



**The Kerry-Bush Health Care Proposals: A Characterization  
and Comparison of their Impacts on Connecticut**

**Technical Appendix**

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## Technical Appendix: Detailed Methodology

CCEA estimates the change in number of insured, total cost, federal cost and state cost, where applicable, for each candidate's slate of proposals as they apply to Connecticut residents. To accomplish this task, we assume that Connecticut residents' decision of whether to purchase health insurance and what plan to purchase depends on the price of a particular insurance plan relative to other plans and the purchaser's household income. We define the price of insurance for a household as out-of-pocket premium cost, excluding other out-of-pocket expenses such as co-pays and deductibles, employer contributions to premiums, costs of travel, and opportunity costs. In doing so, CCEA does not estimate changes in total resource usage within the health care system based on these policies. Therefore, the cost estimates presented here are actually lower than they would be were these other costs incorporated.

CCEA develops models that quantify the consumer responses described above for each policy proposed by the candidates. Estimates are for a 'typical' one-year implementation based on current Connecticut demographics. In general terms, we analyze each individual policy as follows:

1) *Establish baseline situation without candidate's proposed policy.* In this step, we draw primarily on three data sources: U.S. Census Current Population Survey (CPS), Medical Expenditure Panel Survey (MEPS), and Kaiser Family Foundation (KFF) State Health Facts Online. When necessary to account for eligibility across multiple policies, results from another of a candidate's proposals may be incorporated into the baseline (see discussion below). We use the same data across policies when possible.

2) *Estimate how policy affects prices across different insurance types.* As discussed above, we define the price of insurance as the premium cost. We use the specific policy definitions provided by the candidates to determine how these costs change following implementation. In some cases, lack of detail regarding a specific policy requires us to make additional assumptions. In this case, we draw from existing literature to determine

the most reasonable effects, holding assumptions consistent across analyses when possible.

3) *Apply appropriate elasticities and take-up rates to price changes to quantify consumer response.* In this step, CCEA uses price elasticities to quantify how demand changes for a particular type of insurance as its price changes. We also use take-up rates to determine enrollment out of the eligible when appropriate. In both cases, we survey existing theoretical and professional literature to determine the most appropriate values. Whenever possible, we use consistent values across both candidates' proposals. When developing the models for each policy, CCEA initially considered a range of elasticities and take-up rates. The models reported here represent our most reasonable estimates from this process.

4) *Calculate deviations from baseline of the number insured, number enrolled, private costs, and federal costs.* In the final step, we extract from the model relevant results to include in the report.

Because a single individual or household may be eligible for multiple policies proposed by either Bush or Kerry, analyzing each candidate's policies separately and totaling the results would double count individuals and households eligible for multiple policies. To account for this potential overlap among policies, CCEA determines which portions of Connecticut's populations (if any) qualify for multiple programs proposed by either candidate. We then use price information to determine how the overlapping population ranks its possible insurance choices within each candidate's plan. Based on this ranking, we run our models sequentially, incorporating the results from one policy analysis into the baseline for another, thus calculating the 'net' effects of a candidate's entire slate of proposals. This procedure is different for each candidate, however, as the details depend on the extent of the overlap among policies and the number of policies on that candidate's platform. By calculating the net effect of all of a candidate's policies we implicitly assume that, if elected, all of that candidate's proposals would be passed into law. If only a subset of the proposals is enacted, our results underestimate the total

affect. For reference, Table 14 at the end of this Technical Appendix provides detail on the current federal poverty guidelines by household size and age.

## Detailed Analysis of the Bush Health Care Proposals

We analyze the net effect on Connecticut of three policies proposed by the Bush Administration:

*Association Health Plans.* In an effort to encourage small businesses to offer health insurance, President Bush proposes legislation that would allow firms with fewer than 50 employees to purchase health care through regional or national Association Health Plans. Association Health Plans reduce premiums by pooling administrative costs and increasing purchasing power. In Connecticut, statewide Association Health Plans already exist. The new element in Bush's proposal is to exempt Association Health Plans from Connecticut state mandates on benefits, coverage and premium compression in order to allow regional or national plans.<sup>1</sup> Association Health Plans further reduce the insurance cost to firms of insurance by allowing insurers to reduce current levels of coverage and restrict eligible populations.

*Tax Credit.* President Bush proposes a tax credit for 'low income' households (see Table 1 for definitions) who purchase non-group health insurance. Current federal law treats employers' expenditures for health insurance premiums for their employees as a business expenses, and thus they are not taxed. Moreover, current tax policy does not count the value of such a fringe benefit as income to the employee. However, a person purchasing non-group health insurance must pay premiums with after-tax money. The differential tax burden imposes a significant additional cost on households that must purchase their insurance directly. Partially addressing this inconsistency in tax treatment, the Bush proposal intends to reduce the tax burden for some households purchasing non-group

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<sup>1</sup> Congressional Budget Office (2000)

health insurance. Under Bush’s plan, households purchasing non-group health insurance are eligible for a tax credit according to the income and family-type schedule in Table 1.<sup>2</sup>

Table 1: Tax Credit Eligibility Guidelines

<b>Household Type</b>	<b>Modified Adjusted Gross Income</b>	<b>Bush’s Proposed Tax Credit</b>
One adult, no dependents	\$15,000 or less	\$1,000
	\$22,500	\$500
	more than \$30,000	\$0
One adult with dependents	\$25,000 or less	\$1000
	\$32,500	\$500
	more than \$40,000	\$0
Two adults, no dependents	\$25,000 or less	\$2000
	\$42,500	\$1000
	more than \$60,000	\$0
Two adults, one dependent	\$25,000 or less	\$2500
	\$42,500	\$1250
	more than \$60,000	\$0
Two adults, multiple dependents	\$25,000 or less	\$3000
	\$42,500	\$1500
	more than \$60,000	\$0

*Tax Deduction.* Finally, President Bush proposes a tax deduction designed to encourage enrollment in Health Savings Accounts. Health Savings Accounts, available since January 1<sup>st</sup> 2004 through Medicare drug legislation, are only available to individuals or households purchasing high deductible health insurance plans (minimum \$1,000 deductible for individuals and \$2,000 deductible for families). Under the Bush proposal, individuals who purchase high-deductible non-group<sup>3</sup> health insurance and enroll in a Health Savings Account may deduct the total value of health care premiums from their taxable income.<sup>4</sup> The deduction is available regardless of whether the filer itemizes deductions.

<sup>2</sup> From the U.S. Treasury Department, General Explanations of the Administration’s Fiscal Year 2005 Revenue Proposals, February 2004, pp. 21-24.

<sup>3</sup> Deduction is not available to households obtaining health coverage through their employer, even if plan qualifies for HSA.

<sup>4</sup> From the U.S. Treasury Department, General Explanations of the Administration’s Fiscal Year 2005 revenue Proposals, February 2004, pp. 25-26.

To calculate the net effect of these proposals, we first determine what portions of Connecticut’s population would be eligible for multiple policies. We begin by calculating the value of the proposed tax deduction for different household types at various income levels. Using estimated high deductible premiums<sup>5</sup>, we simulate tax returns for Connecticut households of various incomes<sup>6</sup>. Simulation results indicate that the “value” of the tax deduction becomes nonzero for households at roughly 200% of the Federal Poverty Line. The tax credit policy, by contrast, reduces to zero at approximately the same income levels. We therefore assume that the populations eligible for the tax credit and tax deduction are mutually exclusive in Connecticut. However, the only eligibility requirement for Association Health Plans is that the individual work for a small business that offers such a plan. Because those eligible for Association Health Plan insurance fall on a spectrum of income level, we assume that some portion of Connecticut’s population will become eligible for that type of insurance and either the tax credit or tax deduction if all three policies were enacted simultaneously.

When considering the household choice between plans, CCEA considers only the likely household share of premium costs. Because employers usually contribute roughly 80% of total premiums, the households share of premium costs are always lower for Association Health Plan insurance than non-group insurance. It follows that any household eligible for both Association Health Plan insurance and either the tax credit or tax deduction will favor the Association Health Plan policy over a non-group plan. As a result, when we analyze the three policies separately, we analyze Association Health Plans first, and use enrollment results to adjust the baseline of the tax credit and tax deduction analyses.

### Association Health Plan Model Specification

CCEA models the effect of Association Health Plans on Connecticut’s small businesses. We draw from previous research by the Congressional Budget Office (2000), Gruber (1994), Jensen and Gabel (1992), and others to estimate likely responses to the implementation of Bush’s proposed Association Health Plan legislation. CCEA applies

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<sup>5</sup> Estimated using QuickQuote.com for healthy 45 yr. old Connecticut male with various family types.

<sup>6</sup> Simulation by TAXSIM website: <http://www.nber.org/~taxsim/taxsim-calc/index.html>

the consumer responses determined by the Congressional Budget Office to 2002 Connecticut Medical Expenditure Panel Survey data. In particular, we assume that premiums for Association Health Plans would decrease by 13% but that non-Association Health Plan premiums would increase by 2% due to adverse selection. In response to these price changes, CCEA assumes that some employees previously purchasing non-Association Health Plan insurance would switch and that some previously uninsured would gain insurance. Following the Congressional Budget Office (2000), CCEA assumes 20% of small business employees previously purchasing non-Association Health Plan coverage would switch to the plans (a cross-price elasticity of 1.538), and that enrollment in these plans would increase by an additional 14.3%, but 2.2% of previously non-Association Health Plan covered employees would lose coverage due to adverse selection (a demand elasticity of -1.1).

### Association Health Plan: Results

Our analysis predicts that federal AHP legislation would reduce the number of Connecticut’s uninsured by 2,869 (see Table 2). Private costs include premium costs for all those enrolled in Association Health Plan insurance plus the additional cost incurred by those in traditional employer-sponsored insurance plans. There are no federal costs associated with this program.

