, physicians and other professionals, dentists, prescription drugs and long-term care. It excludes insurer and program administration, research and construction, and public health spending (except direct patient services such as vaccinations). Per capita health spending in 2004 was higher in New York compared to the U.S. for all services except prescription drugs and home health.

Figure B-10
Total Health Expenditures in New York and the US in 2004
(Most Recent Year Available) ^{a/}

Total Population (thousands)	New York		United States	
	19,280		293,657	
Health Spending				
Type of Healthcare Provider	Amount (millions)	Amount Per Resident	Amount (millions)	Amount Per Resident
Hospital	\$45,133	\$2,340	\$570,756	\$1,944
Physician	\$26,862	\$1,393	\$399,883	\$1,362
Dental	\$5,478	\$284	\$81,532	\$278
Other Professional	\$3,539	\$183	\$52,720	\$180
Home health	\$6,006	\$135	\$43,181	\$147
Prescription drugs	\$15,678	\$813	\$188,452	\$642
Medical durables	\$1,661	\$86	\$22,951	\$78
Nursing home	\$13,426	\$696	\$115,210	\$392
Other personal care	\$7,298	\$378	\$53,272	\$181
Total Health Spending (in millions)				
Total	\$125,081	\$6,487.6	\$1,560,242	\$5,313

a/ Estimates exclude insurer and program administration, research and construction, and public health spending, except direct patient services such as vaccinations. Estimates are adjusted to a state of residence basis.

Source: 2004 State Estimates, Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS).

These estimates reflect an adjustment converting the OACT numbers from a state of provider basis to a state of residence basis. The OACT estimates for 2004 provide total spending for services provided by providers located in each state. Thus, these data include out-of-state residents using services provided in New York while excluding services provided outside of New York for in-state residents. Because the purpose of this project was to estimate coverage and spending impacts for New York residents only, it was necessary to adjust these data to include health spending for New York Residents only.

The most recent OACT estimates of spending on a residence basis are for 1998. These estimates are based upon Medicare claims data showing the state of residence for each individual and the state in which each service was provided. Using the 1998 data, we calculated estimated health spending in New York on a residence basis to spending for New York on a provider basis for New York by type of service. We used these ratios to adjust the OACT estimates for New York using these factors. The resulting estimates of spending on a residence basis were about 0.8 percent less than the provider location based estimates.

Finally, we adjusted these spending data to 2006 based upon OACT projection of per-capita health spending growth between 2004 and 2006 for each service category, which are developed for national health spending only. The projections of spending growth nationally are 6.4 percent for 2005 and 6.7 percent for 2006. These national growth rates were adjusted to reflect the fact that historically, health spending in New York has grown about 0.2 percent slower than the national average. These health spending projections are shown in *Figure B-11*.

Figure B-11
Estimated Health Spending in New York by Type of Service and Source of Payment in 2006
(in millions)

	Total	Hospital	Physician	Dental	Other Professional	Prescriptions	Durable Medical Equipment	Nursing Home	Home Health	Other Personal Care	Insurer & Program Admin
Out-of-pocket	\$21,485	\$905	\$2,262	\$2,496	\$934	\$3,591	\$838	\$5,313	\$2,799	\$2,348	\$4,743
Employer-workers	\$42,428	\$13,584	\$12,808	\$2,946	\$1,347	\$6,753	\$248	\$0	\$0	\$0	\$359
Employer non-workers	\$4,578	\$1,361	\$1,064	\$167	\$132	\$1,423	\$73	\$0	\$0	\$0	\$629
Non-group	\$2,518	\$641	\$793	\$82	\$75	\$263	\$34	\$0	\$0	\$0	\$1,458
Medicare	\$36,704	\$17,265	\$8,121	\$2	\$683	\$6,059	\$544	\$1,448	\$1,123	\$0	\$1,305
Medicaid	\$41,949	\$14,859	\$3,245	\$297	\$393	\$1,958	\$0	\$8,747	\$4,397	\$6,747	\$11
CHAMPUS/Veterans	\$793	\$535	\$187	\$0	\$0	\$61	\$0	\$0	\$0	\$0	\$132
Other public	\$2,811	\$1,809	\$757	\$0	\$92	\$0	\$21	\$0	\$0	\$0	\$139
Worker's compensation	\$1,939	\$745	\$703	\$0	\$277	\$63	\$12	\$0	\$0	\$0	\$56
Other private	\$856	\$398	\$274	\$40	\$56	\$24	\$8	\$0	\$0	\$0	
Total	\$156,061	\$52,102	\$30,214	\$6,030	\$3,989	\$20,195	\$1,778	\$15,508	\$8,319	\$9,095	\$8,832
Free care	\$1,514	\$241	\$314	\$316	\$136	--	\$13	--	--	--	--

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

2. Health Spending Under Public Programs

We first estimated the amount of spending by type of service under Medicare, Medicaid and other state and local programs. As discussed above, this information is available from the Governor's proposed Budget for 2005 and agencies responsible for these programs. Some of the government figures were adjusted to conform to the calendar years used in our analysis and to eliminate double counting of expenditures. The data and methods used to develop these estimates are discussed below.

Medicare Spending in New York: As discussed above, we adjust the HBSM household database to reflect projections of the growth in the population by age group based upon bureau of the Census projections of population growth by state. We based our estimates of Medicare spending by type of service in New York based upon the OACT data provided by state for 2004. We then adjusted these data for OACT projections of Medicare spending growth per beneficiary

To estimate baseline spending in New York for 2006, we also needed to account for the Medicare prescription drug benefit, which became effective earlier in the year. We used the New York version of HBSM, as described above, to estimate the cost of the Medicare prescription drug benefit and its impact on drug spending for other payers in New York. For this simulation, we assumed that all Medicare beneficiaries would receive the Medicare prescription drug benefit except for those with retiree health benefits (the program provides subsidies to employers to continue their coverage of drugs). We also assumed that all Medicaid dually-eligible beneficiaries would receive the Medicare drug benefit with some wrap-around benefit from Medicaid. These estimates are reflected above in *Figure B-11*.

Medicaid and Other State Programs: We used data from the Governor's proposed budget for 2005, which includes projected spending estimates for 2006. We supplemented these data with information provided by the Department of Health, the Office of Mental Health, the Office of Mental Retardation and the Developmentally disabled, other state health agencies and non-health agencies with expenses that qualify for federal matching funds (e.g., occupational, speech and other developmentally related therapies. It also includes funding for Medicaid program expenditures that are not eligible for federal matching funds.

Figure B-12 presents a detailed accounting of health spending under New York state government programs. These data are a compilation of spending data provided in the Governor's budget and data provided by other state agencies. It also includes funding for state health programs, except those related to the uncompensated care pool which is discussed below. Because this type of compilation of New York state health spending is not available through the stated, it is pieced together from multiple sources. In some cases, it was necessary to derive some of the detailed break-downs of spending based upon the amounts of federal matching funds provided to these agencies.

Figure B-13 summarizes spending under major components of the state's medical assistance programs.

Figure B-12
Health Spending in New York State Budget, With Local Government Share of Medicaid
(millions)

	Total in State Budget with Local Govt. Share	Total State and Federal Disbursement in Budget	Federal Funding		State Funding				Local Govt. Share of Medicaid
			Federal Medicaid & SCHIP	Federal Non-Medicaid	Total State Funds ^{a/}	State General Fund ^{a/}	Other State Revenues ^{b/}	Inter-Governmental Transfers (IGT)s	
Department of Health Spending									
Dept Health	\$42,835	\$36,579	\$20,582	\$923	\$15,075	\$8,317	\$6,308	\$450	\$3,256
Med. Asst.	\$37,681	\$31,542	\$19,816	--	\$11,726	\$7,446	\$3,830	\$450	\$6,139
Medicaid Admin	\$651	\$589	\$470	--	\$119	\$119	--	--	\$62
All Other	\$4,503	\$4,448	\$296	\$923	\$3,229	\$751	\$2,478	--	\$55
SHCHP	\$456	\$401	\$296	--	\$105	\$105	--	--	\$55
Provider Subsidies	\$1,776	\$1,776	--	--	\$1,176	--	\$1,776	--	--
Other	\$2,271	\$2,271	--	\$923	\$1,348	\$646	\$702	--	--
Other Health Agencies									
Other State Agencies	\$6,317	\$5,634	\$2,102	\$630	\$2,902	\$2,468	\$434	--	\$683
Office of MH	\$2,438	\$2,240	\$611	--	\$1,629	\$1,338	\$291	--	\$198
Medicaid	\$1,188	\$990	\$611	--	\$379	\$379	--	--	\$198
Non-Medicaid	\$1,250	\$1,250	--	--	\$1,250	\$959	\$291	--	--
Office of MR/DD	\$3,343	\$2,907	\$1,340	\$630	\$937	\$832	\$105	--	\$436
Medicaid	\$2,608	\$2,172	\$1,340	--	\$832	\$832	--	--	\$436
Non-Medicaid	\$735	\$735	--	\$630	\$105	--	\$105	--	--
OASAS	\$536	\$487	\$151	--	\$336	\$298	\$38	--	\$49
Medicaid	\$294	\$245	\$151	--	\$94	\$94	--	--	\$49
Mon-Medicaid	\$242	\$242	--	--	\$242	\$204	\$38	--	--
Spending in Non-Health Agencies									
Medicaid - Other Non-Health Agencies	\$2,395	\$1,995	\$1,231	--	\$764	\$764	--	--	\$400
Total Government Spending for State Agencies									
Total Government Spending for State Agencies	\$51,547	\$44,208	\$23,915	\$1,553	\$18,741	\$11,549	\$6,742	\$450	\$7,339

a/ Data taken from New York State Budget for 2005-2006.

b/ Includes funding through HCRA and other sources.

Source: New York State 2005-2006 Enacted Budget, April 18, 2005, pages 71, 74, 77.

Figure B-13
Medical Assistance Spending in 2006 ^{a/}

Program	2005 Total Annual Payments (in millions)
Medical Assistance Benefits and Health Plan Payments	\$40,188
Program Administration	\$1,305
Disproportionate Share Hospital Payments (DSH) net of \$450 million in intergovernmental transfers)	\$2,422
Total	\$43,915

a/ Includes Medicaid, FHP, CHP-A and CHP-B.
Source: Lewin Group analysis of Governor's budget for 2005 and interviews with Department of Health officials.

Other Public Spending: The state and Local Governments in New York operate public hospitals and clinics for the medically indigent. There are also several state agencies that provide health services that are not covered under Medicaid. We estimated the amount of other public spending in New York from several sources. *Figure B-14* presents the approach that we used to estimate uncompensated care costs for public hospitals and clinics.

Figure B-14
Estimation of Cost for Public Hospitals and Clinics in New York
(millions)

	Bad Debt and Charity Care Expenses (millions)		HCRA Pool Distribution for 2006	Uncompensated Care
	2003 Actual	2006 Projection		
Hospitals				
Health and Hospitals Corporation (HHC)	\$381.3	\$428.9	\$92.6	\$336.3
Other Public	\$119.2	\$134.1	\$39.0	\$95.1
All Other Hospitals	\$1,066.7	\$1,119.9	\$715.4	\$484.5
Public Clinics				
Health and Hospitals Corporation (HHC)	\$10.8	\$11.1	-	\$11.1
Other Public	\$10.6	\$11.0	-	\$11.0
Total	\$1,588.6	\$1,785.0	\$847.0	\$938.0

Source: Lewin Group analysis of data supplied by the United Hospital Fund.

The available data indicates that hospitals experienced about \$1.6 billion in bad debt and charity care expenses in 2003, which was the most recent data available to us. Data are provided separately for the Health and Hospitals Corporation, other public hospitals in the state and all

other hospitals. We projected these amounts to 2006 based upon OACT data showing that spending under “other public programs” has been increasing at an average annual rate of about 3.8 percent per year. The figure also presents the amount that is expected to be allocated to these groups of hospitals from the HCRA uncompensated care pool. We then computed uncompensated care for these hospital groups by subtracting the amount of the HCRA allocation from the amount of their bad debt and charity care expenses.

For public hospitals, the difference between total bad debt and charity care costs and the amount of the HCRA distribution is paid for by the local governments that sponsor these hospitals. For 2006, we estimate this amount to be \$453.5 million, including both hospital and clinic services. For other hospitals, the difference between bad debt and charity care expenses and the amount of the HCRA allocation is hospital uncompensated care, which we discuss below.

