IMPACT OF JOHN MCCAIN 2008 HEALTH REFORM PROPOSAL

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Submitted to:

McCain 2008 Campaign
Arlington, Virginia

Submitted by:

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John McCain's Health Reform Proposal

Independent Assessment by HSI Network LLC
Proprietary & Confidential

Summary Snapshot

John McCain proposes boldly to fix the United States' broken health insurance system. He will replace the current income tax exemption for health insurance premiums paid by employers with a refundable tax credit available to all every U.S. citizen under age 65 to purchase health insurance either through their jobs or as individuals. He will also provide additional assistance for high-risk people to purchase a Guaranteed Access (GAP) plan. **If these proposals were implemented immediately and in total, there would be a reduction in the uninsured by 27.5 million covered lives (from 47 million) at an annual cost of $287 billion.**

Below, we summarize the candidate's plan in terms of his goals and HSI's assessment of operational changes, as well as elements that cannot be evaluated. The analysis concludes with a cost and coverage impact summary.

The underlying simulation model used is ARCOLA, a proprietary version of a health reform coverage and cost assessment analytic engine. A peer-reviewed presentation of the core model structure was summarized in the journal Health Affairs[1] and a longer version is available as a DHHS report at www.ehealthplan.org

Candidate's Stated Health Care Program Goals

- Restore control to patients themselves. We want a system of health care in which everyone can afford and acquire the treatment and preventative care they need.
- Health care should be available to all and not limited by where you work or how much money you earn.
- Families should be in charge of their health care dollars and have more control over care.
- Health insurance should be innovative, portable and affordable.

Specific Features for Assessment

The McCain health plan has 3 major components: (1) insurance reform and expansion; (2) insurance portability and affordability; and (3) high-performance incentives and innovations. Of these, we have enough empirical evidence to assess (1) and (2).

[1] See Feldman, R., et al., "Health Savings Accounts: Early Evidence of National Take-up from the 2003 Medicare Modernization Act and Future Policy Proposals," Health Affairs, 24:6 (November/December, 2005), pp. 1582-1591.

The McCain health plan will preserve the private health insurance system, but it will change the tax incentives of the current system, which lock people into jobs that provide health insurance, create an open-ended incentive to purchase insurance benefits they may not need, and provide the greatest rewards for wealthy taxpayers. The candidate's health care plan will replace the current system with the following reforms:

- Every U.S. citizen under the age of 65 will get a $2,500 annual tax credit to purchase single-coverage health insurance and a $5,000 tax credit to purchase 2-person or family coverage.
- The tax credit will be automatically advanced upon the purchase of insurance and will be refundable.
- Consumers will be able to purchase insurance across state lines.
- Consumers will have access to high-risk insurance pools across state lines with federal oversight of risk-rating and a subsidy for low-income individuals.

Summary of Changes with No U.S. Private or Public-Sector Precedent

- **Access to VA Hospital Records**: Veterans will be able to use information technology to get access to their VA hospital records from non-VA medical facilities.
- **Comparative Effectiveness Research**: John McCain will support initiatives to develop and disseminate reviews and research on comparative effectiveness, so that Americans and their doctors will have accurate and objective information they need to make the best decisions for their health and well-being.

Summary of Changes with No Rigorous Empirical Evidence of Support

- **Provider Payment Reform**: Provider payment will be based on the value of care derived from clinical data transmitted at the point of service.
- **Disease Management Programs:** Seventy five percent of all health care dollars are spent on patients with one or more chronic conditions, such as diabetes, heart disease, and high blood pressure. John McCain will require that providers who participate in the high-risk insurance plan, Medicare, or the Federal Employee Health Benefits Program (FEHBP) utilize disease management programs. This will improve quality of care, give doctors better information, and reduce costs.
- **Electronic Health Information Technology:** Most medical records are still stored on paper, which makes it hard to coordinate care, measure quality or reduce medical errors and which costs twice as much as electronic claims. John McCain will support broad adoption of standards-based electronic health information systems, including electronic health records, and will phase in requirements for full implementation of health IT.

Coverage Impact of Proposal

The proposal leads to a substantial reduction of the uninsured by approximately 27.5 million of 47 million currently uninsured. This is well over half the uninsured population. Vulnerable populations with low income and chronic illnesses are helped by the proposal. This is in part due to the effect of the Guaranteed Access Program (GAP) as part of the proposal.