Table 2: Results for Bush’s Proposed Association Health Plan legislation

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost
Results for Association Health Plan Policy	59,667	2,869	\$255.5	\$0

CCEA estimates that Association Health Plans reduce costs primarily through the exemption in state mandates. However, because Association Health Plans can offer health plans with less coverage, firms with healthier than average employees are more likely to switch to Association Health Plan insurance. Through adverse selection, costs increase for employees in small firms who continue to purchase non-Association Health Plan health insurance. In addition, allowing firms to bypass state mandates for coverage

could increase the number of uninsured who would have to find a Connecticut employer who does not opt for Association Health Plan or seek non-group coverage or go on Medicaid. While Connecticut has more state mandates than average, we cannot say for sure that Connecticut would be disproportionately affected as far as quality of coverage. Different state mandates have different costs and affect coverage in complicated ways; quantifying these effects is beyond the scope of the present work. For a comparison of Connecticut's mandatory health care laws with other states, see General Accounting Office (1996) or BlueCross-BlueShield (2003) or Appendix II. Under this proposed policy, CCEA predicts that small firms are, on average, better off than under Bush's proposal through the cost savings, increased coverage, and healthier, more productive employees.

### Tax Credit Model Specification

CCEA estimates the impact of Bush's tax credit proposal on Connecticut residents by constructing models simulating consumer response to price changes resulting from the tax credit. The model uses as its base 2002 data describing insurance type for Connecticut residents, including uninsured.<sup>7</sup> However, we account for those eligible for both the tax credit and Association Health Plans. The model described in the previous section predicts that 59,667 people would be enrolled in Association Health Plans. Of these, 56,798 were previously enrolled in traditional employer-based insurance. Thus, to calculate the net effect of both policies, we reduce the baseline number of people enrolled in traditional employer-based coverage by 56,798 to reflect that these people would not consider the tax credit.

In constructing the model, we draw primarily on research by Gruber (2000) and Marquis & Long (1995) to estimate how Connecticut residents respond to the proposed tax credit. Several responses are possible. Gruber (2000) suggests that consumers view the tax credit as a price reduction in non-group insurance, and as a result, any of the following consumer actions are possible:

- Some previously uninsured purchase non-group insurance because the tax credit makes it affordable

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<sup>7</sup> Kaiser Family Foundation State Health Facts Online, Distribution of Nonelderly by Insurance Status, 2002.



- Some previously utilizing Medicaid switch to non-group insurance to have access to better care
- Many of those previously purchasing non-group insurance utilize the tax credit simply to reduce their cost of insurance
- Some previously covered through employer-based plans lose coverage because firms, recognizing that the tax credits make alternate coverage more affordable: (1) might drop coverage outright, or (2) might reduce their contribution to premiums, causing some employees to drop coverage
- If those previously purchasing employer-based coverage lose insurance for the two reasons above, they may switch to non-group, depending on relative costs, or remain uninsured.

CCEA assesses of the likelihood of the consumer responses predicted by Gruber (2000), and we estimate the magnitude of this response as either a price elasticity or a take-up rate. We assume that all consumer responses listed above occur to some extent, including the reaction of employers. We assume a price elasticity of 0.4 to predict enrollment among the previously uninsured.<sup>8</sup> We further assume that the take-up rate from the Medicaid pool is 3.7%, and that take-up among those previously purchasing non-group meeting the income requirements for the credit is 65%. We assume employers reduce premium contributions by 0.5% and that 0.5% of firms drop coverage, but that 90% of those dropped switch to non-group coverage and utilize the tax credit.

### Tax Credit: Results

Our simulation suggests that the tax credit would increase insurance coverage in Connecticut by 9,328 (see Table 3). The component of the cost to the federal government generated in Connecticut in the first year totals \$62.4 million. Total cost is calculated as the total annual premiums paid by those utilizing the tax credit. Note that the difference between total cost and federal cost is the private cost to individuals and firms. There is no direct cost to states.

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<sup>8</sup> Marquis & Long (1995) provides a range of elasticities from -0.31 to -0.54

Table 3: Results for Bush’s Proposed Tax Credit

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost (million)
Results for Tax Credit Policy	49,536	9,328	\$275.8	\$62.4

By design, the proposed tax credit policy would primarily affect Connecticut’s low-income residents. Households below roughly 200% of the federal poverty line are eligible for the credit, and households at roughly 100% of the federal poverty line are eligible for the maximum proposed credit. The model described above predicts a decrease in the uninsured rate and a net switch from Medicaid to non-group insurance. The proposed policy will indirectly affect the Connecticut State government, because Connecticut contributes to Medicaid, and because Connecticut incurs costs from uninsurance. Connecticut will thus benefit from the proposed Bush tax credit policy.<sup>9</sup>

### Tax Deduction: Model Specification

To predict the net effects of the proposed tax deduction on Connecticut, CCEA develops simulation models similar to the tax credit models described above. As with the tax credit model, we adjust (using the same numbers) the baseline to account for those enrolled in Association Health Plan insurance that would not consider non-group insurance in conjunction with the tax deduction.

Because Health Savings Accounts are only recently available, there is limited research on how consumers will respond to high deductible plans and Health Savings Accounts without the additional tax deduction. The only empirical evidence describes response to the Archer Medical Savings Account pilot program (General Accounting Office, 1998). This report indicates that participation in Medical Savings Accounts (which are slightly different than Health Savings Accounts) was extremely limited nationwide. There is, however, some theoretical research on Health Savings Accounts that enables us to make informed assumptions in our models. The American Academy of

<sup>9</sup> See CCEA, “Uninsured in Connecticut: The Costs and Consequences of Living Without Insurance In Connecticut.”

Actuaries (1995) predicted consumer response to possible Health Savings Account designs. Zabinski et al. (1999) and Goldman et al. (2000) each simulated market-wide responses to Medical Savings Accounts suddenly being available to large groups of employees. None of this research includes the tax deduction in the analysis. Only the Center on Budget and Policy Priorities (2004) analyzes the tax deduction separately, reporting the results of a micro-simulation performed by Gruber (personal communication to Center on Budget and Policy Priorities).

Previous research suggests that the tax deduction will induce the following market responses:

- Some previously uninsured will take-up high-deductible non-group in response to the tax deduction
- Many of those previously purchasing non-group insurance will change their deductible to become eligible for a Health Savings Account
- Of those that increase their deductible, most will utilize the tax deduction
- Some healthier than average individuals and households will switch from employer based coverage to high-deductible non-group coverage to enjoy the lower premiums, Health Savings Account, and tax deduction.
- Because those switching out of employer based coverage are healthier than average, premiums will increase for the remainder in that group. Due to this adverse selection, some previously insured through their employer will drop coverage.

CCEA develops a model based on the consumer and market responses suggested in the literature. As with the tax credit models, we use 2002 Connecticut data<sup>10</sup> as our base. However, because the value of the deduction depends on income, we use Current Population Survey data to determine the fraction of each insurance group that qualifies for a nonzero deduction. Consumer responses are applied only to these groups. We assume households qualifying for Medicaid have incomes too low to benefit from the tax deduction. More specifically, we assume a price elasticity of 0.1 to estimate the number of previously uninsured taking up high-deductible non-group insurance. We follow Goldman et al. (2000) by assuming that 36% of those previously purchasing non-group insurance raise their deductible to qualify for the HSA, and that 75% of those changing their deductible use the tax deduction. Following the Congressional Budget Office

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<sup>10</sup> Kaiser Family Foundation State Health Facts Online, Distribution of Nonelderly by Insurance Status, 2002.

(2000), we estimate that adverse selection induces a 2% price increase in premiums for employer based insurance.

### Tax Deduction: Results

Table 4: Results for Bush’s Proposed Tax Deduction

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost (million)
Results for Tax Deduction Policy	82,936	-749	\$485.8	\$79.2

Table 4 displays the simulated impacts of the tax deduction policy on Connecticut. Federal costs are calculated as the average deduction multiplied by the number utilizing the deduction, and total costs represent the total premiums paid by those utilizing the deduction. As with the tax credit results, the difference between total cost and federal cost is the private cost to individuals and firms. There is no direct cost to states.

Because this policy is a tax deduction (as opposed to a tax credit), the value of the deduction rises with income. For example, the deduction has no value to a single parent with one dependent with \$25,000 adjusted gross income per year because that individual pays no federal income tax. The tax credit is most valuable to individuals and households in the highest Federal income tax bracket. Therefore, those most likely to enroll in Health Savings Accounts and use the tax deduction are middle and upper income, depending on family size. These income requirements also limit the effectiveness of the policy on increasing the ranks of the insured. Only roughly 50,000 of the 350,000 uninsured in Connecticut have incomes high enough to qualify for the deduction. However, because wealthier households are, on average, healthier than lower income families,<sup>11</sup> those enrolling in Health Savings Accounts and using the deduction will be, on average, healthier, leaving the insurance pools they left, on average, less healthy. This process, known as adverse selection, causes premiums to rise for employer-based coverage causing some firms and households to forego coverage. These phenomena results in a net *increase* in uninsured of 749, despite a high enrollment of nearly 83,000.

Because Connecticut incurs costs for each uninsured in the state, this policy will impose an indirect net increase in costs to the state government.

## Kerry Health Care Plan

The following section analyzes the health insurance plan proposed by Senator Kerry. His proposals include a small business tax credit, the stop-loss reinsurance pool, a Medicaid expansion, tax credits for the unemployed, ‘near-elderly’, and an health insurance expense cap. Several proposals incorporate the Kerry plan’s proposed Congressional Health Plan, an health insurance ‘mart’ or ‘exchange’ based on the current federal employees’ health benefit plan. These policies are more comprehensive than those proposed by President Bush. The Kerry proposals enhance all major facets of the current health insurance system.