In addition, there is a wide range of health services provided by state agencies that is not part of the state’s medical assistance programs, which we estimate to be about \$2.3 billion in 2006 (see *Figure B-12* above). These include services provided by the Office of Mental Health, the Office of Mental Retardation and Developmental Disabilities, and the Office of Alcohol and Substance Abuse Services. This brought total “other public” spending in New York to about \$2.8 billion in 2006.

The Medical Component of the Workers Compensation Program: The medical component of the Workers Compensation program is part of state-wide health spending. Estimating spending for workers compensation is difficult, particularly for private sector employers and self-insured. We identified total disability medical benefits for New York in 2003 from the National Academy of Social Insurance which provides workers compensation benefits by type of insurer (private carriers, self-insured and state funds) and medical benefits, by state.

3. Health Spending for Private Payers

We include under private health spending: household out-of-pocket spending; spending under employer health plans; spending for retiree coverage; spending under individually purchased insurance policies, which includes spending under the New York Comprehensive Health Care Association (the state’s high-risk pool); spending for military personnel and veterans under (TRICARE/CHAMPUS); and other private health spending.

Under Employer Sponsored Insurance (ESI) Coverage: Premium payments for employer-sponsored insurance represent the largest portion of private health spending. We estimated total employer spending for health care, including both the employer and employee premium contributions using data from the 2003 MEPS Survey of Employers in New York. These data provide estimates of total premium costs for New York employers by firm size and individual/family coverage status. The MEPS premium data were adjusted to exclude plan administrative costs and profits, which vary by firm size, as described below. We estimated the portion of the premium associated with health care spending in order to be consistent with the definitions used by CMS in the State Health Spending estimates.

We then estimated the number of insured workers in New York in each firm size category and individual/family coverage categories as reported in the CPS data for 2005. We then projected these amounts to 2006 based upon OACT projections of the rate of growth in private health spending. Total spending for people with employer sponsored insurance was computed by multiplying the number of insured workers by the estimated annual premium amounts (*Figure B-15*). Spending was allocated across service categories in proportion to the distribution of spending for people with employer sponsored coverage reported in the MEPS database.

Household Out-of-Pocket and Other Private Health Spending: The remainder of private health spending includes household out-of-pocket spending, spending covered under individually purchased insurance policies, employer spending for retiree coverage, and spending for military personnel and veterans under TRICARE/CHAMPUS. For this allocation, we estimated the distribution of private health spending by type of service and source of payment using the MEPS household survey data. We controlled our estimates to state estimates of aggregate spending by type of service and source of payment provided by the New York Department of Health. These adjusted data provided us with estimates of the relative distribution of private health spending by source of payment and type of service that reflects the unique demographic and health coverage characteristics of the New York population.

We assumed the remainder of private spending for personal health care services in New York was distributed by source of payment and type of service as shown in the HBSM/MEPS data after it is adjusted to reflect CPS and New York Health Access Survey population data. This provided us with estimates of spending for: household out-of-pocket expenditures; employer coverage for retirees; individually purchased coverage (group and non-group); and TRICARE/CHAMPUS. MediGap wrap-around coverage for Medicare beneficiaries is included in our estimate of individually purchased private coverage.

4. Insurer and Program Administrative Costs

Insurer administrative costs in the health care sector include the insurer and health plan's costs of administering coverage and insurer profits. Administrative costs for public programs also include the cost of eligibility determination and federal reporting requirements. Our estimates of administrative spending by source of payment are included in *Figure B-14* above.

We estimated administrative costs for private insurance based upon data provided by Hay/Huggins on administrative costs by size of group. In this analysis, we estimated private insurer administrative costs for each privately insured individual in the HBSM household data base who reports having private insurance. For employer groups, administrative costs are estimated based upon the administrative cost data in *Figure B-16*. This is done simply by multiplying the amounts covered for each worker and dependent in the aged HBSM data by the administrative cost percentage corresponding to their reported size of firm.

Figure B-15
Estimated 2007 Total and Average Spending for Employer-Sponsored
Insurance (ESI) Under Current Law in New York ^{a/}

	Total Premium	Employee Contribution	Employer Contribution Percent	Number of Insured Workers CPS	Number of Dependents CPS	Total 2003 Employer Spending	CMS 2003 to 2006 Increases	Benefits to Admin Adjuster	Est 2006 Employer Benefit Spending
Individual Coverage									
Under 10	\$3,936	\$533	86.5%	321,951	-	\$1,267,199	1.2939	0.765	\$1,254,316
10-24	\$4,222	\$763	81.9%	193,959	-	\$818,895	1.2939	0.803	\$850,833
25-99	\$3,630	\$636	82.5%	295,790	-	\$1,073,718	1.2939	0.850	\$1,180,891
100-999	\$3,643	\$724	80.1%	464,225	-	\$1,691,172	1.2939	0.897	\$1,962,822
1000 or more	\$3,383	\$568	83.2%	1,259,943	-	\$4,262,387	1.2939	0.948	\$5,228,317
Family Coverage									
Under 10	\$9,193	\$1,695	81.6%	276,914	603,609	\$2,545,670	1.2939	0.765	\$2,519,790
10-24	\$10,510	\$1,667	84.1%	154,626	237,274	\$1,625,119	1.2939	0.803	\$1,688,502
25-99	\$10,378	\$2,485	76.1%	278,750	405,196	\$2,892,868	1.2939	0.850	\$3,181,619
100-999	\$9,478	\$1,960	79.3%	462,337	871,940	\$4,382,030	1.2939	0.897	\$5,085,908
1000 or more	\$9,198	\$1,676	81.8%	1,305,788	2,563,187	\$12,010,638	1.2939	0.948	\$14,732,455
Total				5,014,283	4,681,206	\$32,569,696	1.2939		\$37,685,453

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

Figure B-16
Private Insurance Administrative Cost Assumptions for Baseline

Number of employees	Claims Admin.	General Admin.	Risk, Profit & Interest Credit ^{a/}	Commissions	Premium Taxes	Total
1 to 4	9.3%	12.5%	7.0%	8.5%	2.8%	40.0%
5 to 9	8.6%	11.2%	6.5%	8.0%	2.7%	35.0%
10 to 19	7.2%	9.2%	6.0%	7.5%	2.6%	30.0%
20 to 49	6.3%	7.6%	5.3%	6.8%	2.5%	25.0%
50 to 99	4.3%	4.8%	4.5%	6.0%	2.4%	18.0%
100 to 499	4.1%	4.0%	4.0%	5.5%	2.3%	16.0%
500 to 2,499	3.9%	3.2%	2.0%	3.5%	2.2%	12.0%
2,500 to 9,999	3.8%	1.4%	0.3%	1.8%	2.2%	8.0%
10,000 or more	3.0%	0.7%	-0.4%	1.1%	2.1%	5.5%

Note-Adjustments by firm size are based on underwriting practices of major insurance companies.

a/ Includes allowance for risk and profit less the interest credit earned by the insurer on cash flow.

Source: Hay/Huggins Company, Inc. As appeared in: "Cost and Effects of Extending Health Insurance Coverage" Congressional Research Service (CRS), October 1988.

For workers with retiree coverage, we estimate administrative costs based upon the administrative cost percentages that correspond to the size of the firm that is providing the coverage. However, because retiree coverage is disproportionately concentrated among the largest firms, administrative costs as a percentage of claims are more similar to those in large groups. We estimated the average size of firm per retiree based upon the employer health plan data used in the model.²⁷ We estimated insurer administrative costs for people with non-group coverage based upon these data. This includes people purchasing non-group coverage as their primary source of coverage and people purchasing Medicare supplemental coverage, often called MediGap coverage.

Administrative costs for government programs have increased in recent years. Public program administrative costs as a percentage of benefit payments are projected by CMS to increase from 5.2 percent in 1998 to 5.5 percent in 2006. Much of this growth in program administrative costs reflects rapid growth in the number of Medicare beneficiaries and recent expansions in eligibility for children under the SCHIP programs.

For state programs, such as Medicaid, we used the administrative cost amounts reported by the state. For federally funded programs, such as Medicare and TRICARE/CHAMPUS, we used the national average of administrative costs as a percentage of benefits paid for these programs.

5. Care Provided Free by Providers

We define free care as services provided by all health care providers that is not reimbursed by any payer through government appropriations or the HCRA uncompensated care pool. As discussed above, we estimate hospital and clinic uncompensated care to be about \$448 million.

²⁷ This is the Kaiser/HRET employer data matched with the 1991 HIAA data which provides added information on the number of retirees by firm size.

For non-public hospitals this is equal to the amount of bad debt and charity care spending less the amount received from the HCRA uncompensated care pool.

We estimated the amount of free care from non-hospital providers based upon the data reported in the MEPS data used in HBSM. We did this by scaling the amounts reported for other providers by the ratio of uncompensated care costs for hospitals and the amount reported for hospitals in these data. These amounts are presented in *Figure B-14*.

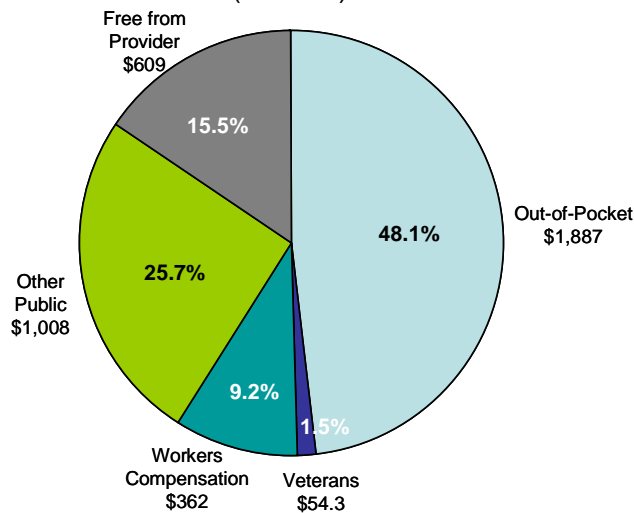
It is important to recognize that the cost of free care is covered through increases in charges to the privately insured through the cost-shift. As discussed above, we adjusted the amounts paid by private payers to reflect the reduction in uncompensated care as coverage is extended to the uninsured.

6. Health Spending for the Uninsured

The Resulting database permits us to estimate health spending by source of payment by age, income, health status and other socio-economic characteristics. For example, the model provides estimates of health spending for people who are uninsured. As shown in *Figure B-17*, we estimate that uninsured people in New York will spend about 3.9 billion for health services in 2006.

Nearly half of this spending will be paid out-of-pocket, reflecting that many of the uninsured live well above the Federal Poverty Line and can afford to pay for some portion of their care. About 15.5 percent of care for the uninsured would be provided free from providers and about 1.0 billion would be covered by public hospitals, clinics and other state programs.

Figure B-17
Health Spending for the Uninsured in New York by Source of Payment in 2006
(millions)



Total Spending = \$3,920 million

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

E. Simulating the Coverage Impacts of Coverage Expansion Proposals

The simulations developed under this project involved several questions concerning the likely response of individuals and firms to the proposals that we studied. This is because these proposals provide subsidies to individuals that alter the relative advantages of employer coverage for the population living below 300 percent of the FPL. This required the use of multivariate models of individual and firm coverage decisions under the policy. The key behavioral choices decisions that we modeled include:

- Enrollment under the FHP expansions for non-custodial adults through 150 percent of the FPL;
- Enrollment in the FHP buy-in for people with incomes between 150 percent and 300 percent of the FPL;
- The movement of eligible individuals from non-group coverage to FHP and the FHP buy-in;
- Workers with employer coverage who shift to FHP or the FHP buy-in;
- Employer decisions to either discontinue coverage or to start offering coverage given the financial incentives; and
- The worker decision to take the coverage offered by an employer.

We discuss the methods used to simulate these effects in the following sections;

- Enrollment under Medicaid eligibility expansion;
- Individual take-up under the FHP Buy-in;
- Changes in employer coverage under the five primary policy scenarios;
- Employer take-up under Healthy New York (HNY) expansion for employers; and
- Worker take-up in firms that start offering coverage.