Total McCain Plan Impact in 2009; Tax credits & GAP Combined

		McCain Health Reform Plan		
Individual Market	**Status Quo Population**	**2009 McCain Plan**	**2009 Total Impact**	**Population Impact**
Insured	12,882,743	40,533,672	$137,273,430,319	27,650,929
Uninsured	37,135,847	9,431,908	$0	-27,703,939
		Subtotal	$137,273,430,319	
Group Market				
Insured	104,876,241	106,304,423	$149,602,579,568	1,428,182
Uninsured	8,747,218	8,914,211	$0	166,993
		Subtotal	$149,602,579,568	
		Total	**$286,876,009,887**	

Impact in 2009 of GAP Proposal Alone

On its own, the GAP proposal would reduce the number of uninsured by 2.06 million, at a cost of $18.4 billion. The impact of a stand-alone GAP plan is displayed below.

Individual Market	**Status Quo Population**	**2009 GAP Plan**	**2009 Subsidy**	**2009 Total Impact**
HSA	4,292,340	4,543,525	$440,373,395	$440,373,395
PPO High	51,124	1,867,238	$17,874,698,368	$17,874,698,368
PPO Low	8,223,616	8,168,385	$46,267,929	$46,267,929
PPO Medium	315,662	315,275	$24,978,335	$24,978,335
Uninsured	37,135,847	35,071,158	$0	$0
				$18,386,318,027

Sub-population Analyses

We conducted a set of sub-population analyses to test the impact of the McCain plan on coverage of different groups of Americans. This analysis is focused on the non-public insurance market only.

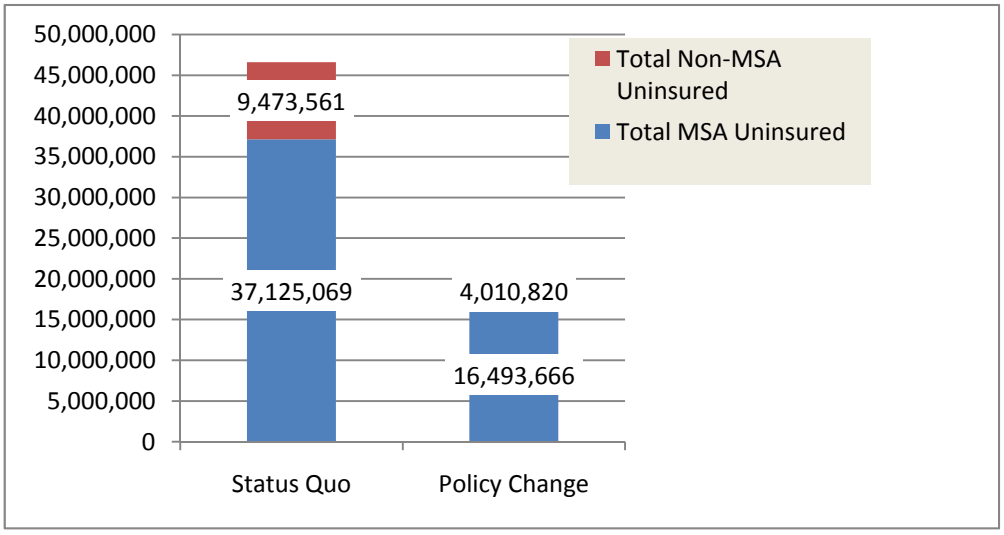
Metropolitan Areas

The McCain plan slightly favors non-MSA areas in terms of the percentage reduction in the uninsured (-58%) compared with reductions in Metropolitan areas (-56%).

Impact by Metropolitan Statistical Areas

	Status Quo Population	Population % Change	New Policy Population
Total Insured	138,019,022	19%	164,113,166
Total Uninsured	46,598,629	-56%	20,504,486
Total MSA Uninsured	37,125,069	-56%	16,493,666
Total Non-MSA Uninsured	9,473,561	-58%	4,010,820
Total MSA Insured	115,856,498	18%	136,487,901
Total Non-MSA Insured	22,162,525	25%	27,625,265