### I. Small Business Tax Credit and Congressional Health Plan

For firms with less than 50 workers, Kerry proposes a refundable tax credit of 50% of employer health insurance premium payments. To qualify, firms must contribute at least 50% of the total premium. Small businesses’ employees would be eligible to purchase insurance from a national health insurance ‘exchange’ or market. Modeled on the current Federal Employees Health Benefit Plan, the Congressional Health Plan would spread risk and administrative costs over a broader cohort. The Congressional Health Plan would increase competition among insurers potentially increasing coverage at lower premiums.

### Small Business Tax Credit and Congressional Health Plan: Model Specification

In Connecticut, there are 60,755 firms with fewer than 50 employees (MEPS, 2002).<sup>12</sup> Of these, 28,859 (47.5%) small firms do not offer health insurance to their

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<sup>11</sup> See CCEA, “Uninsured in Connecticut: The Costs and Consequences of Living Without Insurance In Connecticut

<sup>12</sup> The official definition of small business based on the Small Business Administration (SBA) varies across economic sectors as defined by the North American Industry Classifications (NAICS). This definition may be based on the number of employees or total revenues depending on the economic sector. CCEA analyses

248,818 employees (MEPS, 2002).<sup>13</sup> Small businesses face higher insurance premiums because administrative costs and risk of health expenditures are spread over a smaller pool of enrollees. In Connecticut, firms with fewer than 50 employees face average premiums costing \$256 more than firms face with more than 50 employees on average (MEPS, 2002). The Congressional Health Plan and tax credit addresses this disparity.

Through the Congressional Health Plan, market competition reduces health insurance premiums between 1.5% and 10%.<sup>14</sup> These savings result from increased efficiency in the health insurance market (Enthoven, 2003). The tax credit could further reduce employer payments for premiums by 25% to 50%, depending on the employer's contribution. Employers paying the minimum 50% contribution would receive a rebate equal to 25% of the health insurance premium. Employers paying 100% of the premium would receive a rebate of 50% of the health insurance premium. The federal government would fund the tax credit.

This program attracts firms that currently offer insurance, as well as firms that do not (Conwell and Short, 2001). For comparability with the Bush plan, the scenario presented below uses assumptions from the CBO (2002) analysis of Association Health Plans and Health Marts. Employees, and thus firms, switch plans with a cross-price elasticity of 0.4. New employees gain coverage based on an average price elasticity of -1.1.<sup>15</sup>

CCEA performed sensitivity analysis using Hadley and Reschovsky (2002) and Gruber and Lettau (2000) who found firms newly offer insurance with price elasticities ranging from -0.31 to -0.54. Of employees newly offered insurance, take-up rates ranged between 41% (based on Hadley and Reschovsky, 2002) and 76.4% (based on MEPS, 2002). Abraham, et al. (2002) found cross-price elasticities between 0.02 and

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uniformly rely on the small business definition of less than 50 employees. This definition harmonizes with the available literature and data.

<sup>13</sup> These numbers compare to 99% of Connecticut firms with more than 50 workers offering health insurance to at least some of their workers (that is, 16,545 firms).

<sup>14</sup> Cost reductions are based on differences between FEHB premiums and MEPS employer-based premiums. In its current form the FEHB does not offer intermediate sized coverage for 'single plus one' groups. Individuals in this category would need to purchase more expensive family coverage. In this case, average premium costs would fall by 1.5%. If the Congressional Health Plan includes a 'single plus one' option, average premium costs could fall by 10%.

0.32 for employees switching health insurance plans. The scenario presented below is moderate but slightly higher than these scenarios.

The CCEA scenario presented below assumes a conservative reduction in health insurance premiums but a more generous response by workers and firms. This analysis' assumptions appear below:

- 1.5% reduction in average premiums;
- 25% tax credit;
- -1.1 price elasticity with respect to the expansion of coverage;
- 0.4 cross-price elasticity for individuals to switch insurance;
- there are an average of 1.345 enrollees per employee based on MEPS 2002 data.

### Small Business Tax Credit and Congressional Health Plan: Results

The small business tax credit and Congressional Health Plan increases the number of insured by 70,722 in Connecticut. A total of 96,440 employees and family members enroll in Connecticut. This represents 12,153 participating firms and 8,912 firms newly offering insurance (10% increase). There is no direct state liability.

Table 5: Results for Kerry's Small Business Tax Credit and Congressional Health Plan

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost (million)
Results for Small Business Tax Credit and Congressional Health Plan	96,440	70,722	\$325.3	\$108.3

By improving small businesses' access to affordable health insurance, this program insures small business employees, their spouses and their children. The total cost of health insurance premiums is \$433.4 million with the federal government absorbing \$108.3 million of those costs (based on firms contributing 50% of the premium). Employers and employees share the remainder of the costs.

The assumptions underlying this estimate are comparable with the Bush Association Health Plan analysis. This scenario conservatively estimates the potential

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<sup>15</sup> This price elasticity is slightly lower than the -1.58 assumed in the Association Health Plan analysis because this represents all employees – both those with high and low medical costs. The Association Health Plan analysis selects only those with low medical costs who are more responsive to price.

increase in efficiency from the new Congressional Health Plan. The Congressional Health Plan reduces the discrepancy in health insurance premiums between large employers (large purchasing groups) and small employers (small purchasing groups). This plan increases competition among insurers, spreads administrative costs and health care cost risks over larger groups. In this scenario, CCEA assumes a 1.5% reduction in health insurance premiums from these efficiency gains.<sup>16</sup> To this extent, these findings represent an underestimate of the potential numbers of enrollees and costs.

## II. Stop-Loss Reinsurance Pool

Under the stop-loss reinsurance pool, the federal government would act as a reinsurer for employer-based health insurance for up to 75% of the health care costs insureds incur above \$50,000.<sup>17</sup> This would reduce the cost of health insurance to employers by 10% (HR Policy Association, 2004, Thorpe, 2004). In exchange for these payments, firms must meet three conditions:

- (1) employers must cover all workers in their firms;<sup>18</sup>
- (2) employers must encourage the introduction of disease management<sup>19</sup> programs; and
- (3) employers must demonstrate how they will share the savings from these programs with workers.

Firms of any size would be eligible to participate in the stop-loss reinsurance pool. The stop-loss payments would effectively reduce insurance costs to employers and

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<sup>16</sup> CCEA estimated premium reductions by comparing employer premiums in the federal employees benefit plan and the MEPS, 2002 data. The premiums for single insurance are 10% lower in the federal employees benefit plan than the average for small businesses according to MEPS, 2002. However, the difference in the weighted average of plans is 1.5%. The federal employees' health benefit plan does not offer the intermediate health insurance category 'single plus one' and these purchasers would have to pay a higher premium to maintain the same level of coverage.

<sup>17</sup> The threshold above which costs are paid would be variable and set to achieve a 10% premium reduction target. For instance, Thorpe (2004) and others have estimated a threshold of \$36,000 would be needed for the first year to reach the 10% premium reduction target.

<sup>18</sup> It is not clear whether this includes part-time workers, early retirees, etc. (HR Policy Association, 2004) For the purposes of this analysis, we follow Thorpe (2004) by including part time workers at pro-rated support and exclude early retirees.

<sup>19</sup> The term 'disease management' is an umbrella term that incorporates very different types of programs. The Kerry plan does not specify what type of disease management programs would be implemented. To estimate cost savings, CCEA models potential cost savings based on state level experiences in Washington, and Florida, which mandated cost savings in contracts with private disease management companies. These programs target individuals with specific chronic illnesses, like congestive heart failure, diabetes, etc. and encourage the use of best practice treatment standards for patients and their physicians alike.



employees. These reductions would be mitigated by the increased costs of covering more employees and disease management program expenditures. The Kerry proposal does not detail the disease management programs. Effective disease management programs can improve health outcomes and potentially reduce overall health care costs (see the disease management section below). This policy is a broad-based program designed to make insurance more affordable to employers and expand coverage.

### Stop-Loss Reinsurance Pool: Model Specification

About 68% or 2.3 million Connecticut residents receive health insurance through employer-based group health insurance (CPS, 2004). These workers represent 62.4% of Connecticut firms who offer health insurance to 73% their workers (MEPS, 2002). Ineligible workers may be part-time, temporary or new employees. Different size firms offer insurance to different degrees. For example, all firms in Connecticut with 1,000 workers or more offer health insurance. However, only 66% of their workers are eligible for insurance. Rising health insurance premiums have led to reductions in the numbers of eligible workers.

The stop-loss reinsurance reimbursement threshold would be set to guarantee a 10% reduction in premiums. For firms with fewer than 50 employees, this is a smaller premium reduction than they could receive through participating in the small business tax credit and Congressional Health Plan. CCEA assumes that firms with less than 50 employees would participate in that plan rather than the stop-loss reinsurance pool.

Other firms would either switch from their current plan or newly offer insurance depending on the total price change. Firms newly offering insurance would be attracted to the 10% decrease in premiums. Firms joining the stop-loss reinsurance pool would balance the premium reductions with the costs of expanding coverage to previously ineligible employees.<sup>20</sup>

According to the most recent Medical Expenditure Panel Survey (MEPS), all firms with more than 100 employees in Connecticut already offer insurance to at least some of their employees. Hadley and Reschovsky (2002) and Gruber and Lettau (2000) estimate that firms with less than 100 employees have price-elasticities of offering

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<sup>20</sup> The CCEA analysis includes all workers, including part-time workers, in the expanded eligibility.

insurance between -0.54 and -0.617 depending on their size. The scenario presented below uses Gruber and Lettau's (2000) estimate of -0.617 for firms with under 100 workers.