1. Enrollment under Medicaid Eligibility Expansion

Each of the four major policy proposals analyzed in this study would include increasing eligibility for non-custodial adults under FHP from its current level of 100 percent of the FPL to 150 percent of the FPL. As discussed in *Appendix A*, we used the New York Version of HBSM (as described above) to estimate the number of people eligible for the current Medicaid program under the eligibility expansion using the actual income eligibility rules used in the New York program. We then simulated the individual's decision to participate in the program based upon a multivariate analysis of how program participation varies with income, availability of employer coverage, other demographic characteristics and health status.

Participation Analysis: Using historical data on enrollment levels, we estimated a multivariate model of the factors affecting enrollment. The historical participation data indicates that only about 72 percent of people eligible for Medicaid enroll, although enrollment varies widely by eligibility group (e.g., children, parents, aged etc.). Thus, not all eligible people are expected to enroll in Medicaid when they become eligible. Based upon our multivariate participation analysis, we estimate that on average, Medicaid enrollment for non-disabled adults and children would average about 70 percent for uninsured people and about 39 percent for people with access to employer-sponsored insurance (ESI). We also used a separate multivariate model of participation rates in programs requiring a premium to adjust enrollment rates. We estimate that premiums reduce participation by 37 percent or more, depending upon the amount of the premium (*Figure B-18*).

We adopted the following rules in simulating enrollment:

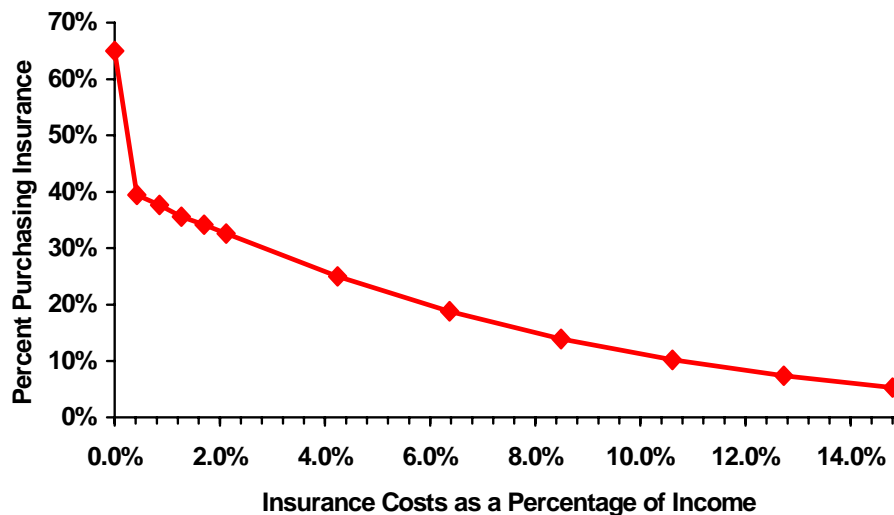
- We assume that children currently eligible for FHP, CHP-A or CHP-B who are not now enrolled would become covered under the program only if one or both their parents become covered under the expansion; and
- A portion of the newly eligible population that is currently covered under private insurance are simulated to shift to FHP based upon an analysis of how changes in the relative price of insurance affect the likelihood of moving from one source of coverage to another lower cost health plan.

Simulation of "Crowd-Out": Our estimates of "Crowd-out" (i.e., people shifting from ESI to public coverage) are derived directly from our multivariate model of participation. As discussed above, we estimate that the participation rate for people with access to ESI is about 39 percent. We developed this estimate of take-up rates for people with access to ESI based upon

coverage information for children who are eligible under the children's Medicaid eligibility expansions to the FPL implemented in the early 1990s. Using the 1997 March CPS data, we were able to identify children with a parent who was covered by ESI. Because virtually all employer plans provide family coverage as an option - although workers often pay up to the full cost - we assumed that all of these children were eligible for ESI. This provided a basis for estimating separate participation rates for children with and without access to ESI, thus enabling an estimate of "Crowd-out" for each policy simulation.

During the course of this project, we analyzed the impact of requiring a waiting period as a means of reducing Crowd-out. In this case, we simulated the impact of requiring individuals to be without employer coverage for at least the prior 12 months to be eligible. The MEPS household data include the information required to simulate the impact of this provision, including an exemption for people changing jobs.

Figure B-18
Estimated Percentage of People Who Will Take Subsidized Coverage by Premium Cost as a Percentage of Family Income



a/ Based upon percentage of people eligible to participate in Medicaid who enroll.
 b/ Probabilities of enrollment initially based upon the percentage of people without insurance who purchased non-group coverage by family income and premiums as a percentage of family income.
 Source: Lewin Group Estimates.

Simulation of “Spill-Over” effect for currently eligible but not enrolled: We estimate an increase in enrollment among the currently eligible but not enrolled population resulting from expansions in eligibility for Medicaid and SCHIP, which has been called the “spill-over.” This estimate is based upon evaluations of programs that expand coverage for children to higher income groups. One study of a coverage expansion for children in California indicated that for each newly eligible child enrolled, up 0.86 currently eligible but not enrolled children also enrolled. Similar results have been reported for SCHIP outreach programs around the country. We estimated that to be about 17 percent of currently eligible but not enrolled children in the state. We used these results as the basis for modeling the spill-over effect associated with Medicaid eligibility expansions.²⁸

Effects of the individual mandate: We simulated the impact of the mandate for FHP eligible people, including currently eligible and newly eligible people. We assume that the mandate is enforced through the income tax system. People who do not provide evidence of coverage with their tax return are automatically enrolled in the program they appear to eligible for. However, many of the uninsured do not file tax returns and would therefore be beyond the reach of this enforcement mechanism.

Based upon an analysis of the CPS data on tax filings, we estimate that about 40 percent of all uninsured have no tax liability and are not required to file a tax return. However, about half of

²⁸ Christopher Trenholm and Sean Orzol, “The Impact of the Children’s Health Initiative (CHI) of Santa Clara County on Medi-Cal and Healthy Families Enrollment,” (report to the David and Lucile Packard Foundation), Mathematica Policy Research, inc., September 2004.

these people file even though not required to do so, presumably so that they can obtain any refund they are entitled to. Thus, about 20 percent of all uninsured people do not file a tax return and would not be affected by the mandate.

Figure B-19
Distribution of Insured and Uninsured Tax Filers by Marginal Tax rate in 2004

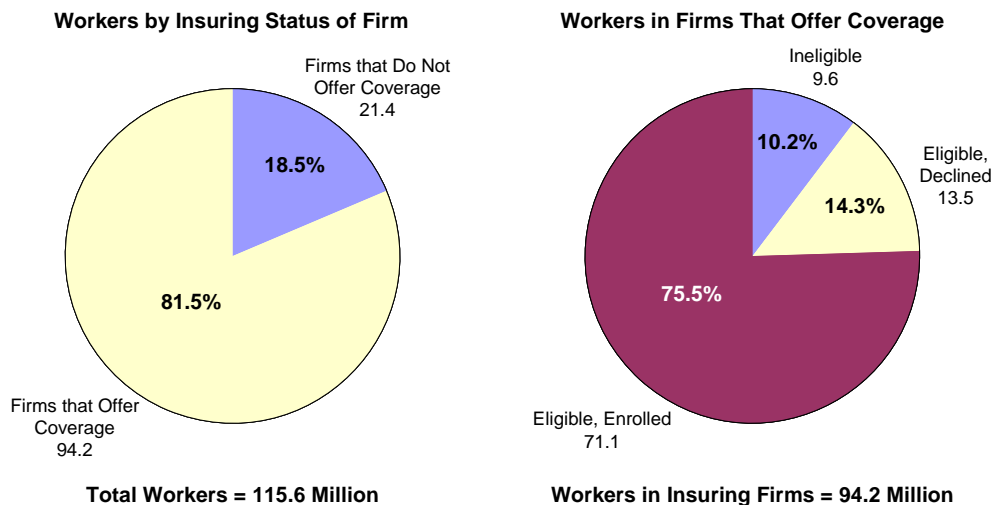
	With Earnings	Without Earnings	Total	With Earnings	Without Earnings	Total
All Tax Filing Units in the US				Uninsured Tax Filing units in US		
Total Potential Filers	119,981	39,367	159,348	23,004	5,016	28,020
Non-Filers	9,451	20,377	29,828	2,848	3,330	6,178
All Filers by Marginal Tax Rate				Uninsured Filers by Marginal Tax Rate		
0	18,855	11,203	30,068	5,982	648	6,630
10	15,679	2,470	18,149	4,992	354	5,346
15	43,914	3,447	47,361	7,389	484	7,873
27	25,537	1,394	26,931	1,424	140	1,564
30	4,437	359	4,796	242	43	285
35	870	60	930	60	9	69
39	1,235	54	1,289	67	7	74
Total Filers	110,530	18,990	129,520	20,156	1,686	21,842

Source: Lewin Group Estimates Using the 2005 Current Population Survey (CPS) Data.

It is important to understand that many of those who do not file tax returns would still enroll. This is because the first step in simulating enrollment is to determine whether eligible individuals enroll voluntarily, as discussed above. If a newly eligible individual does not enroll, the model then checks to see if they filed a tax return to determine if they are automatically enrolled through the enforcement mechanism.

Impact of Mandate on enrollment in employer-Sponsored Insurance: The MEPS data used in the model identifies workers who are eligible for their employer’s health plan but who have declined the coverage offered. This is an important step in modeling the impact of a mandate because about 20 percent of all uninsured workers are eligible for coverage through their employer but have declined to take it. We assume that all of these people take the coverage offered at work if they file a tax return and are therefore subject to enforcement through the tax code. We also assume that uninsured dependents of these workers enroll in the employer plan as well. The model simulates the impact that this has on enrollment and costs in employer health plans.

Figure B-20
Workers by Employer Insurance Status in 2003 (millions)



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

Program Costs: As discussed in *Appendix A*, the model estimates program costs based upon the per-member per-month (PMPM) costs in the existing program by eligibility group. We adjusted these premiums to reflect the unique composition of the newly eligible population by age, gender and health status using the health expenditures data reported in HBSM. These data include an adjustment to health services utilization to reflect the increase in spending as insured people become covered.

2. Individual Take-up under the FHP Buy-in

The four proposals that we analyzed would create a FHP buy-In program where individuals can obtain subsidized coverage. Under the buy-in, individuals with incomes between 150 percent and 300 percent of the FPL would be able to purchase coverage by paying a premium on a sliding scale with income. The program would set a premium equal to the full cost of coverage provided to buy-in enrollees. The premium would be reduced with a subsidy ranging from 80 percent for people with incomes between 150 percent and 200 percent of the FPL to 25 percent for people living between 275 percent and 300 percent of the FPL. During the course of the project, we also estimated the impact of the program under this and other alternative premium subsidy schedules.

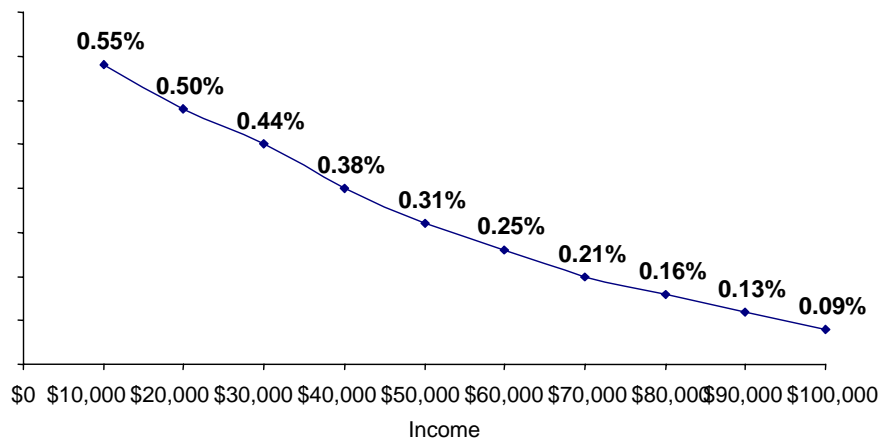
Take-up among the uninsured: A key assumption in our analysis is that the premium subsidies provided under the buy-in will be viewed as a reduction in the price of health insurance coverage, which increases the likelihood that eligible individuals would take coverage. Similarly, reductions in the cost of coverage due to reduced provider payment levels and/or reduced administrative costs under the buy-in will further reduce the premium resulting in an increase in the number of people taking coverage.