Reduction in the Uninsured by Metropolitan Statistical Area



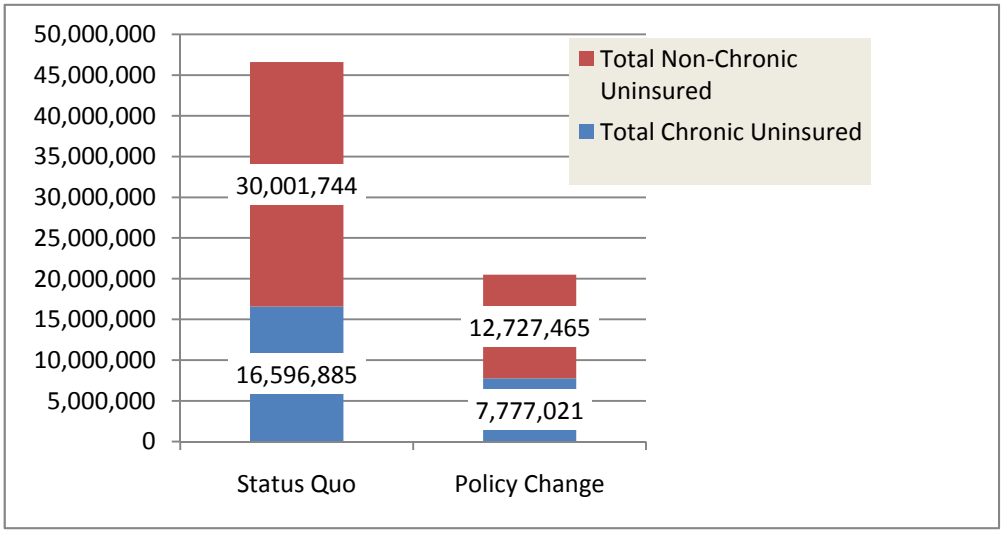
Chronic Illness

Uninsured individuals with chronic illness will be slightly less likely to gain insurance coverage under the McCain plan than those with no chronic illness. There is a 58% reduction in the uninsured among those with no chronic illness and a 53% reduction in the uninsured with one or more chronic illnesses.

Impact by Chronic Illness Presence

	Status Quo Population	Population % Change	New Policy Population
Total Insured	138,019,022	19%	164,113,166
Total Uninsured	46,598,629	-56%	20,504,486
Total Chronic Uninsured	16,596,885	-53%	7,777,021
Total Non-Chronic Uninsured	30,001,744	-58%	12,727,465
Total Chronic Insured	43,184,589	20%	52,004,453
Total Non-Chronic Insured	94,834,433	18%	112,108,713

Reduction in the Uninsured by Chronic Illness Presence

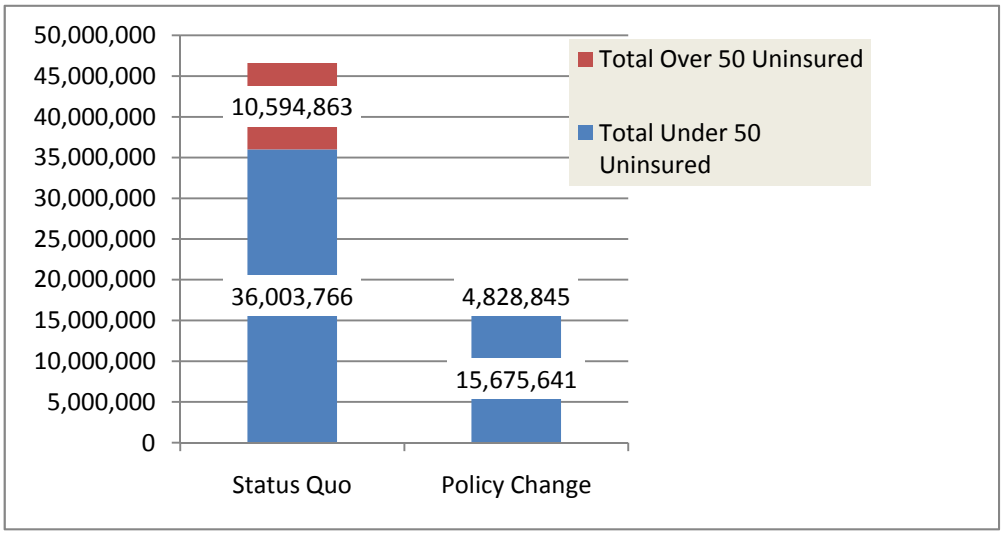


Age

Those over the age of 50 would see a 56% decrease in uninsurance. Those under 50 would also have greater insurance coverage but they would see a slightly smaller decrease of 54% in uninsurance.