CCEA models a firm's decision to switch to the stop-loss reinsurance pool two ways. First, using a combination of data from the Economic Census and Medical Expenditure Panel Survey, CCEA estimates cost savings for firms receiving a 10% premium reduction but expanding insurance to all full and part-time employees.<sup>21</sup> Firms that receive a net savings join the stop-loss reinsurance pool.

As a check on this method, CCEA uses Connecticut-specific estimates of net savings by firm size produced by Thorpe (2004) and accepted by the Kerry campaign as an accurate characterization of their program.<sup>22</sup> Cost savings range from 5% for firms with fewer than 100 workers to 16% for firms with 500-999 workers. CCEA applies a price elasticity of spending<sup>23</sup> by firm size to these savings based on Gruber and Lettau (2000). The price elasticities of spending are -0.15 for firms with less than 100 workers, -0.72 for firms with 100-999 employees and -1.13 for firms with more than 1,000 employees. The scenario below reports these results.<sup>24</sup>

In firms newly offering insurance or firms expanding coverage, CCEA considers take-up rates from 41% to 76.4%. In the scenario presented below, 41% of employees at small firms (fewer than 100 workers) take up newly offered insurance. This estimate is based on Hadley and Reschovsky (2002). They estimate 59% of uninsured employees at small businesses have health insurance from another source (Hadley and Reschovsky, 2002). At firms with more than 100 workers, employees take up insurance 76.4% of the time. This rate comes from the most recent Medical Expenditure Panel Survey data.

To summarize, CCEA models use the following assumptions:

- health insurance premiums fall by 10%;
- the price elasticity of offer is -0.617 for firms not currently offering insurance (Gruber and Lettau, 2000);

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<sup>21</sup> Employers pro-rate contributions to part-time employee health insurance premiums by 50% on average.

<sup>22</sup> The Kerry-Edwards campaign has accepted Thorpe's (2004) analysis as an accurate estimate of the national costs of their suggested reforms. See the Kerry-Edwards campaign at [http://www.johnkerry.com/pressroom/news/news\\_2004\\_0402.html](http://www.johnkerry.com/pressroom/news/news_2004_0402.html).

<sup>23</sup> Gruber and Lettau (2000) estimate how much a firm who already offers insurance will change its spending on health insurance coverage given and change in the premium cost of insurance.

<sup>24</sup> Using aggregate data, the CCEA analysis of cost savings for firms was lower than Thorpe's projections. This difference is possibly the result of the higher level of aggregation in our analysis.

- firms currently offering insurance face cost savings based on Thorpe (2004); and
- price elasticities of spending for firms currently offering insurance range from -0.15 to -1.13 with an overall value of -0.66 from Gruber and Lettau (2000).

### Stop-Loss Reinsurance Pool Model: Results

The stop-loss reinsurance pool would increase the number of insured by 88,263 and enroll 204,692 employees and their families in Connecticut. The federal cost of Connecticut’s program is \$90.8 million. Employers and employees absorb the remaining \$816.7 million in health insurance premium costs. The state has no direct liability under this program.

Table 6: Results for Stop-Loss Reinsurance Pool

	Enrollees	Change in Insured	Total Cost (million)	Federal Cost (million)
Results for Stop-Loss Reinsurance Pool	204,692	88,263	\$816.7	\$90.8

Based on CCEA’s net analysis, this program increases coverage primarily by increasing the number of eligible employees. A total of 2,182 firms participate in the program but only 164 firms newly offer insurance in Connecticut. These numbers reflect the fact that larger firms in Connecticut already offer insurance and firms with less than 50 employees are more likely to choose the small business tax credit option because it reduces costs to the firms more than this program.

This program expands the employer-based health insurance system using federal payments to reduce the price of health insurance premiums and mandating coverage increases. Although the Kerry plan specifies that firms must detail how they will share these savings with their employees, the plan does not explicitly determine who will receive what portion of these cost savings. The disease management program requirement can mean vastly different things both in the nature of the programs and potential cost savings. Health outcomes may be improved both through the disease management initiative and the decrease in uninsured. Overall, it is difficult to quantify the extent to which this program reduces health insurance costs, increasing efficiency, rather than shifting costs through the federal payments. It does, however, insure 25% of Connecticut’s 357,000 uninsured residents.

### III. Medicaid Expansion

Kerry proposes to increase the number of ‘low-income’ persons eligible for Medicaid coverage by expanding the income guidelines for enrollment as follows:

- children younger than 19 in households with incomes less than 300% of poverty would be eligible for enhanced Medicaid (S-CHIP) [HUSKY];
- ‘parents’ of children younger than 19 with household incomes under 200% of poverty would be eligible for enhanced Medicaid, (S-CHIP) [HUSKY] ; and,
- childless adults with household incomes under 100% of poverty would be eligible for Medicaid.

Kerry proposes to fund these changes through a ‘cost swap’. The federal government assumes the full cost of HUSKY A for children, and 65% of the costs of insuring parents (Kerry, Edwards, 2004). The states pay the costs of ‘expanding’ health insurance to children with family incomes under 300% of poverty (enhanced Medicaid), and states pay 35% of the costs of insuring parents with household incomes under 200% of poverty and the cost of insuring childless adults with household income less than 100% of poverty.

The Kerry plan would also increase enrollment by easing current restrictions. Allowing enrollment through schools, hospitals, and clinics would reduce barriers to enrolling. Kerry would also eliminate the five-year eligibility-waiting period currently required for legal immigrants. States that meet 95% enrollment targets would share in a potential \$5 billion incentive pool.<sup>25</sup>

#### Medicaid Expansion: Model Specification

Currently in Connecticut, individuals in ‘low-income’ households (see Table 7 below) are eligible for government assistance through Medicaid, Healthcare for Uninsured Kids and Youth (HUSKY), or State Administered General Assistance (SAGA). The HUSKY A and B plans provide free or low-cost comprehensive health care<sup>26</sup> to children and their parents based on household income. HUSKY Plus provides

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<sup>25</sup> Details based on Kerry, J. and Edwards, J. (2004) “John Kerry’s Plan to Make Health Care Affordable to Every American” [http://www.johnkerry.com/issues/health\\_care/health\\_care.html](http://www.johnkerry.com/issues/health_care/health_care.html)

<sup>26</sup> Comprehensive benefits package includes: “preventive care, outpatient physician visits, prescription medicines, in-patient hospital and physician services, outpatient surgical facility services, mental health and substance abuse services, short-term rehabilitation and physical therapy, skilled nursing services, home health care, hospice care, diagnostic x-ray and laboratory services, emergency care, durable medical

additional coverage for children with special physical or behavioral needs. SAGA provides health care coverage to ‘very low-income’ households.

Table 7: Eligibility Guidelines for Connecticut HUSKY, and SAGA Programs

Program	Eligibility Guidelines <sup>1</sup>	Enrollees <sup>2</sup>
HUSKY A – under 19	<ul style="list-style-type: none"> <li>• children with household income &lt;185% FPL</li> <li>• parents of children with household income &lt;100% FPL</li> <li>• pregnant women with household income &lt;185% FPL</li> </ul>	302,899
HUSKY B	<ul style="list-style-type: none"> <li>• children with household income &lt;235% of FPL</li> <li>• children in households with incomes 235-300% FPL, but pay \$30 per month per child up to \$50 per household</li> </ul>	13,860
HUSKY B	<ul style="list-style-type: none"> <li>• children in households with incomes &gt;300% of FPL, but pay full premium, \$158-230 per month depending on plan selected</li> </ul>	538
SAGA	<ul style="list-style-type: none"> <li>• single adult in one-person households with less than 60% FPL if not working and 79% FPL if working<sup>3</sup></li> <li>• single adult in two-person household with household income less than 61% FPL if not working and 76% FPL if working<sup>3</sup></li> </ul>	29,586

<sup>1</sup> These eligibility guidelines are generalizations. Eligibility in specific cases is determined by the Connecticut Department of Social Services.

<sup>2</sup> Source: Connecticut Department of Social Services, Aug. 5, 2004 statistics

Connecticut already offers insurance to children with household incomes less than 300% of poverty, parents up to 100% of poverty and general assistance to childless adults with household incomes below 60% to 76% depending on household and work status. Consequently, 53,210 Connecticut adults would be newly eligible for Medicaid under these proposals.<sup>27</sup>

In the absence of details, CCEA assumes the current premium-cost sharing arrangements for children in HUSKY B and no premium cost-sharing for newly eligible adults. CCEA assumes that Medicaid-eligible individuals would prefer Medicaid to

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equipment, eye care and hearing exams, and dental care.” (Connecticut Department of Social Services, 2004, p. 4).

<sup>27</sup> This number excludes SAGA and Medicare eligible. CCEA assumes that Connecticut does not harmonize its SAGA program with this new initiative. If the state did, CCEA predicts an additional 18,000 enrollees under age 65 in the Medicaid expansion.

purchasing non-group insurance, which involves substantial household insurance premium costs. Cutler and Gruber (1995) note that, in fact, Medicaid is not necessarily individual's first choice because Medicaid involves out-of-pocket costs, is not accepted by some health care providers, and carries the stigma of receiving public assistance. Even so, CCEA assumes those who currently have no insurance are not willing to purchase non-group insurance and would prefer the Medicaid plan.