We simulated the impact of these proposals based upon a Lewin Group multivariate analysis of how the likelihood that an individual will take coverage varies with the amount of the

premium. This estimate is based upon a pooled time-series cross-section analysis of private employer coverage reported in the Current Population Survey for the 1987 through 1997 period.²⁹ These analyses indicates an implicit price elasticity of -0.34 percent, which means that on average, a one percent real reduction (i.e., inflation adjusted) in private employer premiums, corresponds to an increase in the percentage of people with insurance of 0.34 percent.³⁰

The multivariate model is actually estimated in a way where the implicit price elasticity varies with individual characteristics such as age, income and other socio-economic characteristics.³¹ For example, the percentage increase in coverage resulting from a one percent reduction in premiums ranges from a high of 0.55 percent among people with incomes of \$10,000 to 0.09 percent among people with incomes of \$100,000 (*Figure B-21*) (i.e. a price elasticity ranging from -0.55 to -0.09). Similarly, the percentage increase in coverage resulting from a one percent reduction in premiums ranges from 0.46 percent for people age 20 to 0.30 percent among people age 60 (*Figure B-22*) (i.e. a price elasticity of -0.46 to -0.30). Thus, the model shows that older people and those in higher income groups are less sensitive to changes in price than other population groups.³²

Figure B-21
Percentage Change in Coverage Resulting from a One-Percent Reduction in Premiums by Income Level (in percentages) a/



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

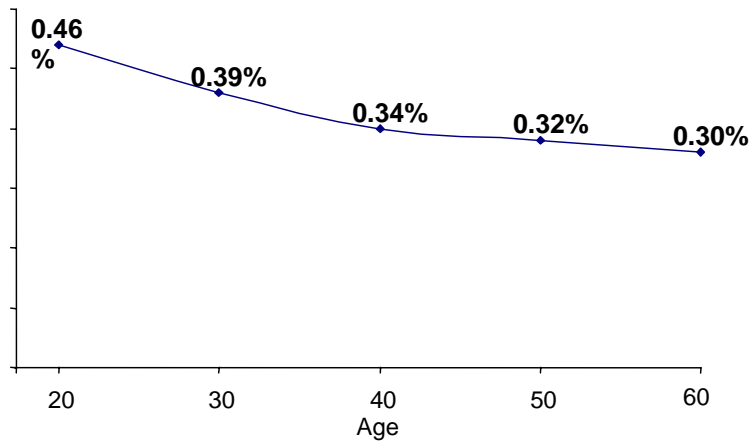
²⁹ This required imputing premiums based upon employer survey data developed by the Kaiser Family Foundation (KFF) and the Health Research and Education Trust.

³⁰ See Sheils, J., Haught, R., "Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy", (report to The National Coalition on Health Care), The Lewin Group, October 18, 1999.

³¹ The multivariate model is a "logit" estimation of the percentage of people taking coverage as premiums and other characteristics are varied. Thus, we calculate implicit price elasticity estimates based upon the change in the predicted probability of taking coverage give each individual's characteristics.

³² The multivariate model coefficients and estimation statistics are provided in the detailed HBSM documentation referenced above.

Figure B-22
Percentage Change in Coverage Resulting from a One-Percent Reduction in Premiums
by Age (in percentages) a/



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

Migration of privately insured to buy-in: We assume that those who are currently covered under private insurance will see the buy-in as an alternative source of coverage. The model is used to identify privately insured people who are newly eligible for either FHP or the FHP buy-in. These include workers with private employer health insurance and those who are purchasing non-group coverage. The 2005 CPS data indicates that about 22 percent of all people living below 150 percent of the FPL have private coverage through an employer or individually purchased non-group coverage. Also, about 59 percent of those living between 150 percent and 300 percent of the FPL have private coverage. Thus, the shift from private to public sources of coverage could be substantial.³³

The model identifies these groups and the premium they now pay for coverage. For people with non-group coverage the premium is the full amount of the premium they are paying for coverage. For those with employer coverage, the premium is equal to the employee share of the premium less and tax subsidy received due to the exclusion of employer provided benefits from taxation. The model then identifies people where the cost of insurance under FHP or the buy-in is less than what they now pay for insurance.

We then simulate the decision to move from private coverage to public coverage based upon multivariate analyses of the likelihood that people will move from one health plan to another given a change in the relative price of insurance. We simulate the decision to shift to FHP or the FHP buy-in upon studies of how people respond to changes in the price of insurance in employer groups offering a choice of health plans.³⁴ One study estimated that a 1.0 percent

³³ These may include individuals with coverage purchased on their behalf by family living outside the household. It may also include people who are spending their savings for coverage after losing employer coverage.

³⁴ Stombom, B., Buchmueller, T., Feldstein, P. "Switching Costs, Price Sensitivity and Health Plan Choice," *Journal of Health Economics*, 21 (2002), 89-116.

decrease in the price of an alternative source of coverage was associated with a 2.47 percent migration of enrollees to the alternative health plan (i.e., a cross-price elasticity of -2.47). These elasticity estimates vary by age and health status such that older and sicker people are less likely to switch plans in response to a given change in the relative price of coverage (*Figure B-23*).

Figure B-23
Plan Switching Price Elasticity Estimates Used in HBSM

<u>Age of Participant</u>	<u>Low Risk</u>	<u>High Risk^{a/}</u>
Under 31	-3.50	-2.78
31 to 45	-2.54	-2.54
Over 45	-2.07	-1.38

a/ People in the 90th percentile of health spending.

Source: Stombom, B., Buchmueller, T., Feldstein, P. "Switching Costs, Price Sensitivity and Health Plan Choice," *Journal of Health Economics*, 21 (2002), 89-116.

This approach assumes that the decision to shift from private to public coverage will be comparable to the likelihood of shifting from one private plan to another. In fact, people may have a preference for private coverage due to issues related to the stigma and perceived quality of care under the public coverage. However, we have no empirical basis for how these factors will affect the plan switching.

3. Changes in Employer Coverage under the Five Primary Policy Scenarios

We simulated employer coverage decisions under all four of the major proposals modeled. These decisions include:

- Employer decision to discontinue coverage in response to the FHP and FHP buy-in proposals;
- The employer decision to either provide or discontinue coverage under the pay-or-pay proposals; and
- The Employer decision to start offering coverage in response to the individual mandate under both the FHP expansions with a mandate for coverage and the pay or play proposal with the mandate for coverage.

The underlying assumption in our analysis is that employers offer coverage because they need to in order to attract and retain workers. We do not expect employers to discontinue their coverage en-mass solely because the FHP expansions and the buy-in become available. We assume that employers will take the decision to discontinue coverage only if it is more cost-effective for their workers to obtain the coverage on their own through FHP and/or the non-group market. Conversely, under a mandate for workers to have coverage, worker demand for insurance could increase causing some employers to begin offering coverage, particularly when few of their workers qualify for subsidies.

The cost of coverage for an employer’s workforce: As discussed above, each worker in HBSM is assigned to one of the “synthetic firms” included in the model. These synthetic firms include data for each of the people working in that firm and their dependents, including the family income data that would be used to determine their eligibility for subsidized coverage under the proposal. Using these data, we estimate the cost of coverage for each group (regardless of employer/employee premium contributions) under their current health plan using the health insurance markets model discussed above. We then subtract from this the amount of taxes saved for each individual due to the tax exclusion for employer provided health benefits.³⁵

The second step is to calculate the cost of insurance for each worker assuming they were to obtain coverage on their own. The model identifies people in each synthetic firm who is eligible for FHP or the FHP buy-in and calculates their premium based upon the subsidies provided under these programs (i.e., no premium for people living below 150 percent of the FPL, with the premium subsidy phased out through 300 percent of the FPL). For workers with incomes too high to qualify for subsidies, we estimate the premium based upon the cost of coverage in the private non-group market.

To model the decision to offer or drop coverage, we calculate a composite plan change price elasticity for each group based upon the average plan change price elasticity for each group member, using the plan change price elasticity estimates presented above in *Figure B-23*. We then calculate the percentage change in the cost of covering each group under the FHP expansions and/or the non-group market (i.e., non-ESI coverage) under the proposal, to the cost of providing employer coverage, net of any tax benefits to the workers. We use the percentage difference in costs under ESI and non-ESI coverage to estimate the likelihood of changing to or from employer coverage using the composite elasticity for the group.

Nowhere in these calculations do we account for the portion of the premium for employer coverage paid by the employer vs. the employee. This is because we assume that if the employer were to discontinue coverage, the savings to the employer would be “cash-out” and passed-on to the worker in the form of higher wages, thus reducing the net cost of insurance to the workers of obtaining coverage on their own. This would happen either through an explicit employer cash-out or in the natural course of competition in the labor markets for workers. Thus the cash-out offsets the loss of the employer premium contribution.

These calculations are performed for both insuring and non-insuring firms to provide a basis for simulating policies that could cause some employers to start offering coverage.

Employer decision under the “voluntary” buy-in: Our underlying assumption is that employers will seek to provide the most “efficient” compensation package for their workers. Thus, if the total cost of insurance to an individual employer’s work force (i.e., net of tax effects) is lower when workers obtain insurance on their own through FHP and/or the non-group market, the employer may be inclined to discontinue their health plan.

³⁵ The tax benefit is estimated using the marginal tax rate for each individual which we imputed to the HBSM household data from tax data reported in the 2005 CPS.

HBSM simulates the decision to discontinue coverage based upon the plan switching analysis discussed above. We simulate the employer's decision to discontinue coverage by applying the composite plan change price elasticity described above for each group to the percentage reduction in costs for the group if they were to take coverage under the non-ESI coverage available under the proposal. However, to reflect the fact that there is evidence of a preference for private employer coverage among workers, we reduce the plan switching elasticity figures by 25 percent.

Employer offer decision under the “mandatory” buy-in: Under the mandate, we assume that some employers would discontinue coverage, while others would start to offer ESI. As discussed above, employers offering ESI who find that non-ESI coverage under the proposal would be less costly than the employer coverage could discontinue coverage. We simulate the discontinuation of employer health plans under the mandate in the same way that we simulate the discontinuation of coverage under the voluntary buy-in model.

However, unlike the voluntary buy-in, we anticipate that some non-insuring employers would start to offer coverage. This is because workers who are newly required to obtain insurance may increase the demand for employer coverage among workers. This will be particularly true in cases where the employer can provide the coverage at a lower cost (including the effect of tax benefits) than if their workers were to obtain coverage through the FHP buy-in and/or the non-group market.

The method used to simulate the employer's decision to start offering coverage is analogous to the approach used to simulate the decision to discontinue coverage described above. For each non-insuring employer, we calculate the cost of providing insurance for the employer's workforce through ESI (reflecting tax benefits) and compare this with the cost of purchasing coverage for that workforce through the FHP program and the non-group market for those not eligible for the FHP buy-in.

In cases where it is less costly for the group to obtain coverage through their employer, we simulate the decision to offer coverage using the same composite plan change price elasticity used to simulate the decision for employers to discontinue coverage (see discussion of employer behavior under the voluntary buy-in in the prior section). The percentage “change in price” for the group is computed as the percentage difference in the cost of covering the group under ESI and the cost of covering the group through non-ESI sources.

Employer offer decision under voluntary “Pay-or-Play”: The pay-or-play model presents employers with a choice between offering coverage or not offering coverage and paying the tax. Employers who now provide coverage would have the option of paying the tax rather than providing coverage. Non-insuring employers would also be required to decide between offering coverage and paying the tax.

We simulate the employer decision to discontinue coverage in the same way that we simulate the discontinuation of coverage under the FHP buy-in. For each insuring employer, we estimate the cost of covering their workforce through ESI and the cost of the group taking coverage through other sources, including FHP and the FHP buy-in, just as we described above. However, under the pay-or-pay model, the cost to the group of not offering ESI is equal to the

cost of non-ESI coverage for the group, plus the amount of the payroll tax that the employer would be required to pay for not offering coverage. We then simulate the employer's decision to terminate coverage based upon the percentage difference in costs and the composite group plan change price elasticity.

Under the voluntary pay-or-play scenario, we assume that non-insuring employers decide between offering coverage and paying the tax on the basis of which is less costly to the employer. Thus, if paying the payroll tax is less costly than offering insurance, they would pay the tax. If the cost of providing ESI is less than paying the tax, they are assumed to offer coverage.