	Status Quo Population	Population % Change	New Policy Population
Total Insured	138,019,022	19%	164,113,166
Total Uninsured	46,598,629	-56%	20,504,486
Total Under 50 Uninsured	36,003,766	-56%	15,675,641
Total Over 50 Uninsured	10,594,863	-54%	4,828,845
Total Under 50 Insured	105,950,561	19%	126,278,685
Total Non-Under 50 Insured	32,068,462	18%	37,834,480

Reduction in the Uninsured by Age (over 50 years of age)



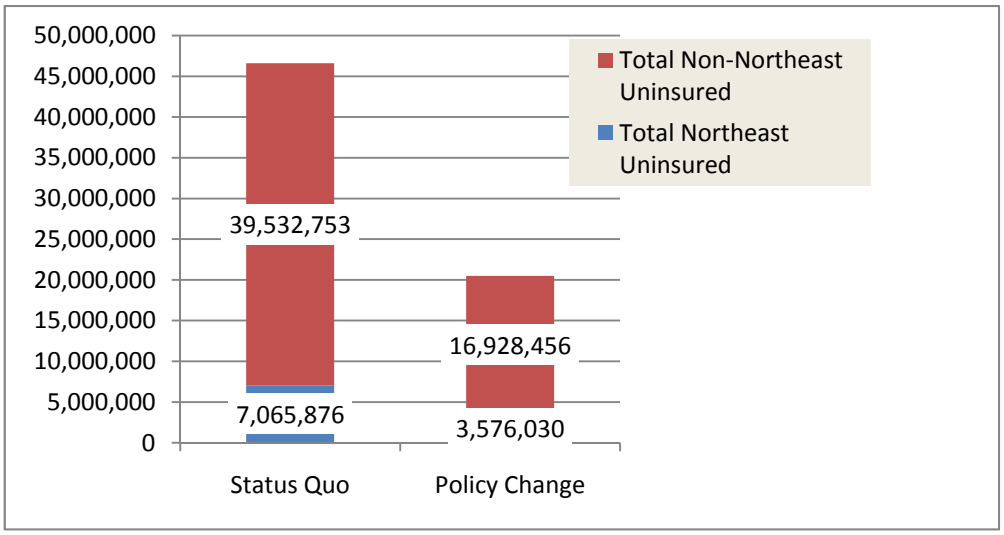
Region

We compared the most densely population region in the U.S., the Northeast, with the rest of the country. Those in the Northeast would see a 49% reduction in uninsurance while those elsewhere would have a 57% reduction.

Impact by Northeast resident or not

	Status Quo Population	Population % Change	New Policy Population
Total Insured	138,019,022	19%	164,113,166
Total Uninsured	46,598,629	-56%	20,504,486
Total Northeast Uninsured	7,065,876	-49%	3,576,030
Total Non-Northeast Uninsured	39,532,753	-57%	16,928,456
Total Northeast Insured	27,511,679	13%	31,001,525
Total Non-Northeast Insured	110,507,343	20%	133,111,641