The last major expansions in Medicaid (1986-1992) provide a basis for projecting the effects of the proposed Medicaid expansion. Four major studies of the earlier expansions found that 24-25% of newly eligible children actually enrolled in the expanded Medicaid program nationally. Cutler and Gruber (1995) and Shore-Sheppard (1995) found roughly 31% of new Medicaid enrollees switched from other forms of private insurance reducing the net gain in newly insured. Using another method (difference-in-difference), Yazici and Kaestner (1998) and Dubay and Kenney (1996) estimate an average of 14.5% of new enrollees switched from private insurance to public (government-provided) insurance. These switches include individuals whose employers dropped coverage or increased employee premium payments in response to the Medicaid expansion. More recently, Cunningham (2003) found a national 64% Medicaid take-up rate among the uninsured in areas of generally high health insurance rates. Although more optimistic, Cunningham (2003) does not account for secondary effects in other insurance markets.

CCEA follows Yazici and Kaestner (1998) estimating that:

- 25% of newly eligible take up Medicaid;
- 13.5% of these individuals previously had insurance and are netted out of estimates;
- CCEA assumes the cost per new enrollee is the current average cost per enrollee in the HUSKY A & B programs (\$2291.35),<sup>28</sup>
- federal government pays 65% of the costs of insuring parents; and
- state government pays 35% of the costs of insuring parents and 100% of the costs of insuring newly eligible childless adults.

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<sup>28</sup> HUSKY costs include imputed premiums for each income band assuming the average premium cost for HUSKY B for enrollees with household income >300% FPL and the per child monthly premium of \$30 for household income at 235-300% FPL. SAGA and other Medicaid per enrollee costs were much higher and excluded because they represent the high health utilization of special needs groups. All costs and enrollments were supplied by Connecticut OPM 2004/05 FY projections and matched with 3-year historical averages.

## Medicaid Expansion: Results

CCEA estimates 13,303 newly eligible persons enroll in Connecticut’s Medicaid expanded program and 11,374 of them are newly insured. The cost associated with this change in enrollment is \$4.8 for the federal government and \$25.7 million for the state government.

Table 8: Results for Medicaid Expansion

	Enrollees	Change in Insured	Federal Cost (million)	State Cost (million)
Results for Medicaid Expansion	13,303 <sup>1</sup>	11,374 <sup>1</sup>	\$4.8 <sup>2</sup>	\$25.7 <sup>2</sup>

<sup>1</sup> Current SAGA enrollees not included in estimates.

<sup>2</sup> These costs do not include the cost Medicaid and Expanded Medicaid for Children. For details on the cost ‘swap’ between the federal government and state see text below.

In addition, Senator Kerry proposes to ease enrollment burdens by automatically enrolling eligible children in schools and clinics. Kerry would remove the five-year eligibility-waiting period for legal immigrants. That would increase the number of eligible particularly in Connecticut’s Hispanic community. Also, the HUSKY plan has become increasing popular and well-known in Connecticut. Expanding the HUSKY program, would likely reach out to more individuals than in the past. For these reasons, the CCEA enrollment estimates are conservative.

The Kerry plan proposes \$5 billion in bonuses for states that enroll 90%-95% of eligible children, although he does not specify how these funds would be distributed. CCEA estimates Connecticut would need \$109 to \$115.1 million to insure 90% to 95% of the 53,065 uninsured Medicaid-eligible children in Connecticut under the existing HUSKY programs. The government would need to spend \$108.7 to \$114.7 million and enrolled households altogether would pay \$351,000 to \$371,000 in shared premiums. Households would also pay out-of-pocket charges such as health service co-payments that are not included in this estimate. In addition to program costs, Connecticut would need to engage in outreach and enrollment activities, which would require additional resources.

In order to remain cost-neutral in such an expansion, Connecticut would need to receive *at least* \$109 to \$115.1 million from government. Given that all states would

share in the proposed bonuses, the Kerry bonuses likely fall short of fully funding the expansion.

In addition to the bonuses, however, the Kerry plan proposes to provide fiscal relief to participating states by assuming the state costs of children enrolled in HUSKY A. This funding ‘swap’ would transfer an estimated \$258.8 million to Connecticut. The net cost of the swap *and* the expansion would be a savings of \$232.9 million for Connecticut. These savings could be applied to increasing enrollment among the number of eligible but uninsured children in Connecticut. The net cost of the swap *and* the expansion to the federal government would be \$263.3 million for Connecticut.

Kerry’s proposed expansion is designed to reach those in poverty; however, it affects minority groups differentially. Thirty-one percent of Hispanics and 24% of African-Americans in Connecticut live in poverty (Kaiser, 2004).<sup>29</sup> These statistics suggest that this program has the potential to help minorities in poverty gain health insurance. However, research suggests that obstacles to enrolling minority households go beyond expanding eligibility (CCEA, 2004). Concerns about immigration status and language barriers reduce Hispanic enrollment. Experience also suggests that outreach and targeted advertising is important for increasing enrollment in these populations (CSRA, 2000).

#### IV. Tax Credits

The Kerry plan offers refundable tax credits<sup>30</sup> to three distinct populations purchasing non-group insurance:

- a 75% tax credit for up to six months for unemployed with household incomes below 300% of poverty;
- a 25% tax credit to 55-64 year olds with household incomes below 300% of poverty; and
- a credit<sup>31</sup> for health insurance expenditures above a cap of 6% of household income for households in poverty, up to 12% of household income for households at 300% of poverty.<sup>32</sup>

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<sup>29</sup> This contrasts with only 6% of Caucasian, non-Hispanic persons living in poverty.

<sup>30</sup> Based on current information, it is not clear whether these tax rebates would be available at the time of purchase. Low-income households paying for insurance first and receiving a credit later poses a liquidity challenge and could reduce the number who participate

<sup>31</sup> Details are not available on how the proposed health insurance expenditure cap would be administered. CCEA assumes it would be administered as a refundable tax credit.



All individuals eligible for these credits would be eligible to purchase non-group insurance through the proposed Congressional Health Plan. Modeled on the current federal employees' health benefit plan, the Congressional Health Plan reduces health insurance premiums by promoting competition between insurers and spreading risk and administrative costs over a broader population. This last point is especially important in the non-group market.

### Tax Credit Discussion

Based on federal employees' health benefit premiums, CCEA estimates Congressional Health Plan premiums would be 1.5% to 10% less than the current average employer-based Connecticut premium. Buchmueller and Ohri (2004) estimate that 55-64 year olds would expect a 10% decrease in premiums if they paid an actuarially fair premium. An actuarially fair premium reflects the risk of medical costs of a given population. For specific sub-groups, being part of a lower-risk insurance pool may increase savings further. Johnson, et al. (1999) estimate that health status differences in the non-group market can increase the price of premiums 50% for 55-61 year olds with mild to moderate health conditions and 200% for those with serious conditions. Based on these estimates, CCEA assumes premiums would fall by 10% rather than the more conservative 1.5% for those purchasing 'non-group' insurance from the Congressional Health Plan.

Even with lower premiums and a tax credit, the cost of health insurance premiums for a comprehensive care policy may still be too large. For instance, a single person with income 300% of poverty, or \$28,719, would pay \$3,365 for insurance in the current federal employees' health benefit plan. This premium represents 11.7% of their income. Even with Kerry's health expenditure cap, spending 6% to 12% of one's income on premiums alone is a significant burden to many low-to-moderate income households.

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<sup>32</sup> These credits are in addition to current tax-credits that allow the self-employed to deduct up to 100% of their premium payment up to their self-employment income amount and to some extent supplement other tax exemptions including itemized deductions for medical spending (including health insurance premiums) above 7.5% of their adjusted gross income (AGI).

The tax credits' effectiveness at decreasing the number of uninsured may be diminished by two factors. First, to the extent that government subsidizes non-group insurance, firms may reduce the share of premiums they pay or the amount of coverage they offer their employees to reduce the firm's insurance costs (Gruber, 2000). The CCEA analysis below follows Gruber's (2000) micro-simulation model in incorporating the effects of changes in the non-group market on the other insurance sectors. A second issue with tax credits is that they serve to decrease the costs of those already purchasing non-group insurance rather than increasing the number of newly insured (Marquis and Long, 1995 and Johnson, et al., 1999). Tax credits for non-group insurance premiums are potentially expensive programs that may do little to increase the number of newly insured.

The sections below detail the impact of each of the Kerry plan's tax proposals.

#### IV.I Tax Credit for Unemployed Workers: Model Specification

A total of 41,300 Connecticut residents are eligible for this tax credit (CPS, 2002-04). They are unemployed, are aged 19-64 and have incomes less than 300% of poverty. CCEA assumes individuals in this group eligible for the Medicaid *expansion* will first choose the Medicaid expansion. Unemployed individuals who are also eligible for the 55-64 year old tax credit will claim the unemployed tax credit first because it is larger. This leaves a 'net' eligible population of 22,430 in Connecticut. Of these, 6,012 purchase health insurance through their previous employer under the Consolidated Omnibus Budget Reconciliation Act (COBRA). Under COBRA, unemployed workers keep their employer-based insurance when separating from a job but pay the full premium themselves.