Employer offer decision under mandatory “Pay-or-Play”: Under this scenario, the pay-or-play proposal is implemented together with a mandate for all people to have coverage. For firms that currently offer coverage, we simulate the decision to discontinue or continue to offer ESI in the same way as under the voluntary pay-or-play model. That is, we estimate the cost of covering the group under ESI and compare it with the cost of their workforce taking coverage through FHP and/or the non-group market plus the payroll tax penalty. We then simulate the decision to terminate coverage using the composite plan change price elasticity estimates.

However, the mandate for all people to have coverage would increase the demand among their workforce for ESI. Thus, under the mandate, we assume that employers will decide whether to offer coverage based upon the total cost of coverage for the group under ESI vs. the cost of non-ESI coverage for the group, where the non-ESI option includes the payroll tax for firms not offering coverage. In cases where it is less costly for the group to obtain coverage through their employer, we simulate the decision to offer coverage using the composite plan change price elasticity based upon the percentage difference in the cost of covering the group under ESI and the cost of covering the group through non-ESI sources.

This approach is identical to the methods used to simulate employer take-up under the mandatory FHP buy-in model as discussed above. The only difference is that under the pay-or-play mandate model, the cost of covering people through non-ESI sources includes the cost of paying the payroll tax. This results in a greater number of non-insuring employers taking up coverage under the pay-or-play scenario.

Employer offer decision under the “modest assessment scenario”: We also simulated the effect of implementing the FHP mandate scenario, with a \$400 employer assessment for each worker without coverage (prorated for part-time workers). This is essentially a pay-or-play proposal in that employers must decide between offering coverage and paying the \$400 assessment. Consequently, we used the same approach used to simulate the individual mandate with pay-or-play scenario. To do this, we simply substituted the \$400 assessment amount for the payroll tax under the pay-or-play model discussed above.

As discussed above, employers are assumed to compare the net after-tax/after-subsidy cost of covering workers under an employer plan and the cost of their workforce purchasing coverage through the buy-in/ non-group market with the help of the subsidies for those who qualify. Currently insuring firms are assumed to retain their ESI if this is less costly than the group purchasing coverage on their own. In cases where the cost of insurance through FHP/non-

group insurance is less than the cost of ESI, employers are simulated to drop their plans using the composite plan change price elasticity for each individual group as described above.

Employers who do not now offer coverage are also assumed to decide between offering coverage and allowing their workforce to obtain coverage through FHP/non-group insurance based upon the net after-tax/after-subsidy cost of ESI vs. the FHP/non-group alternative. In cases where it is less costly for the group to obtain coverage through their employer, we simulate the employer decision to offer coverage using the composite plan change price elasticity based upon the percentage difference in the cost of covering the group under ESI and the cost of covering the group through non-ESI sources.

4. Employer Take-up under the Healthy New York Expansion for Employers

One of the options that we analyzed was an expansion in eligibility for employers under the Healthy New York (HNY) Program. Under the current program small firms (fewer than 50 workers) with low-wage workers (i.e., 30 percent below \$32,000 per year) are eligible to participate in an insurance program subsidized by the state, provided they have not offered insurance in the past 12 months. The subsidy takes the form of a state funded reinsurance program that covers 90 percent of health care cost between \$5,000 and \$75,000 for individuals experiencing \$5,000 or more in health expenses.

We analyzed several proposals that would expand eligibility for employers under the program by allowing all firms with fewer than 100 workers to enroll, eliminating the low-wage worker requirement and allowing firms to enroll regardless of the number of months since the firm offered coverage. We simulated the impact of these expansions on coverage by assuming that the reinsurance subsidy, estimated to be a 20 percent reduction in premiums, would be seen by employers as a reduction in the cost of insurance resulting in an increase in the number of firms offering coverage.

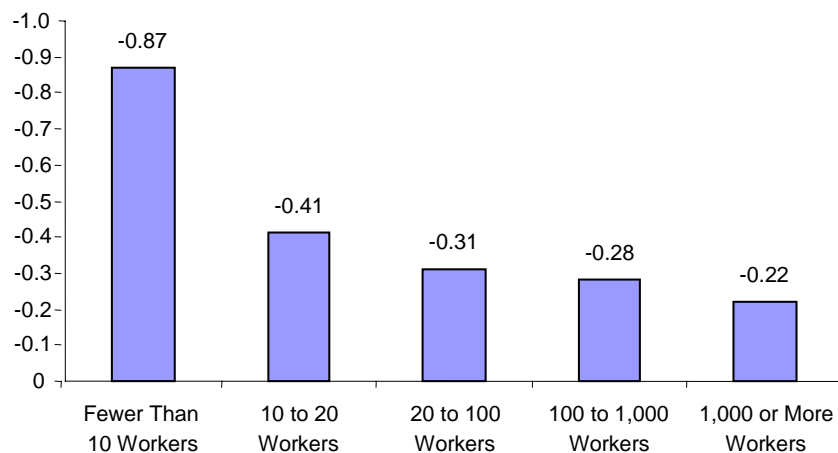
We used the HBSM employer database to identify firms that meet these criteria. We then simulated take-up for currently non-insuring firms using a multivariate model of the employer decision to offer coverage, which reflects the impact of price on the employer's purchase decision. The multivariate model was estimated using the 1997 RWJF Survey of Employers which provides data on a representative sample of establishments. These data include information on the size of the firm, industry and workforce characteristics of establishments in the US. These data include both firms that offer insurance and those that do not. It also provides information on the characteristics of the health plans offered by each employer including premium costs and the share of the premium paid by the employer. These data were used to estimate a multivariate model that shows how the likelihood that a firm will offer coverage varies with wage level, workforce composition, firm size, industry, other firm characteristics and the price of health insurance.³⁶

³⁶ While the RWJF data includes premium information for employers that offer coverage, no data is provided on the premiums faced by firms that do not offer coverage. To model the price effect we imputed premiums to non-insuring firms with a multivariate model of how premium levels vary with the workforce and firm characteristics that we estimated from the RWJF data on insuring establishments.

The effect of price on the purchase of a good or service is typically summarized by what economists call “price elasticity.” For example, the implicit price elasticity for firms with fewer than ten employees is -0.87. This means that for each 1.0 percent reduction in price, there is an increase of 0.87 percent in the number of firms offering insurance. The implicit price elasticity declines as firm size increases to -0.41 for firms with 10 to 20 workers, and -0.22 for firms with 1,000 or more workers (*Figure B-24*).

The model simulates the effect of employer premium subsidies using this multivariate model of the employer decision to offer coverage. For each non-insuring employer in the data, we estimate the change in the price of insurance resulting from the premium subsidies. The model then simulates the decisions to offer coverage based upon the predicted price elasticity for the employer.

Figure B-24
Employer Health Insurance Price Elasticity Estimates by Firm Size ^{a/}

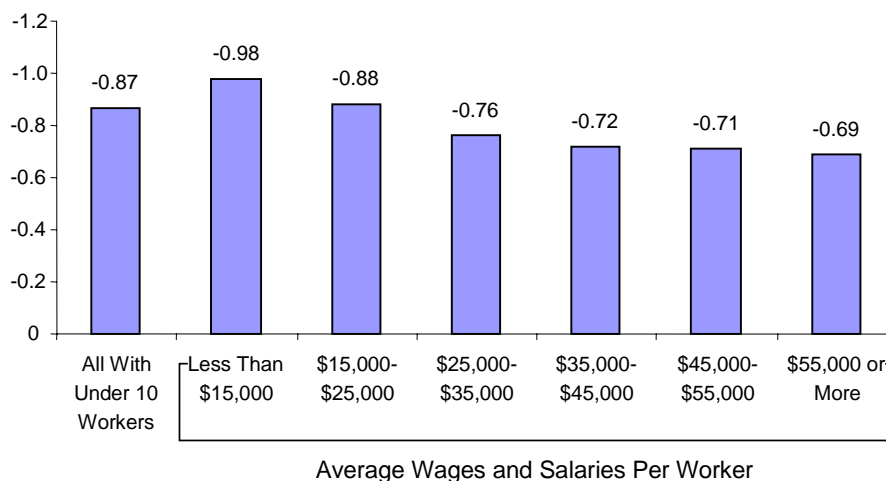


a/ Based upon multivariate analysis of the 1997 Robert Wood Johnson Foundation (RWJF) Survey of Employer Characteristics. “Health Benefits Simulation Model (HBSM),” The Lewin Group, August 2003.

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

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-25* and *B-26*. 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.

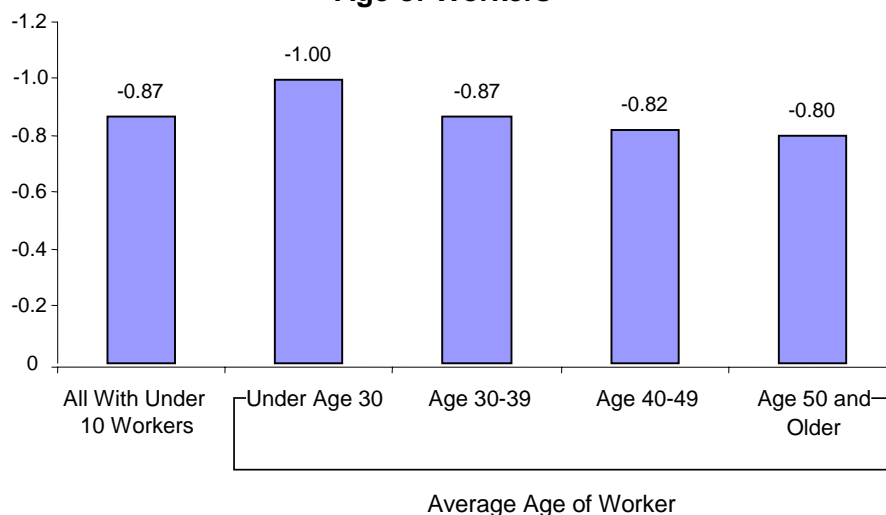
Figure B-25
Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers by Average Wages and Salaries per Worker ^{a/}



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-26
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).

5. Worker Take-up in Firms that Start Offering Coverage

As discussed above, there are several ways in which currently non-insuring firms could start offering coverage. These include the employer coverage decision under the pay-or-play model, employer decision to provide coverage in response to a mandate for individuals to have insurance and in response to eligibility expansions for firms under the Health New York Program. HBSM simulates the decision for workers to accept this coverage based upon Lewin Group multivariate analyses of worker take-up in insuring firms by worker and employer characteristics.

The first step is to estimate the portion of the premium that would be paid by the employer in each newly insuring firm. 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 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.

Appendix C

Options for Expanding Coverage through the Healthy New York Program

The Health New York (HNY) provides subsidized private health insurance to certain low-wage employers and low-income individuals. We project that the program will cover about 117,900 people in 2006 at a cost to the state of \$67.6 million. In this analysis, we estimated the impact of several options for expanding enrollment in the program. We also analyzed the impact of implementing other coverage expansion proposals on Health NY enrollment and costs. Our results are presented in the following sections:

- Program eligibility and coverage;
- Selected changes in eligibility and coverage;
- Changing the reinsurance subsidy;
- The impact of the FHP buy-in on HNY; and
- HNY and the Pay-or-Play program.

A. Program Eligibility and Coverage

The HNY program was established in 2001 to make health insurance more affordable and available to small employers and their employees, sole proprietors, and working individuals whose employers do not provide health coverage. The Program's key features are that it: 1) permits carriers to market a specified benefits package that is exempt from state minimum benefits requirements; and 2) subsidizes insurance costs through a state funded reinsurance program for enrollees with high health costs.

Small employers who have not offered coverage in the past 12 months are eligible for this coverage if they meet the following criteria:

- 50 or fewer employees;
- Thirty percent of the employees must earn \$32,000 or less annually;
- Must not have provided coverage in preceding 12 months;
- Fifty percent of the eligible employees must participate; and
- Employer must pay at least 50 percent of the premium.

Sole proprietors and working individuals are eligible if they are living below 250 percent of the federal poverty level (FPL) and have been uninsured for 12 or more months. Eligibility rules for sole proprietors and individuals include:

- Applicant must be a resident of New York;
- The applicant and/or spouse must be employed full-time or part-time or must have been employed sometime during the prior 52 weeks;
- Total gross household income must not exceed 250 percent of the FPL;

- Must have been without insurance for previous 12 months unless due to job change, termination of employer plan and certain other exceptions;
- Must not be eligible for Medicare; and
- Applicant’s employer must not provide and contribute to the cost of employer coverage.