Reduction in the Uninsured by Northeast resident or not



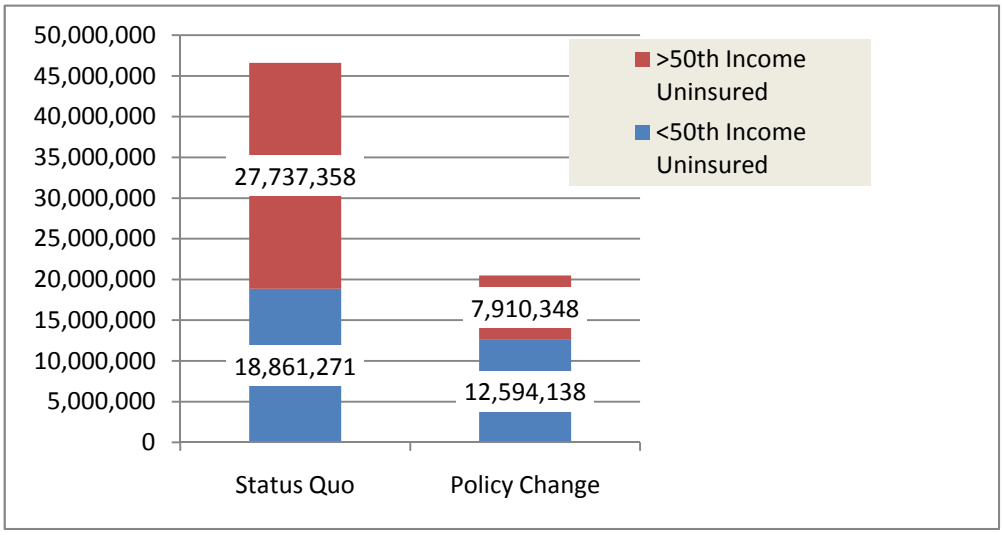
Income

The impact of the McCain policy for the uninsured is not identical for those above and below the 50th percentile of wage income. In the lower-income population, there would be a 33% reduction in uninsurance, while the higher-income population would have a 71% reduction. However, those below the 50th percentile of wage income would see a 365% increase in health insurance coverage.

Impact by lower 50th percentile of income

	Status Quo Population	Population % Change	New Policy Population
Total Insured	138,019,022	19%	164,113,166
Total Uninsured	46,598,629	-56%	20,504,486
<50th Income Uninsured	18,861,271	-33%	12,594,138
>50th Income Uninsured	27,737,358	-71%	7,910,348
Total <50th Income Insured	7,078,442	365%	32,917,005
Total Non-<50th Income Insured	130,940,580	0%	131,196,161

Reduction in the Uninsured by lower 50th percentile of income



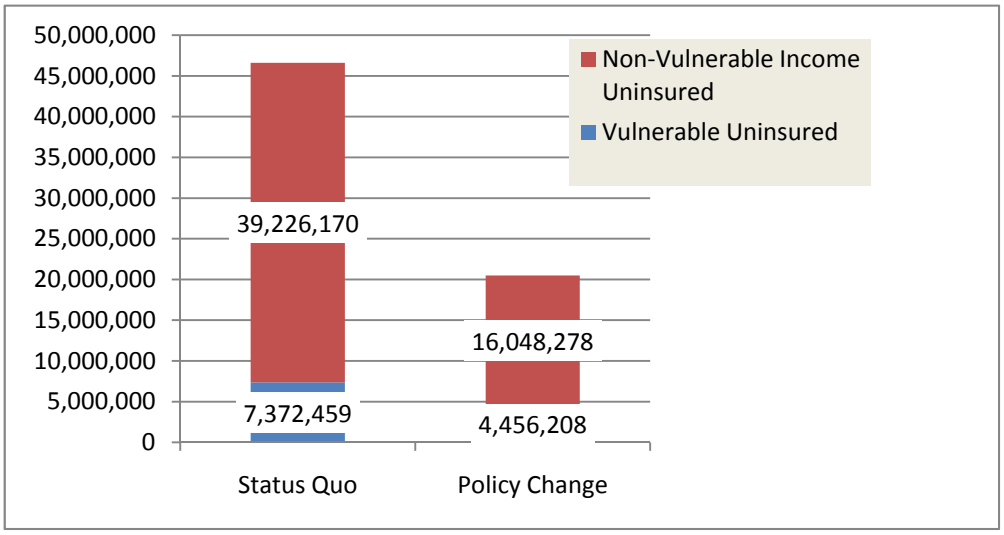
Vulnerable Populations

Vulnerable populations (defined as those below the 25th percentile of wage income and having a chronic illness) would see a reduction of 40% in uninsurance compared with the non-vulnerable population's reduction of 59%. However, the vulnerable populations would see a 496% increase in health insurance coverage.

Impact by vulnerable population status (less 25th Income percentile and chronically ill)

	Status Quo Population	Population % Change	New Policy Population
Total Insured	138,019,022	19%	164,113,166
Total Uninsured	46,598,629	-56%	20,504,486
Vulnerable Uninsured	7,372,459	-40%	4,456,208
Non-Vulnerable Income Uninsure	39,226,170	-59%	16,048,278
Total Vulnerable Insured	1,751,215	496%	10,443,852
Total Non-Vulnerable Insured	136,267,807	13%	153,669,314

Reduction in the Uninsured by vulnerable population status (less than 25th Income percentile and chronically ill)



Cost Impact of Proposal

The one-year cost impact of the proposal is $287 billion dollars. This assumes that the tax exclusion for employer-sponsored health insurance would be replaced by refundable tax credits for the individual and group markets, and that the GAP plan would be implemented. The investment in health IT is assumed to be a wash in the system given that additional costs of health IT to providers will consume most savings in the near term.