Individuals switching to the Congressional Health Plan pay 10% less for premiums than they would pay in the non-group market. CCEA assumes that COBRA-eligible individuals choose to continue their employer-coverage to avoid transition delays and costs. COBRA-eligible individuals can apply the tax credit to their employer policies. The 75% tax credit for six months is a 37.5% tax credit on annual premiums.<sup>33</sup>

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<sup>33</sup> CCEA considered the potential that insureds were uninsured less than six months and the relevant price reduction was 75%. For the scenario presented here, CCEA pessimistically assumes that individuals expect

Estimates of price elasticities for insurance purchases range from a low of -0.03 for individuals purchasing group insurance with premium cost sharing (Chernew, et al., 1997, Blumberg, et al., 2001) to a high of -0.685 for the self-employed's purchase of non-group insurance (Gruber and Porterba, 1994). Marquis and Long (1995) estimate a price elasticity between -0.3 to -0.4 workers purchasing non-group insurance. Gruber and Madrian (1997) studied the decision to purchase health insurance by unemployed men aged 25-54. They found a price elasticity of -0.1 (Gruber and Madrian, 1997). For the scenario presented below, CCEA follows Gruber (2000) and estimates an income-adjusted price elasticity ranging from -0.32 for households in poverty to -0.55 for households with incomes 300% of poverty.<sup>34</sup>

Based on studies of the earned income tax credit, Gruber (2000) further suggests that less than 100% of households purchasing non-group or COBRA insurance actually take up the credit. Not all households are aware of tax credits or how to file for them. CCEA assumes that tax credit-eligible individuals increase their take-up rate as the size of the tax credit increases. Following Gruber (2000), take-up rates reach a maximum of 90% with a 100% tax-credit. For individuals eligible for the tax credit, who are not eligible for Kerry's Medicaid proposals, but are nevertheless on Medicaid, CCEA assumes that a small percentage will prefer to purchase insurance from the Congressional Health Plan (Gruber, 2000). The non-group tax-credits are a new option to these individuals and they have slightly higher incomes than those eligible for the Kerry Medicaid expansion (up to 300% of poverty). Furthermore, this assumption is parallel to assumptions made about the Bush tax-credits.

The assumptions for the scenario presented below are:

- non-group and newly insured enroll in the Congressional Health Plan and pay 10% lower premiums;
- COBRA-eligible maintain their employer-based insurance rather than switching plans;
- the annualized value of the tax credit is 37.5%;
- price elasticities range from -0.32 to -0.55 increasing with income;
- 55% of those with non-group insurance take up the tax credit; and

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'the worst' or to be unemployed for a year and consider the 37.5% reduction in annual premiums when making the decision to purchase insurance.

<sup>34</sup> The income adjusted price elasticity is  $-0.625(1-(\text{after tax premium}/\text{income}))^2$ . This elasticity is applied to aggregate poverty classes with a weighting for family size.

- 57% of those with COBRA insurance take up the tax credit; and
- 6.8% of Medicaid eligible, not eligible for Kerry’s Medicaid expansion, switch to non-group insurance.

### Tax Credit for Unemployed Workers: Results

In Connecticut, 5,269 people would use the tax credit for the unemployed. Of these, 1,658 would be newly insured. The cost of the program is modest because of the program’s small scope. The federal cost of the program is \$12.6 million and households pay an additional \$22.1 million for insurance. There is no direct state liability in this program.

Table 9: Results for the Tax Credit for Unemployed Workers

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost (million)
Results for Tax Credit for Unemployed Workers	5,269	1,658	\$22.1	\$12.6

When individuals lose their jobs, not only do their incomes decrease, but they now must pay the full cost of their insurance. The COBRA provision has improved access to health insurance, but has not made it more affordable. This tax credit would increase the affordability of health insurance for unemployed workers. If an individual is unemployed for less than six months, the tax credit would cover 75% of the costs of insurance. For individuals unemployed longer, the premium represents a smaller share of their total spending on health insurance premiums.

In addition to affordability, this tax credit also impacts the labor market. Gruber and Madrian (1997) analyzed the changes in employment behavior when COBRA programs first introduced affordable health care for unemployed men aged 25-54. Gruber and Madrian (1997) found that workers changed their employment behavior when they had the option of purchasing health insurance under their employer-based health insurance (EBHI) plan for a year. Workers were unemployed 15% longer and increased the rate of job transition by 14%. The new jobs workers found were 6% better paid than their previous job. These results suggest making health insurance available and affordable may decrease ‘job lock’ and ease job transition.

#### IV.I Tax Credit for 55-64 Year-Olds: Model Specification

In Connecticut, 91,335 individuals are between 55-64 years old and have household incomes below 300% of poverty. Of these 55-64 year olds, 21,687 are netted out because they are eligible for other Kerry proposals. These ‘near-elderly’ are more likely to face higher medical costs because health status worsens with age. In addition, they are less connected to the labor force. Many 55-64 year olds retire early, either by choice or because they cannot find employment. Consequently, they need health insurance options beyond employer-based coverage.

Under this proposal, 55-64 year olds would be eligible to purchase non-group insurance from the Congressional Health Plan. As discussed above, this results in an assumed 10% reduction in non-group premiums. The refundable tax credit further reduces premium costs by 25%.

As discussed in the previous section, price elasticities to purchase insurance range from the Chernew, et al. (1997) low estimate of -0.03 and Gruber and Porterba’s (1994) estimate of -0.685. Buchmueller and Ohri (2004) estimate an overall price elasticity of -0.152 for 55-64 year olds based on a survey of retirees paying the full health insurance premium. Although these price elasticities were used in background analyses, the scenario presented below uses income-adjusted price elasticities based on Gruber (2000) for consistency with the other tax credit results. CCEA assumes a price elasticity of -0.21 for households with poverty level incomes, -0.43 for households with income at 200% of poverty and -0.47 for households at 300% of poverty. To the extent these elasticities are greater than the Buchmueller and Ohri (2004) estimates, CCEA’s results represent an overstatement of the number of enrollees.

Individuals currently insured with non-group insurance take up subsidies depending on the size of the credit. Following Gruber (2000), CCEA assumes a 50% take-up rate among those currently purchasing non-group insurance at a 25% credit. The take-up rate scales up with the credit to a maximum of a 90% take-up rate for a 100% credit.

Those with employer-based health insurance may switch to non-group insurance if their employer reduces its coverage in response to this credit. Health insurance is a

costly employee benefit for employers. If other alternatives are available to their workers, employers may try to shift some or all of their costs of insurance onto their employees (Cutler and Gruber, 1995). The scenario presented below accounts for this possibility based on the micro-simulation tax credit model Gruber (2000) developed. This model assumes 10% of firms drop coverage if a 100% credit is available, with a sliding scale based on credit size. If firms drop coverage, these newly uninsured workers then purchase non-group health insurance if it is cheaper than their employee portion of their employer-based health insurance or, if not cheaper, according to an income-adjusted price elasticity. Based on Gruber (2000), CCEA assumes that no firms increase premium cost sharing in response to this tax credit.

The Gruber (2000) model assumes that some individuals take advantage of the Kerry plan tax credit as an opportunity to switch from Medicaid to non-group insurance. Only those enrolled in Medicaid, but not eligible for the Kerry Medicaid expansion are part of the population eligible to make this switch. As above, these individuals are wealthier than the average person affected by the Medicaid expansion is and the Congressional Health Plan and tax credits are a new opportunity for them. CCEA assumes 4.5% of Medicaid recipients switch to non-group health insurance with the 10% cost reduction and 25% tax credit.

CCEA estimates the following scenario for the ‘near-elderly’ tax credit

- 10% lower premiums in the Congressional Health Plan;
- 25% refundable tax credit;
- 50% of current non-group insured enroll in the Congressional Health Plan and claim the tax credit;
- uninsured individuals purchase insurance based on price elasticities ranging from -0.21 for households with incomes in poverty to -0.47 for households with incomes at 300% of poverty;
- employees at 2.5% of firms that drop insurance purchase insurance on this same basis; and
- 4.5% of Medicaid enrollees switch to non-group insurance.

### Kerry Tax Credit for 55-64 Year-Olds: Results

CCEA estimates 5,537 ‘near-elderly’ people in Connecticut would enroll in the Congressional Health Plan and take-up the tax credit. These enrollees represent 8% of Connecticut’s net eligible population. Only 732 individuals gain insurance under this

plan. This figure is low, in part, because some firms reduce coverage in response to the government program.<sup>35</sup> The federal cost for these enrollees is \$8.4 million with households absorbing \$25.1 million in health insurance premium costs. There is no direct state liability in this program. In this case, the majority of the costs of the program accrue to people already insured.

Table 10: Results for the Tax Credit for 55-64 Year Olds

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost (million)
Results for Tax Credit for 55-64 Year Olds	5,537	732	\$25.1	\$8.4

This tax credit could potentially increase the number of early retirees. The closer an individual is to retirement age; the less likely they are to stay in the labor force. However, the lack of affordable health insurance options keeps individuals working past when they would like to retire. Several studies found that the availability of non-group insurance increases the rate of early retirement for 55-64 year olds (Johnson, et al., 1999, Gruber and Madrian, 1995, Blau and Gilleski, 1997).<sup>36</sup> For instance, Gruber and Madrian (1995) found a 1.1% increase in the number of early retirees based on the availability of COBRA insurance. Buchmueller and Ohri (2004) have a similar finding. With the availability of a tax credit and health insurance through the Congressional Health Plan, more Connecticut residents would have insurance and some will retire early.

<sup>35</sup> These assumptions are consistent with the other tax credit analyses for the Bush and Kerry plans.

<sup>36</sup> In contrast, Gustman and Steinmeier (1994) look at average medical costs and find no propensity for individuals to retire early.

### IV.3 Health Insurance Expense Cap

The Kerry plan also proposes allowing individuals not covered by his other plans, to buy into the Congressional Health Plan. The amount of income spent on health insurance would be capped at 6% for those in poverty. The cap would phase out at incomes of 300% of poverty with an expenditure cap of 12% of income. CCEA assumes Kerry would offer a refundable tax credit for health insurance premium costs above these caps.<sup>37</sup>

To be eligible for this credit, one must not be eligible for any other program. Based on this, CCEA excludes individuals eligible for employer-based health insurance, Medicaid, Medicare, and other government programs (Indian Health Service, TRICARE, CHAMPVA, etc.) who are 55-64 and unemployed. These criteria leave out individuals working or not in the labor force, 19-54 who are uninsured or currently buying non-group insurance with household incomes between 100% and 300% of poverty (excluding parents with household incomes from 100% to 200% of poverty). Enforcing these eligibility requirements presents a challenge to administering the program. The Kerry plan does not specify how this would be accomplished (Kerry and Edwards, 2004a, 2004b). For this analysis, CCEA assumes the eligible population is targeted accurately.