The program specifies a benefits package that is eligible for the subsidy. It includes inpatient and outpatient hospital services; physician services; pre-admission and diagnostic testing; laboratory and x-ray; maternity care; emergency services; therapeutic services; and prescription drugs (now an optional benefit). Home health care, chiropractic care, inpatient and outpatient mental health, and alcohol and substance abuse treatment are not covered. Cost sharing for this benefits package includes:

- Inpatient hospital services \$500 co-pay
- Surgical Services 20% or \$200
- Outpatient surgical facility \$75 co-pay
- Emergency services \$50 co-pay
- Prenatal Services \$10 co-pay
- Well-child visits \$0 co-pay
- All other services \$20 co-pay
- Optional drug \$100 deductible; \$10-\$20 co-pay; \$3,000 max

The reinsurance program covers 90 percent of costs between \$5,000 and \$75,000 for each individual. This is an improvement over the original program which covered 90 percent of spending between \$30,000 and \$100,000.

B. Selected Changes in Eligibility and Coverage

In this analysis, we estimated the effect of five specific changes in eligibility and coverage under the program. These include:

- Increase income eligibility level for sole proprietors and individuals from 250 percent of the FPL to 300 percent of the FPL, with no change to other eligibility rules;
- Eliminate the 12 months without coverage rule for all eligible groups including individuals, sole proprietors and small groups;
- Eliminate the “low-wage small firm requirement” that 30 percent of workers must earn below \$34,000;
- Increase the firm size eligibility requirement from 50 to 100 workers; and
- Expand HNY benefits by aligning the mental health, prescription drug, and cost sharing levels with Family Health Plus.

We estimated the impact of each of these proposals individually and together as a combined scenario.

Figure C-1 presents our estimates of the impact of these provisions on program enrollment and costs. We also show how these expansions in eligibility would affect the premiums for the HNY coverage and the any changes in enrollment that may occur among the currently eligible group in response to these changes in premiums. We also present estimates of the change in the number of uninsured.

We project that total enrollment in the HNY program in calendar year 2006 will be about 117,900 people. This is based upon an analysis of enrollment growth trends through the fourth quarter of 2005.³⁷ We project that total spending for the reinsurance subsidy will rise to \$67.6 million in 2006, which reflects the projected increase in enrollment and an assumed 7.0 percent growth in costs, as projected by the Office of the Actuary of the Centers for Medicare and Medicaid services. We project that the average premium for HNY coverage would be \$199.45 per-member per-month (PMPM), and about \$214.20 PMPM per adult.³⁸

³⁷ "Report on the Healthy NY Program 2005," (report to the State of New York Insurance Department), EP&P Consulting, Inc., December 31, 2001.

³⁸ This is the estimated average premium charged for Health NY coverage, which reflects the reduced cost due to the reinsurance subsidy.

Figure C-1
Estimated Impact of Selected Policy Options for Expanding Eligibility under the Health New York Program ^{a/}

	Net Change in Number Enrolled			Currently Enrolled Who Drop Coverage	Net Change in Total Enrollment	Average Age of Adults	Subsidy Cost (1,000 s)	Average Premium +PMPM ^{b/}		Number of Uninsured
	Sole Proprietors	Individuals	Small Firms					All Enrollees	Adults	
Current Total Program Enrollment and Costs								Average Premium for Current Program ^{c/}		Total Uninsured
Current Law Program Totals Projected to 2006	21,066	66,211	30,648	--	117,955	36.5	\$67,570	\$199.45	\$214.20	2.804 Million
Changes for Each Policy Option if Implemented Alone								Average Premium Under Policy Option		Change in Uninsured
Allow individuals below 300% of FPL to enroll	7,115	22,212	-54	-206	29,271	36.6	\$17,536	\$200.45	\$215.27	-29,271
Eliminate 1 year waiting period ^{d/}	127,267	400,006	396,371	-6,224	923,644	39.9	\$612,847	\$214.93	\$247.45	5,290
Expand eligible firm size from 50 to 100 workers	--	--	2,299	--	2,299	36.5	\$980	\$199.30	\$214.10	-2,299
Eliminate low-wage eligibility requirements for small firms	-56	-200	7,030	-365	6,774	36.7	\$3,043	\$200.94	\$216.08	-6,774
Expand Healthy New York benefits to FHP benefits and Co-pays	-3,197	-9,075	-4,215	-18,570	-16,487	37.7	\$8,540	\$264.26	\$283.80	14,014
Changes From Baseline if Policy Options are Implemented together										
All changes together	157,514	352,780	324,248	-20,292	834,542	39.7	\$743,523	\$274.83	\$296.81	15,307
Total Program Under Combined Policy								Average Premium for Combined Option		Total Uninsured Under Combined Option
Total Program	178,143	421,317	352,715	-20,292	952,175	39.2	\$811,872	\$274.83	\$296.81	2.789 million

a/ All estimates are for calendar year 2006.

b/ Assumes premiums increase 7 percent between July 1, 2005 and July 1, 2006. Average premium in July 1, 2005 was \$189 PMPM. Based upon these assumptions the average premium over the January 1, 2006 period will be \$199.45 PMPM.

c/ This is the estimated average premium charged for Health NY coverage, which reflects the reduced cost due to the reinsurance subsidy.

d/ We estimate that that 85 percent of currently insured people will shift to the program.

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

1. Increase Income Eligibility for Sole Proprietors and Individuals

Increasing the income eligibility level from 250 percent of the FPL to 300 percent of the FPL would result in a net increase in enrollment of about 29,477. This would be partially offset by a reduction in enrollment among the currently enrolled population of about 206 people, resulting in a net increase in enrollment of 29,271 people under this option. The loss of coverage among the currently enrolled group is due to the fact that the newly eligible group is on average slightly older than the currently enrolled group. This would increase the premium resulting in a small number of people (206) discontinuing coverage. This option would reduce the number of uninsured by about 29,271 people overall with a net increase in reinsurance subsidy costs of about \$17.5 million.

2. Eliminate 1-year Waiting Period

The next policy option we examined is to eliminate the one-year waiting period since last insured for all eligibility groups. This would have the effect of making people who currently have private insurance eligible for the program, as long as they meet other eligibility requirements. This includes small firms with low-wage workers, as well as sole proprietors and individuals with incomes below 250 percent of the people. Due to the reduced cost of coverage under the program, we estimate that about 85 percent of these newly eligible people would shift to the program (based upon estimates of the likelihood of workers changing coverage when presented with a lower cost alternative). This would result in an increase in coverage of about 923,600 people, with an increase in subsidy costs of about \$612.8 million.

However, there would be a reduction in coverage under this scenario among those currently enrolled in the program of about 6,200 people. The reason for this is that the newly enrolled group tends to include older workers, which would increase the average age per adult enrollee from 36.5 to 39.9. This shift in enrollment would raise the average premium from \$199.45 PMPM to about \$214.93. This premium increase would result in a reduction in enrollment among those now participating in the program. Consequently, we estimate that this provision would increase the number of uninsured by about 5,300 people overall, reflecting the fact that nearly all of those who would enroll are already covered.

3. Expanded Eligibility for Small Employers

Of the 117,900 people who would be enrolled under the current program, about 30,600 (26 percent) will be people covered through eligible small groups. Extending eligibility to firms with up to 100 workers would increase the number of people enrolled by about 2,300 people. Alternatively, eliminating the low-wage eligibility requirement for small groups would increase enrollment by about 6,800 people. These changes would increase program subsidy costs by \$980,000 and \$3.0 million respectively.

4. Improvements in the Health NY Benefits Package

In the fifth scenario, we estimated the effect of aligning the mental health, prescription drug and cost-sharing amounts in Health NY to the Family Health Plus (FHP) benefits package. We estimate that this would increase the premium for the Health NY benefits package from \$199.45 PMPM to \$274.83 PMPM. However, the effect on enrollment is difficult to estimate, because

while the premium increases, the coverage is also improved. Because the literature is silent on the effect of this combination of changes, we modeled the impact in the following two steps:

- We estimated the number of currently enrolled people who discontinue coverage based upon a Lewin Group multivariate analysis of how the likelihood of buying coverage varies with premium levels. This resulted in about 18,600 Health NY enrollees discontinuing their coverage; and
- Due to the improvements in coverage, some people who do not now purchase insurance may wish to enroll due to the improvement in benefits. For example, people who need prescription drugs may be willing to enroll once this is covered, despite the higher premium. We estimated this increase in enrollment based upon estimates of the net savings to currently eligible but uninsured people and estimates of the effect of price on health services utilization. This resulted in a partially offsetting increase in enrollment of 2,083.

We estimate that this proposal would result in a net reduction in coverage of about 16,500 people. There still would be a net increase in Health NY subsidy costs of about \$8.5 million, reflecting the increase in services covered under the program. However, these estimates are speculative because of a lack of research on how the likelihood of taking coverage is affected by changes in covered services where there is an associated increase in the premium.

5. Combined Program Health NY Expansions

We also estimated the effect of implementing these five proposals simultaneously. We estimate that enrollment would increase enrollment from 117,900 under current law to about 952,200 people. Nearly all of the newly enrolled would be people who have had private coverage in the absence of the program. The number of uninsured would be reduced by about 15,300 people. Reinsurance subsidy costs would increase from \$67.6 million under the current program to \$811.9 million.

B. Changing the Reinsurance Subsidy

The public subsidy under the Health NY program is based upon reinsurance for high cost cases funded by the state. When the Health NY program was established, the reinsurance covered 90 percent of costs between \$30,000 and \$100,000. To encourage greater enrollment, the formula was subsequently changed to cover 90 percent of costs between \$5,000 and \$75,000. The current reinsurance formula covers about 25 percent of all covered health costs for the currently enrolled population, thus reducing the premium by one-quarter.³⁹

Returning to the original reinsurance formula would reduce the subsidy, resulting in reduced enrollment and costs. We estimate that the original formula would cover only about 6.6 percent of costs for enrollees, compared with about 25 percent under the current formula. This would raise the premium from its current projected level of \$199.45 PMPM to about \$244.63 PMPM.

³⁹ We define costs to be the premiums charged to participants plus the amount of the reinsurance subsidy received by plans.

The increase in premium would reduce enrollment by about 10,000 people (*Figure C-2*). Premium subsidy costs would fall from a projected level of \$67.6 million to about \$14.1 million. Under the combined expansion scenario (discussed above) enrollment would also fall by about 11 percent, with subsidy costs dropping by about 80 percent.

Figure C-2
Estimated Enrollment and Costs under Healthy New York
Under Current and Original Reinsurance Models

Category of Eligibility	Current Healthy New York		Healthy New York with Combined Expansions	
	Current Reinsurance Model ^{a/}	Original Reinsurance Model	Current Reinsurance Model	Original Reinsurance Model
Total Enrollment				
Sole Proprietors	21,066	19,254	178,143	162,803
Individuals	66,211	61,708	421,317	385,077
Small Firms	30,648	25,997	352,715	299,098
Total	117,925	106,959	952,175	846,978
Healthy New York Program Costs (millions)				
Program Cost	\$67.6	\$14.1	\$811.9	\$169.2

a/ Assumes current reinsurance of 90 percent of spending between \$5,000 and \$75,00.

b/ Assumes original reinsurance of 90 percent of spending between \$30,000 and \$100,000.

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

C. The Impact of the FHP Buy-in on Health New York Program

In this scenario, we estimate the impact that expansions in eligibility under FHP would have on enrollment in the HNY program. Earlier in this analysis, we estimated the cost and coverage impacts of expansions in the FHP program including: increasing FHP eligibility to 150 percent of the FPL for childless adults; and creating an FHP buy-in for people through 300 percent of the FPL. There would be no premium for people living below 150 percent of the FPL and buy-in premiums would be subsidized on a sliding scale with income for people living between 150 percent and 300 percent of the FPL. Estimates were developed with and without a mandate for people to have coverage.

Using our simulation model, we estimate that enrollment in Health NY would be virtually eliminated if the FHP expansion and buy-in were to be implemented. The reason for this is that nearly all sole proprietors and individuals who are eligible for the FHP buy-in would pay a premium under the Buy-in that is less than what they would pay to enroll in HNY. Similarly, eligible small employers would also find that the cost of coverage for their workforce would be lower under FHP. Also, the FHP benefits package covers more services and has lower co-payments than under the Health NY benefits package.