Total expenditure in 2009 and net tax recovery, $amounts

Individual Market	Status Quo Population	2009 McCain Plan	2009 Subsidy	2009 Tax Recovery	2009 Total Impact
HSA	4,292,340	10,289,776	$17,298,264,964	$0	$17,298,264,964
PPO High	51,124	1,807,591	$22,824,595,825	$0	$22,824,595,825
PPO Low	8,223,616	28,020,770	$95,156,813,958	$0	$95,156,813,958
PPO Medium	315,662	415,535	$1,993,755,572	$0	$1,993,755,572
Uninsured	37,135,847	9,431,908	$0	$0	$0
			$137,273,430,319		$137,273,430,319
Group Market					
HMO	25,510,799	14,156,077	$38,459,752,793	$46,592,380,526	-$8,132,627,733
HRA	2,999,863	11,506,298	$45,087,017,099	$4,009,745,173	$41,077,271,927
Employer-sponsored HSA	105,353	705,403	$3,441,907,566	$93,231,925	$3,348,675,640
Opt-out HSA	47,413	7,347,924	$2,223,587,226	$77,338,800	$2,146,248,426
Opt-out PPO Low	80,243	8,220,320	$22,369,126,906	$102,250,056	$22,266,876,850
PPO High	11,452,590	31,317	$156,484,035	$36,351,092,933	-$36,194,608,898
PPO Low	1,334,315	8,242,099	$22,372,956,238	$1,627,388,843	$20,745,567,395
PPO Medium	52,211,043	40,969,521	$195,833,274,433	$91,488,098,474	$104,345,175,959
Turned Down - Other Private	11,134,622	15,125,464	$0	$0	$0
Turned Down - No insurance	8,747,218	8,914,211	$0	$0	$0
			$329,944,106,298		
		Total:	$467,217,536,617	$180,341,526,730	$286,876,009,887

The cost of the Guaranteed Access Plan (GAP) for high risks is included in the table above. When we break out that cost, it is estimated to be $19 billion. There would 2.7 million people eligible for GAP. Given the financial incentives of the GAP plan, 1.68 million of them would take advantage of GAP and purchase health insurance.

Gap Effect	
Eligible	2,675,719
People eligible now insured	1,679,694
GAP Cost	$19,014,040,913

McCain Health Plan Simulation: Technical Documentation

The McCain health plan proposes a complex set of changes to the group (i.e. employer-sponsored) and individual health insurance markets in the United States, as well as a variety of incentives for people to purchase insurance. In this technical appendix, we describe how we incorporated these proposals – many of which are not yet spelled out in detail – into the ARCOLA simulation model.

Tax Credit Proposal

John McCain's tax credit proposal calls for replacing the current tax exemption for employer-sponsored health insurance (ESI) with a tax credit to purchase either ESI or individual insurance. Our simulation of the tax credit proposal assumes that every U.S. citizen under the age of 65 gets a $2,500 annual tax credit to purchase individual coverage and a $5,000 tax credit to purchase 2-person or family coverage. The tax credit will be automatically advanced upon the purchase of insurance. People who choose health plans that cost less than the credit will be entitled to a refund for the difference between the credit and the out-of-pocket premium.

The tax credit replaces the current exemption of employer-paid health insurance premiums from federal income taxes, but we assume that the employer-paid premium will continue to be exempt from FICA taxes, which represent 15.3% of the wage base for most individuals. We also assume that some individuals will continue to pay their share of the ESI premium with pre-tax dollars through 'Section 125' plans.

Less than 5% of Americans[2] aged 18-64 who are not in public insurance programs might face an increase in their taxes due to the McCain health plan depending upon the generosity. In every major income percentile, Americans will have, on average, a reduction in their health insurance costs resulting from the tax credit proposal.

Guaranteed Access Plan

John McCain's Guaranteed Access Plan (GAP) provides financial support beyond that offered by the tax credits that are available to all individuals and families, to help people who have been denied coverage for health insurance. This section explains our technical approach to simulate the effectiveness and cost of GAP.