The actual size of the credit is highly sensitive to the size health insurance premium. CCEA assumes the premiums are comparable to the 2004 federal employees' health benefit premiums for comprehensive plans in Connecticut.<sup>38</sup> CCEA estimates the average value of the cap is 40% for households at 100% of poverty, 21% for households at 200% of poverty and 7% for households at 300% of poverty as weighted by average household size. In the absence of additional information, CCEA assumes the cap is a tax rebate received at the time of insurance purchase (Kerry and Edwards, 2004a, 2004b).

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<sup>37</sup> Although not reported here, the CCEA also considered the combined effect of income caps with the other tax credits on the number of insured.

<sup>38</sup> CCEA imputes a 'single-plus one' premium for the congressional health plan that is 10% less than current projected Connecticut employer-based health insurance premiums.



## Health Insurance Expense Cap: Model Specification

A total of 174,357 Connecticut residents are eligible for this and no other Kerry program. This population includes people working, not in the labor force, uninsured and non-group insured with incomes between the poverty line and 300% of poverty. Of the population eligible for the Kerry tax credit, 55% are currently uninsured and 45% have non-group insurance.

CCEA estimates the Congressional Health Plan premiums will be 10% less expensive than current non-group policies' premiums.<sup>39</sup> For the population CCEA considers, total savings are between 31% and 17% with Congressional Health Plan premiums and the income caps.

Although CCEA considered a range of price responses (elasticities) from -0.1 to -0.625, the scenario presented below assumes an income-adjusted price elasticity ranging from -0.38 to -0.42 based on Gruber (2000).<sup>40</sup> This is consistent with the other tax credit analyses.

Because individuals with employer-based health insurance are not eligible for the Kerry tax credit, CCEA assumes no behavioral change on the part of firms. In fact, because CCEA assumes the government is able to target accurately the specified population, there are no employer-based health insurance or government program switches. Individuals with non-group insurance have take-up rates ranging from a high of 48% for households with incomes 100-200% of poverty to 41% for households with 200-300% of poverty (Gruber, 2000).

The assumptions used in the scenario below are:

- 10% reduction in insurance premiums from the Congressional Health Plan;
- 21% cap 'rebate' for households with incomes 100%-200% of poverty and 7% cap 'rebate' for households with incomes 200%-300% of poverty;
- price elasticities of -0.38 for households with incomes 100%-200% of poverty and -0.42 for households with incomes 200%-300% of poverty; and
- 48% take-up rate for households purchasing non-group insurance and incomes 100%-200% of poverty and 41% for households with incomes 200%-300% of poverty.

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<sup>39</sup> These numbers are based on Connecticut average premiums reported in the insurance component of the MEPS. Non-group insurance premiums are likely to be higher and therefore 10% represents a conservative estimate.

## Health Insurance Expense Cap: Results

This policy serves a broad portion of Connecticut's population. Even so, only 43,914 enroll of which 9,186 are newly insured in Connecticut. The caps still require households to spend a significant portion (between 6% and 12%) of their income on health insurance premiums. Given the other demands on a Connecticut resident's income, many individuals still cannot afford to purchase non-group insurance. This credit mostly reduces health insurances costs for those who already purchase non-group insurance.

Table 11: Results for the Health Insurance Expense Cap

	Enrollees	Change in Insured	Private Cost (million)	Federal Cost (million)
Results for Health Insurance Expense Cap	43,914	9,186	\$226.8	\$38.6

The federal cost of this program is \$38.6 million. This represents about 14.5% of the total health insurance premium costs. Households pay the remaining \$226.8 million in insurance costs.

## Summary of Kerry Analysis

The Kerry plan represents a significant investment in expanding the current system. Under the Kerry plan, employer-based health insurance, Medicaid and non-group insurance all expand. Even so, the high cost of health insurance premiums means insurance would still be unaffordable to many members of Connecticut society. A total of 181,936 Connecticut residents gain insurance under these proposals. This reduces the number of uninsured by 50%. Another 175,064 Connecticut residents would still be without health insurance.

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<sup>40</sup> The income adjusted price elasticity is:  $-0.625(1-(\text{after tax premium}/\text{income}))^2$ . This elasticity is applied to aggregate poverty classes with a weighting for family size.

## Cost Savings

This report considers two Kerry proposals to reduce the cost of health care. CCEA selected these policies for analysis because they are within the purview of health insurance reforms. The Kerry plan requires employers in his Stop-Loss Reimbursement Plan to encourage disease management programs. His plan expands current disease management initiatives in Medicaid and Medicare at the national level. The Kerry plan proposes to provide ‘incentives’ to switch the current health insurance claims system from a paper system to an electronic system.<sup>41</sup> Under both plans, the number of uninsured would decline. This means that uncompensated care would be reduced. CCEA estimates this change for both candidates assuming fewer uninsured would reduce federal and state disproportionate share payments. This section quantifies the potential health and cost impact of these changes.

### I. Disease Management

Nationally, 10% of all patients incur 70% of all health care costs (Short, et al., 2003). Many of these patients have chronic or multiple health conditions (CBO, 2002). For instance, of the national adult Medicaid population, 60% have a chronic or disabling condition and 50% of those have more than one chronic condition (Williams, 2004). Disease management programs assume that if chronically ill individuals receive timely and appropriate care, much of this expense could be averted, in particular, expensive hospitalizations and emergency room visits. Some of the most common diseases that are targeted for management are asthma, diabetes, congestive heart failure, chronic obstructive pulmonary disease (COPD), end-stage renal disease (ESRD), depression, rheumatoid arthritis, chronic pain, hypertension and hyperlipidemia (Ofman, et al., 2004). Disease management strategies target individuals with these conditions to avoid costly care by keeping them well.

According to Short, et al. (2003), disease management strategies include “sending patients educational materials about their condition, reminding them to adhere to prescribed medications or seek preventive screenings” (page 2). Disease management

programs may include similar reminders to physicians regarding their patients. A more intensive step may be case management that focuses on coordinating care in highly individualized treatment programs. Hospitals and providers also have rigorous protocols for managing disease. The programs have in common the implementation best practice treatment for chronic conditions. The depth and extent of the programs varies considerably.

A recent literature review of all types of disease management programs by Orfman, et al. (2004) found that disease management improved health outcomes in many cases but failed to realize uniform cost savings. Other researchers have expressed skepticism about the potential cost savings of disease management programs (Kazel, 2003, Short, et al., 2003, Harris, 1996, and Williams, 2004).

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<sup>41</sup> Both Kerry and Bush have proposed other information technology changes such as electronic medical records to reduce medical error. The potential savings from reduced medical errors are currently hypothetical and, therefore, other initiatives are excluded from analysis.

## Disease Management: Method

To estimate the potential savings of disease management strategies, CCEA considers only the impact of disease management on federal programs. The federal government has the authority to mandate the implementation of disease management in Medicaid and the expansion of disease management in Medicare. The Kerry stop-loss reinsurance pool program could lead to the expansion of disease management in the general population that would reduce statewide health care expenditures. Participation in the stop-loss reinsurance pool is voluntary and the type of programs and the extent of the programs is unclear. Conservatively, CCEA focuses exclusively on Medicaid and Medicare savings.

Medicare and Medicaid recipients both have scope for cost reduction through disease management. Compared to the general population Medicare and Medicaid recipients are more likely to have chronic diseases because they are older or more likely to be 'low-income' if they are sick. Further, some Medicaid recipients do not have a consistent relationship with their health care provider and are prone to avoidable adverse health outcomes. This opens a window for potential cost savings through disease management programs.

CCEA's literature review found savings ranging from 7% for disease management of bladder infections (Armstrong, 2001) to 53% for diabetics with ESRD (Gozzoli, et al., 2001). Lazarus (2001) predicted a potential overall savings of as much as 33% with broad-based disease management based on analytic modeling. For 'low-income' individuals (on Medicaid), Rossiter, et al. (2000) found a \$3 to \$4 cost savings for each incremental dollar spent on disease management. Thorpe (2004a) cites a recent compilation of studies from America's Health Insurance Plans that suggests a range from 6% to 33% cost savings for specific disease management plans. Overall, Thorpe (2004a) estimates a potential 10% decline in medical expenditures for those with chronic diseases, which is about 30% of Medicare recipients.

State-level disease management initiatives have met with mixed success in their Medicaid programs. Colorado found an overall 11% cost reduction in their Medicaid asthma disease management program (Williams, 2004). The State of Washington realized a combined savings of \$2 million (or 5% of costs) for asthma, diabetes,

congestive heart failure and end-stage renal disease. Florida projected savings of \$112.7 million over four years for its Medicaid disease management program covering nine diseases (Williams, 2004).<sup>42</sup> However, it is not clear that these savings were realized (Williams, 2004). Several state-level programs are in the process of implementation and have not yet been evaluated (Williams, 2004).

CCEA develops two savings scenarios for disease management. Scenario one is based on Florida's Medicaid program. Under this scenario, CCEA estimates a 0.45% saving in Connecticut's Medicaid and Medicare programs. Based on Thorpe's (2004) analysis, CCEA estimates health care costs will decline by 10% for 30% of current Medicare expenditures. This rate translates to a savings of 1.6% for all Medicare expenditures. CCEA applies this rate (1.6%) to estimate disease management savings for both Medicaid and Medicare. Federal and state government share savings accruing to the Medicaid program based on the regular and enhanced Medicaid reimbursement rate. CCEA notes the possibility that no cost savings will be realized through the implemented disease management programs, particularly in the first few years of the programs

### Disease Management: Results

CCEA finds a potential savings of \$39.1 million in scenario one and \$141.7 million in scenario two. Of these amounts, between \$30.3 and \$109.9 million accrues to the federal government and between \$8.8 and \$31.8 million accrues to the Connecticut state government. Table 12 below presents these results. CCEA selects the conservative scenario, scenario one, as the 'most probable' scenario. The conservative scenario is most prudent given that government programs have as of yet failed to demonstrate appreciable cost savings.