We estimate that under the individual mandate scenario, HNY enrollment would drop from a projected level of 117,900 people to roughly 4,600 people (*Figure C-3*). Enrollment in Health NY under the combined expansion scenario would be reduced from 952,200 people to about 34,300 people if implemented with the FHP expansion.

Figure C-3
Estimated Enrollment and Costs under Healthy New York
With and Without the FHP Expansion/Buy-in ^{a/}

Category of Eligibility	Current Healthy New York			Healthy New York with Combined Expansions		
	Current Without Buy-in	With Buy-in: Voluntary Coverage	With Buy-in: Mandatory Coverage	Without Buy-in	With Buy-in: Voluntary Coverage	With Buy-in: Mandatory Coverage
Total Enrollment						
Sole Proprietors	21,066	649	973	178,143	5,485	8,186
Individuals	66,211	2,038	2,978	421,317	12,967	18,154
Small Firms	30,678	707	689	352,175	7,926	7,926
Total	117,925	3,394	4,640	952,175	26,378	34,266
Healthy New York Program Costs (millions)						
Program Cost	\$67.6	\$1.9	\$2.6	\$811.9	\$118.5	\$153.8

a/ Includes FHP expansion for adults and the FHP Buy-in assuming no waiting period requirement.
 Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

D. Healthy New York and the Pay-or-Play Program

In an earlier analysis, we estimated the impact of implementing a pay-or-play model where employers have the option of either providing coverage to their workers or paying a payroll tax. People who do not have employer coverage would be able to purchase subsidized coverage through the FHP buy-in. As under the FHP buy-in scenario discussed above, we estimate that enrollment of sole proprietors and individuals in Health NY would be virtually eliminated due to the fact that more comprehensive coverage is available through FHP at a lower price.

However, we estimate that there would be an actual increase in small group enrollment under HNY due to the pay-or-play requirement. We estimate that roughly half of all uninsured workers are in a firm that would decide to provide coverage under the pay-or-play model. Many of these firms would find it less costly to provide coverage through the HNY program. Consequently, HNY small group enrollment would actually increase from a projected level of 30,700 people under current law to 554,900 people under a policy that combines the pay-or-play program, the eligibility expansions for HNY and a mandate for people to have coverage (*Figure C-4*). Total costs under this scenario would increase from \$67.6 million under current law to about \$472.9 million.

Figure C-4
Estimated Enrollment and Costs under Healthy New York
With and Without Pay-Or-Play ^{a/}

Category of Eligibility	Current Healthy New York			Healthy New York with Combined Expansions		
	Without Pay-or-Play Program	With Pay-or-Play: Voluntary Coverage	With Pay-or-Play: Mandatory Coverage	Without Pay-or-Play Program	With Pay-or-Play: Voluntary Coverage	With Pay-or-Play: Mandatory Coverage
Total Enrollment						
Sole Proprietors	21,066	207	325	178,143	1,848	2,704
Individuals	66,211	672	979	421,317	4,120	5,780
Small Firms	30,648	49,904	50,379	352,175	573,665	582,123
Total	117,925	50,783	51,683	952,175	579,633	590,607
Healthy New York Program Costs (millions)						
Program Cost	\$67.6	\$30.1	\$31.4	\$811.9	\$494.1	\$503.3

a/ Assumes Pay-or-Play with FHP expansions and FHP buy-in without a waiting period requirement.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

**Appendix D
Cost and Coverage Estimates**

**Cost and Coverage Estimates of an Individual
Buy-In Program for New York**



**Changes in National Health Spending Under
the Individual Buy-In in 2006 (in millions)**

Change in health services expenditures		\$936
Change in utilization for newly insured	\$1,136	
Change in utilization due to improved coverage	\$310	
Reimbursement Effects	(\$510)	
Payments for uncompensated care	\$262	
Medicaid Payment Rates	(\$1,112)	
Increased cost shifting	\$340	
Change in administrative costs		(\$425)
Insured administration	(\$567)	
Administration of subsidies	\$142	
Total Change in Health Spending		\$511

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

Change in Health Spending by Stakeholder Group Under the Individual Buy-In in 2006 (in millions)

	Without Wage Effects	With Wage Effects	Fully Funded
Federal Government	\$652	(\$508)	(\$508)
State and Local Government	\$3,785	\$3,889	--
Private Employers	(\$4,428)	--	--
Households	\$502	(\$2,870)	\$1,019
Total Health Spending	\$511	\$511	\$511

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

Expenditures Under Public Plans Under the Individual Buy-In (in millions)

	Total Program	Federal	State
Public Programs Costs			
Administrative Simplification	\$970	\$529	\$440
Expansion to 150% of FPL for Childless Adults	\$718	--	\$718
Medicaid Enrollment Due to Buy In	\$439	\$243	\$196
FHP Buy-In Program			
Sliding Scale Premium Subsidies	\$3,529		
Subsidy Administration ^{a/}	\$142		
Medicare Primary Payers	(\$215)		
Total Program Costs	\$5,583	\$772	\$4,811

^{a/} Assumes eligibility determination expense of \$171 per application, which is based upon the average cost of eligibility determination in public programs in New York.

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

Changes in the Federal Spending Under the Individual Buy-In Proposal (in millions)

	Change in Spending
Federal Program Spending Under Proposal	
Federal Share of Spending under Program	\$772
Offsets	
Revenues Due to Wage Effects	\$1,280
Federal Employees	\$0
Workers & Dependents (\$120)	
Wage Effects \$120	
Total Offsets	\$1,280
Net Cost to Federal Government	
Net Costs / (Savings)	(\$508)

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

Change in Health Spending for State and Local Governments Under the Individual Buy-In Proposal in 2006 (in millions)

	Change in Spending
State Share of Program Spending	\$4,811
Offsets	
Savings to Safety-net and Other Programs	\$617
Savings (Costs) for State and Local Workers	\$0.0
Workers and Dependents (\$343)	
Retirees \$0.0	
Wage Effect \$343	
Savings from Healthy New York Program	\$66
Tax Revenue from Wage Effect	\$239
Total Offsets	\$922
Net Cost to State and Local Governments	
Revenue Required to Fund Program	\$3,889

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

Changes in Private Employer Health Benefits Costs by Current Insuring Status Under the Individual Buy-In in 2006 (in millions)

	Currently Insuring Employers	Currently Non-Insuring Employers	All Employers
Private Employer Spending Under Current Policy			
Current			
Workers & Dependents	\$26,680	--	\$26,680
Retirees	\$2,416	--	\$2,416
Total	\$29,096	--	\$29,096
Private Employer Spending Under the Policy			
Health Benefits Under Policy			
Workers & Dependents	\$22,030	--	\$22,030
Retirees	\$2,416	--	\$2,416
Cost Shift Increase	\$152	--	\$152
Total	\$24,598	--	\$24,598
Net Change in Private Employer Spending			
Net Change	(\$4,428)	--	(\$4,428)

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

Impact of Individual Buy-In Proposal on Family Health Spending (in billions)

	Without Wage Effects	With Wage Effects	Fully Funded
Change in Premiums	\$1,139	\$1,139	\$1,139
Change in Out-of-pocket	(\$637)	(\$637)	(\$637)
After Tax Wage Effects a/	--	(\$3,372)	(\$3,372)
Taxes to Fund Program	--	--	\$3,889
Net Change	\$502	(\$2,870)	\$1,019

a/ The increase in after-tax wage income resulting from savings to employers are counted here as a reduction in family health spending.

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

Cost and Coverage Estimates of a Individual Mandate Program for New York



Changes in National Health Spending Under the Individual Mandate Proposal in 2006 (in millions)

Change in health services expenditures			\$2,587
Change in utilization for newly insured		\$2,506	
Change in utilization due to improved coverage		\$470	
Reimbursement Effects		(\$389)	
Payments for uncompensated care		\$517	
Medicaid Payment Rates		(\$1,166)	
Increased cost shifting		\$260	
Change in administrative costs			\$33
Insured administration		(\$232)	
Administration of subsidies		\$265	
Total Change in Health Spending			\$2,620

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

Change in Health Spending by Stakeholder Group Under the Individual Mandate in 2006 (in millions)

	Without Wage Effects	With Wage Effects	Fully Funded
Federal Government	\$1,055	(\$21)	(\$21)
State and Local Government	\$4,733	\$4,903	--
Private Employers	(\$4,093)	--	--
Households	\$925	(\$2,262)	\$2,641
Total Health Spending	\$2,620	\$2,620	\$2,620

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

Expenditures Under Public Plans Under the Individual Mandate (in millions)

	Total Program	Federal	State
Public Programs Costs			
Administrative Simplification	\$970	\$529	\$440
Expansion to 150% of FPL for Childless Adults	\$718	--	\$718
Medicaid Enrollment Due to Individual Mandate			
Parents and Children	\$733	\$640	\$982
Childless Adults	\$889		
FHP Buy-In Program			
Sliding Scale Premium Subsidies	\$3,605		
Premium Cap Subsidies	\$441		
Subsidy Administration ^{a/}	\$265		
Medicare Primary Payer	(\$217)		
Total Program Costs	\$7,404	\$1,169	\$6,235

^{a/} Assumes eligibility determination expense of \$171 per application, which is based upon the average cost of eligibility determination in public programs in New York.
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

Changes in the Federal Spending Under the Individual Mandate Proposal (in millions)

	Change in Spending
Federal Program Spending Under Proposal	
Federal Share of Spending under Program	\$1,169
Offsets	
Revenues Due to Wage Effects	\$1,190
Federal Employees	\$0
Workers & Dependents (\$114)	
Wage Effects \$114	
Total Offsets	\$1,190
Net Cost to Federal Government	
Net Costs / (Savings)	(\$21)

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

Change in Health Spending for State and Local Governments Under the Individual Mandate Proposal in 2006 (in millions)

	Change in Spending
State Share of Program Spending	\$6,235
Offsets	
Savings to Safety-net and Other Programs	\$1,047
Savings (Costs) for State and Local Workers	\$0.0
Workers and Dependents (\$389)	
Retirees \$0.0	
Wage Effect \$389	
Savings from Healthy New York Program	\$66
Tax Revenue from Wage Effect	\$219
Total Offsets	\$1,332
Net Cost to State and Local Governments	
Revenue Required to Fund Program	\$4,903

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

Changes in Private Employer Health Benefits Costs by Current Insuring Status Under the Individual Mandate in 2006 (in millions)

	Currently Insuring Employers	Currently Non-Insuring Employers	All Employers
Private Employer Spending Under Current Policy			
Current			
Workers & Dependents	\$26,680	--	\$26,680
Retirees	\$2,416	--	\$2,416
Total	\$29,096	--	\$29,096
Private Employer Spending Under the Policy			
Health Benefits Under Policy			
Workers & Dependents	\$22,276	\$156	\$22,432
Retirees	\$2,416	--	\$2,416
Cost Shift Increase	\$155	--	\$155
Total	\$24,847	\$156	\$25,003
Net Change in Private Employer Spending			
Net Change	(\$4,249)	\$156	(\$4,093)

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

Impact of Individual Mandate Proposal on Family Health Spending (in billions)

	Without Wage Effects	With Wage Effects	With Wage Effects
Change in Premiums	\$2,418	\$2,418	\$2,418
Change in Out-of-pocket	(\$1,493)	(\$1,493)	(\$1,493)
After Tax Wage Effects^{a/}	--	(\$3,187)	(\$3,187)
Taxes to Fund Program	--	--	\$4,903
Net Change	\$925	(\$2,262)	\$2,641

a/ The increase in after-tax wage income resulting from savings to employers are counted here as a reduction in family health spending.

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

Cost and Coverage Estimates of a Voluntary Pay or Play Program for New York



Changes in National Health Spending Under the Voluntary Pay or Play Proposal in 2006 (in millions)

Change in health services expenditures		\$1,138
Change in utilization for newly insured	\$1,083	
Change in utilization due to improved coverage	\$446	
Managed Competition Effect	(\$8)	
Reimbursement Effects	(\$383)	
Payments for uncompensated care	\$269	
Medicaid Payment Rates	(\$907)	
Increased cost shifting	\$255	
Change in administrative costs		(\$230)
Insured administration	(\$321)	
Administration of subsidies	\$91	
Total Change in Health Spending		\$908

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

Change in Health Spending by Stakeholder Group Under the Voluntary Pay or Play Proposal in 2006 (in millions)

	Without Wage Effects	With Wage Effects	Fully Funded
Federal Government	\$446	\$356	\$356
State and Local Government	\$2,207	\$2,377	--
Private Employers	(\$841)	--	--
Households	(\$904)	(\$1,825)	\$552
Total Health Spending	\$908	\$908	\$908

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

Expenditures Under Public Plans Under the Voluntary Pay or Play Proposal (in millions)

	Total Program	Federal	State
Public Programs Costs			
Administrative Simplification	\$970	\$529	\$440
Expansion to 150% of FPL for Childless Adults	\$718	--	\$718
Medicaid Enrollment Due to Pay or Play	\$65	\$29	\$36
FHP Buy-In Program			
Sliding Scale Premium Subsidies	\$2,854		
Premium Cap Subsidies	\$48		
Subsidy Administration ^{a/}	\$91		
Medicare Primary Payer	(\$153)		
Total Program Costs	\$4,593	\$558	\$4,035

^{a/} Assumes eligibility determination expense of \$171 per application, which is based upon the average cost of eligibility determination in public programs in New York.

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

Changes in the Federal Spending Under the Voluntary Pay or Play Proposal (in millions)

	Change in Spending
Federal Program Spending Under Proposal	
Federal Share of Spending under Program	\$558
Offsets	
Revenues Due to Wage Effects	\$202
Federal Employees	\$0
Workers & Dependents (\$112)	
Wage Effects \$112	
Total Offsets	\$202
Net Cost to Federal Government	
Net Costs / (Savings)	\$356

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

Change in Health Spending for State and Local Governments Under the Voluntary Pay or Play Proposal in 2006 (in millions)

	Change in Spending
State Share of Program Spending	\$4,035
Offsets	
Savings to Safety-net and Other Programs	\$593
Savings (Costs) for State and Local Workers Workers and Dependents (\$189)	\$0.0
Retirees \$0.0	
Wage Effect \$189	
Payroll Taxes	\$1,007
Savings from Healthy New York Program	\$39
Tax Revenue from Wage Effect	\$19
Total Offsets	\$1,658
Net Cost to State and Local Governments	
Revenue Required to Fund Program	\$2,377

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

Changes in Private Employer Health Benefits Costs by Current Insuring Status Under the Voluntary Pay or Play Proposal in 2006 (in millions)

	Currently Insuring Employers	Currently Non-Insuring Employers	All Employers
Private Employer Spending Under Current Policy			
Current			
Workers & Dependents	\$26,680	--	\$26,680
Retirees	\$2,416	--	\$2,416
Total	\$29,096	--	\$29,096
Private Employer Spending Under the Policy			
Health Benefits Under Policy			
Workers & Dependents	\$24,578	\$124	\$24,702
Retirees	\$2,416	--	\$2,416
Cost Shift Increase	\$155	--	\$155
Payroll Taxes	\$186	\$796	\$982
Total	\$27,335	\$920	\$28,255
Net Change in Private Employer Spending			
Net Change	(\$1,761)	\$920	(\$841)

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

Impact of Voluntary Pay or Play Proposal on Family Health Spending (in billions)

	Without Wage Effects	With Wage Effects	With Wage Effects
Change in Premiums	(\$158)	(\$158)	(\$158)
Change in Out-of-pocket	(\$746)	(\$746)	(\$746)
After Tax Wage Effects ^{a/}	--	(\$921)	(\$921)
Taxes to Fund Program	--	--	\$2,377
Net Change	(\$904)	(\$1,825)	\$552

a/ The increase in after-tax wage income resulting from savings to employers are counted here as a reduction in family health spending.

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

Cost and Coverage Estimates of a Mandatory Pay or Play Program for New York



Changes in National Health Spending Under the Mandatory Pay or Play Proposal in 2006 (in millions)

Change in health services expenditures		\$2,707
Change in utilization for newly insured	\$2,502	
Change in utilization due to improved coverage	\$450	
Managed Competition Effect	(\$8)	
Reimbursement Effects	(\$237)	
Payments for uncompensated care	\$514	
Medicaid Payment Rates	(\$909)	
Increased cost shifting	\$158	
Change in administrative costs		\$28
Insured administration	(\$179)	
Administration of subsidies	\$207	
Total Change in Health Spending		\$2,735

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

Change in Health Spending by Stakeholder Group Under the Mandatory Pay or Play Proposal in 2006 (in millions)

	Without Wage Effects	With Wage Effects	Fully Funded
Federal Government	\$919	\$848	\$848
State and Local Government	\$2,706	\$2,903	--
Private Employers	(\$613)	--	--
Households	(\$277)	(\$1,016)	\$1,887
Total Health Spending	\$2,735	\$2,735	\$2,735

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

Expenditures Under Public Plans Under the Mandatory Pay or Play Proposal (in millions)

	Total Program	Federal	State
Public Programs Costs			
Administrative Simplification	\$970	\$529	\$440
Expansion to 150% of FPL for Childless Adults	\$718	--	\$718
Medicaid Enrollment Due to Pay or Play Parents and Children \$533 Childless Adults \$696	\$1,229	\$500	\$729
FHP Buy-In Program Sliding Scale Premium Subsidies \$3,020 Premium Cap Subsidies \$27 Subsidy Administration ^{a/} \$207 Medicare Primary Payer (\$160)	\$3,094	--	\$3,094
Total Program Costs	\$6,011	\$1,029	\$4,982

^{a/} Assumes eligibility determination expense of \$171 per application, which is based upon the average cost of eligibility determination in public programs in New York.

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

Changes in the Federal Spending Under the Mandatory Pay or Play Proposal (in millions)

	Change in Spending
Federal Program Spending Under Proposal	
Federal Share of Spending under Program	\$1,029
Offsets	
Revenues Due to Wage Effects	\$181
Federal Employees	\$0
Workers & Dependents (\$110)	
Wage Effects \$110	
Total Offsets	\$181
Net Cost to Federal Government	
Net Costs / (Savings)	\$848

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

Change in Health Spending for State and Local Governments Under the Mandatory Pay or Play Proposal in 2006 (in millions)

	Change in Spending
State Share of Program Spending	\$4,982
Offsets	
Savings to Safety-net and Other Programs	\$986
Savings (Costs) for State and Local Workers	\$0.0
Workers and Dependents (\$217)	
Retirees \$0.0	
Wage Effect \$217	
Payroll Taxes	\$1,007
Savings from Healthy New York Program	\$66
Tax Revenue from Wage Effect	\$20
Total Offsets	\$2,079
Net Cost to State and Local Governments	
Revenue Required to Fund Program	\$2,903

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

Changes in Private Employer Health Benefits Costs by Current Insuring Status Under the Mandatory Pay or Play Proposal in 2006 (in millions)

	Currently Insuring Employers	Currently Non-Insuring Employers	All Employers
Private Employer Spending Under Current Policy			
Current			
Workers & Dependents	\$26,680	--	\$26,680
Retirees	\$2,416	--	\$2,416
Total	\$29,096	--	\$29,096
Private Employer Spending Under the Policy			
Health Benefits Under Policy			
Workers & Dependents	\$24,690	\$305	\$24,995
Retirees	\$2,416	--	\$2,416
Cost Shift Increase	\$90	--	\$90
Payroll Taxes	\$186	\$796	\$982
Total	\$27,382	\$1,101	\$28,483
Net Change in Private Employer Spending			
Net Change	(\$1,714)	\$1,101	(\$613)

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

Impact of Mandatory Pay or Play Proposal on Family Health Spending (in billions)

	Without Wage Effects	With Wage Effects	With Wage Effects
Change in Premiums	\$1,189	\$1,189	\$1,189
Change in Out-of-pocket	(\$1,466)	(\$1,466)	(\$1,466)
After Tax Wage Effects ^{a/}	--	(\$739)	(\$739)
Taxes to Fund Program	--	--	\$2,903
Net Change	(\$277)	(\$1,016)	\$1,887

^{a/} The increase in after-tax wage income resulting from savings to employers are counted here as a reduction in family health spending.

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

Cost and Coverage Estimates of a Modest Employer Assessment Program with Individual Mandate for New York



Changes in National Health Spending Under the Employer Assessment with Mandatory Coverage Proposal in 2006 (in millions)

Change in health services expenditures		\$2,637
Change in utilization for newly insured	\$2,506	
Change in utilization due to improved coverage	\$468	
Reimbursement Effects	(\$337)	
Payments for uncompensated care	\$510	
Medicaid Payment Rates	(\$1,072)	
Increased cost shifting	\$225	
Change in administrative costs		(\$12)
Insured administration	(\$262)	
Administration of subsidies	\$250	
Total Change in Health Spending		\$2,625

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

Change in Health Spending by Stakeholder Group Under the Employer Assessment with Mandatory Coverage Proposal in 2006 (in millions)

	Without Wage Effects	With Wage Effects	Fully Funded
Federal Government	\$1,043	\$383	\$383
State and Local Government	\$4,182	\$4,322	--
Private Employers	(\$3,161)	--	--
Households	\$561	(\$2,080)	\$2,242
Total Health Spending	\$2,625	\$2,625	\$2,625

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

Expenditures Under Public Plans Under the Employer Assessment with Mandatory Coverage Proposal (in millions)

	Total Program	Federal	State
Public Programs Costs			
Administrative Simplification	\$970	\$529	\$440
Expansion to 150% of FPL for Childless Adults	\$718	--	\$718
Medicaid Enrollment Due to Pay or Play Parents and Children \$716 Childless Adults \$869	\$1,585	\$625	\$960
FHP Buy-In Program Sliding Scale Premium Subsidies \$3,521 Premium Cap Subsidies \$284 Subsidy Administration ^{a/} \$250 Medicare Primary Payer (\$217)	\$3,838	--	\$3,838
Total Program Costs	\$7,111	\$1,154	\$5,957

^{a/} Assumes eligibility determination expense of \$171 per application, which is based upon the average cost of eligibility determination in public programs in New York.

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

Changes in the Federal Spending Under the Employer Assessment with Mandatory Coverage Proposal (in millions)

	Change in Spending
Federal Program Spending Under Proposal	
Federal Share of Spending under Program	\$1,154
Offsets	
Revenues Due to Wage Effects	\$771
Federal Employees	\$0
Workers & Dependents (\$111)	
Wage Effects \$111	
Total Offsets	\$771
Net Cost to Federal Government	
Net Costs / (Savings)	\$383

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

Change in Health Spending for State and Local Governments Under the Employer Assessment with Mandatory Coverage Proposal in 2006 (in millions)

	Change in Spending
State Share of Program Spending	\$5,957
Offsets	
Savings to Safety-net and Other Programs	\$1,019
Savings (Costs) for State and Local Workers	\$0.0
Workers and Dependents (\$272)	
Retirees \$0.0	
Wage Effect \$272	
Employer Assessments	\$418
Savings from Healthy New York Program	\$66
Tax Revenue from Wage Effect	\$132
Total Offsets	\$1,635
Net Cost to State and Local Governments	
Revenue Required to Fund Program	\$4,322

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

Changes in Private Employer Health Benefits Costs by Current Insuring Status Under the Employer Assessment with Mandatory Coverage Proposal in 2006 (in millions)

	Currently Insuring Employers	Currently Non-Insuring Employers	All Employers
Private Employer Spending Under Current Policy			
Current			
Workers & Dependents	\$26,680	--	\$26,680
Retirees	\$2,416	--	\$2,416
Total	\$29,096	--	\$29,096
Private Employer Spending Under the Policy			
Health Benefits Under Policy			
Workers & Dependents	\$22,823	\$164	\$22,987
Retirees	\$2,416	--	\$2,416
Cost Shift Increase	\$136	--	\$136
Employer Assessment	\$145	\$251	\$397
Total	\$25,520	\$415	\$25,935
Net Change in Private Employer Spending			
Net Change	(\$3,576)	\$415	(\$3,161)

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

Impact of Mandatory Employer Assessment with Mandatory Coverage on Family Health Spending (in billions)

	Without Wage Effects	With Wage Effects	With Wage Effects
Change in Premiums	\$1,981	\$1,981	\$1,981
Change in Out-of-pocket	(\$1,421)	(\$1,421)	(\$1,421)
After Tax Wage Effects ^{a/}	--	(\$2,641)	(\$2,641)
Taxes to Fund Program	--	--	\$4,322
Net Change	\$561	(\$2,080)	\$2,242

a/ The increase in after-tax wage income resulting from savings to employers are counted here as a reduction in family health spending.

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