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<sup>42</sup> Both Florida and Washington mandated 5% and 6% cost savings, respectively for their programs (Carrol, 2004, LifeMasters, 2004). In this case, the disease management firms are required to produce this level of savings or pay the difference.

Table 12: Disease Management Savings (million)

	Scenario 1	Scenario 2
Total Program Expenditures <sup>1</sup>	\$8,703	\$8,703
Net Savings	\$39.1	\$141.7
Federal Net Savings	\$30.3	\$109.9
State Net Savings	\$8.8	\$31.8

<sup>1</sup> Based on Centers for Medicaid and Medicare Services data. State expenditures are extrapolated to 2004 levels based on using national spending trends until 2002 and a conservative 6% rate of growth to 2004.

The potential impact of disease management programs, however, goes beyond cost savings. While some researchers question disease management cost savings (Kazel, 2003, Short, et al., 2003, Harris, 1996), most studies find improved health outcomes in the target population (Ofman, et al., 2004). For Medicaid-eligible individuals with chronic and unstable health conditions, disease management could provide a significant improvement in quality of life. Improving health outcomes increases the potential for worker productivity and, consequently, higher incomes.

## II Information Technology (IT)

Integrating information technologies into the current claims system could reduce health insurance costs. The Kerry plan proposes replacing the current mixed paper and electronic health insurance claim system with a 100% electronic claims adjustment system. Kerry proposes offering incentives to convince health care providers to switch to an electronic system but provides little detail on these incentives. The Kerry plan proposes integrating information technology systems in other areas such as prescribing medicines and storing patient information. These initiatives are designed to reduce medical errors and are shared in common, to some extent with proposals from President Bush.

## Information Technology: Method

CCEA considers only potential changes to the insurance system. The potential implementation costs are not considered because details of the plans for ‘bonuses’, tax credits and the extent of changes are not available. The CCEA estimates provide a basis for considering the potential once all changes have been implemented. Other information technology cost savings are highly uncertain as are the specific time frames and proposals.

Nationally, about 60-70% of medical claims are currently filed electronically (Thorpe, 2004). CCEA considers moving to a 100% electronic system. We use two methods, one Thorpe (2004) developed and another New Jersey Institute of Technology (NJIT, 1995) developed to compare the potential savings for Connecticut.

Scenario one is based on Thorpe (2004) in which he estimates the potential savings is \$5.50 or 92% per claim filed electronically. Under this scenario, CCEA assumes 35% of total claims are converted from paper to electronic filing.

Scenario two is based on a study by the New Jersey Institute of Technology (NJIT, 1995). NJIT (1995) finds 41% of claims are filed electronically while the remainder is paper claims. On average, the NJIT (1995) study estimated a 30% cost savings per claim filed electronically.

In scenario two, CCEA assumes a 30% cost saving for 59% of claims. Although the estimate of total claims filed on paper is high, the savings per claim is more reasonable than Thorpe’s estimate. This difference likely reflects the difference between savings in theory and savings in practice. Consequently, scenario two is CCEA’s ‘most probable’ estimate of savings from claims switched from paper to electronic filing.



## Information Technology: Results

Connecticut residents file an estimated 31,636,837 health care claims per year (MEPS, 2002). CCEA's methodology finds a range of savings between \$24.2 million to \$60.9 million. Table 13 reports these results.

Table 12: Information Technology Cost Savings (millions)

	Scenario One	Scenario Two
Claims Newly Filed Electronically	11,072,893	18,665,734
Total Savings	\$60.9	\$24.2
Federal Savings	\$18.3	\$7.3
State Savings	\$4.5	\$2.0

Using IT as a basis for claims adjustment saves Connecticut insurers and providers time and money. This analysis does not weigh these cost savings against the cost of implementing the policies, which would reduce net savings as the program is implemented. The federal and state savings are imputed based on the percentage of expenditures that go to the Medicaid and Medicare programs as these are the largest components of federal healthcare spending. The savings imputed to the federal government are \$7.3 million in our most conservative scenario, Scenario two. States can expect to save about \$2 million from this transition.

### III. Disproportionate Share Savings

The disproportionate share program developed initially because some providers (hospitals, physicians, clinics, etc.) served a disproportionately large share of Medicaid and Medicare patients. Because the reimbursement rates are lower than private insurance or out-of-pocket payments, these health care providers were financially disadvantaged in treating so many government aid recipients. Disproportionate share payments were made to these providers to compensate them for this disparity.

As the number of uninsured nationally and in Connecticut rose, providers treating low-income patients faced an additional problem of the uninsured who were unable to pay the full cost of their care. Some uninsured pay discounted health care prices or may default on their medical bills. This leads to a significant level of uncompensated care in the state. Connecticut hospitals alone provided \$153.6 million in uncompensated care in 2002. Disproportionate share payments have expanded to include the problems of uncompensated care.

Both plans, in total, reduce the number of uninsured. CCEA finds the Kerry plan reduces the number of Connecticut uninsured by 51% and Bush by 3.2%. Connecticut's disproportionate share payments to health care providers are \$115.2 (excluding SAGA payments) paid equally by the federal and state government. Given the differences in compensation rates between those with Medicaid and those receive charity or cannot pay, a reasonable approximation of payment reductions is an overall reduction proportional to the decrease in uninsured. Table 13 presents the results below.

Table 13: Disproportionate Share Savings (millions)

	Bush Plan (millions)	Kerry Plan (millions)
Total Disproportionate Share Payments Savings	\$7.2	\$58.7
Federal Disproportionate Share Payments Savings	\$3.6	\$29.4
State Disproportionate Share Payments Savings	\$3.6	\$29.4

The two plans exhibit modest savings for the state and federal government related to the reduction in the number of uninsured. Savings would also accrue to health care providers to the extent that they have a reduction in the administrative costs associated with uncompensated care and their share of the uncompensated care costs. The Kerry plan reduces disproportionate share payments the most because it increases the insurance rates.

Table 14: Current Federal Poverty Guidelines by Household Size and Age

Size of family unit	Weighted average thresholds	Related children under 18 years								
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual).....	9,393									
Under 65 years.....	9,573	9,573								
65 years and over.....	8,825	8,825								
Two persons.....	12,015									
Householder under 65 years.....	12,384	12,321	12,682							
Householder 65 years and over.....	11,133	11,122	12,634							
Three persons.....	14,680	14,393	14,810	14,824						
Four persons.....	18,810	18,979	19,289	18,660	18,725					
Five persons.....	22,245	22,887	23,220	22,509	21,959	21,623				
Six persons.....	25,122	26,324	26,429	25,884	25,362	24,586	24,126			
Seven persons.....	28,544	30,289	30,479	29,827	29,372	28,526	27,538	26,454		
Eight persons.....	31,589	33,876	34,175	33,560	33,021	32,256	31,286	30,275	30,019	
Nine persons or more.....	37,656	40,751	40,948	40,404	39,947	39,196	38,163	37,229	36,998	35,572

## Glossary:

Adverse Selection: The process by which premiums rise for one type of insurance when healthier than average policy-holders leave to purchase another type of insurance, leaving the remaining pool in the original insurance group on average less healthy and therefore more costly to insure.

Children: A child is a person younger than 19 years of age.

Federal Poverty Line Guidelines: The U.S. Census Bureau defines the level of income needed to meet the basic needs of households depending on size. The ‘needs’ of households are based on U.S. Department of Agriculture estimates of food budgets required for families under stress. These guidelines were initially developed in 1964-5 and the current price index has been used to update these values. Families with less income than these poverty thresholds are considered in poverty. See

<http://www.census.gov/hhes/poverty/povdef.html>, and  
<http://www.dss.state.ct.us/pubs/AnnualReport2003.pdf>.

Childless adults – Single or married adults who do not have a child under the age of 19.

Current Population Survey (CPS) – The Current Population Survey is a monthly U.S. Census bureau household survey. The March Supplement is the Annual Social and Economic Survey (ASEC) is the basis for the health insurance data.

EBHI: employer-based health insurance

Elasticity – A measure of responsiveness of the percentage change of one factor with respect to the percentage change in another. A price elasticity measures the percentage change in quantity for a given change in price.

Establishments – Establishments are units of a firm that are established in different geographical locations.

Federal Poverty Line Guidelines: The U.S. Census Bureau defines the level of income needed to meet the basic needs of households depending on size. The ‘needs’ of households are based on U.S. Department of Agriculture estimates of food budgets required for families under stress. These guidelines were initially developed in 1964-5 and the current price index has been used to update these values. Families with less than income than these poverty thresholds are in poverty.

<http://www.census.gov/hhes/poverty/povdef.html>

Federal Employee Health Benefit Program (FEHB) A national program that provides health insurance plan options to federal employees.

Firms- Firms represent entire business unit for tax purposes. A firm may consist of several geographically independent establishments.

Health Savings Account (HSA) A regulated tax-free savings account supported by workers or their employers that can be used to pay for medical care.

Job-Lock: this term means that employees are not willing to change jobs because of non-portability of their health insurance package.

Parents – Parents are adults who are the legal parents of and reside with dependent children younger than 19.

Unemployed: refers to people who are not working for the last 12 months, people who are not working for more than 12 months and people who never worked.

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