Eligibility: Individuals or families who have been denied insurance coverage or have only been offered insurance that limits coverage for their high-cost medical

[2] This estimate is based on the ARCOLA simulation model. It predicts using MEPS data 4.2 million people among all those 18-64 years of age who are not in public insurance programs or are students will face an increase in taxes. The total population serving as the denominator is 121.4 million. Thus, the actual percentage is 3.5%.

conditions would be eligible for GAP. We assume that eligibility is limited to people in the individual insurance market. We used data from the Medical Expenditure Panel Survey (MEPS) to identify eligible people as those who don't have access to ESI and (a) have ever been turned down for health insurance coverage or (b) have a serious medical condition(s). There are about 2.7 million such individuals who would be eligible for GAP.

Choice of plans: There will be a choice of plans in GAP. We used the choices that are currently available in the individual market.

Premiums: Premiums will not exceed 150% of the 'comparable standard risk plans' sold in the state. We assume this means the age-sex adjusted premium for individual coverage.

Premium support: Individuals and families will apply their tax credits to purchase their chosen policy. Additional support will be available on a sliding scale up to 300% of the federal poverty level (FPL). We assume 100% premium support for those who have incomes less than FPL, with the subsidy phasing down to zero at 300% of FPL.

Additional subsidies to make up any shortfall (benefit costs less premiums): To keep the simulation simple, we calculated the amount of the subsidy needed for GAP to break even but we did not specify a particular source for those funds (e.g. insurer assessments, federal or state assistance).

GAP-only Simulation: This simulation produces estimates of the number of people who will be eligible for GAP, the number who take up coverage, and the cost of this proposal, if it were implemented without any tax credit. A specific example of an individual who is eligible for GAP-only is given below:

> The standard single-coverage premium for Mr. Jones, who has been denied insurance coverage because of chronic illness, is $400 per month, but his predicted medical care cost is $1,200 per month. Mr. Jones's GAP premium will be 2 x $400 = $800 per month. Assume Mr. Jones's income is 200% of FPL. He will be eligible for a low-income subsidy of 50% x $800 = $400. His net premium is therefore $800 - $400 = $400. If he takes up GAP, the subsidy cost will be $800.

GAP and Tax Credit Simulation: This simulation produces estimates of the number of people who will be eligible for GAP, the number who take up coverage, and the cost of this proposal, if it were implemented with the McCain tax credit proposal. A specific example of an individual who is eligible for GAP and the tax credit is given below:

> The standard single-coverage premium for Mr. Jones, who has been denied insurance coverage because of chronic illness, is $400 per month,

but his predicted medical care cost is $1,200 per month. Mr. Jones's GAP premium will be 2 x $400 = $800 per month. He can apply 1/12 of his annual $2,500 tax credit or approximately $208 each month toward paying the premium. Therefore, his tax credit-adjusted premium is $800 - $208 =$ 592. Assume Mr. Jones's income is 200% of FPL. He will be eligible for an additional low-income subsidy of 50% x $592 = $296. His net premium is therefore $800 - $208 - $296 = $296. If he takes up GAP, the subsidy cost will be $1,104: $208 from the tax credit, $296 from the low-income subsidy, and $600 from other sources.

General Company Information

HSI Network (HSI) is a limited liability company with offices in Minnesota, Connecticut and Virginia that performs sophisticated health care econometric analyses using administrative data. HSI was incorporated in 1998 in New York State. Gross revenues reached one million dollars by winter 1999. The majority of revenues are distributed to researchers, analysts and academics working with HSI. HSI operates on cash accounting basis and no liquid assets are carried year to year with the exception of operating expenses and partner travel stipends. HSI carries 1 million dollars of general liability insurance with an additional 1 million dollars of coverage for errors and omissions.

HSI is supported with dedicated Masters level analyst/programmers and the fifteen terabyte capacity of HSI Network LLC's distributed fire-wall protected network of SAS and SQL servers.

Recent HSI projects completed and ongoing include:

- Evaluation of United Health Group's Mid Atlantic Division disease management program.
- Confidential evaluation of an independent disease management vendor's long term performance using claims data from a large employer with over 200,000 covered lives operating in the New York/New Jersey/Pennsylvania Tri-State region.
- Expert design consultation and training for United Health Group Europe's provider performance tools using administrative and clinical records from the United Kingdom.
- Development of CS-PURE, a claim-based dashboard application in Microsoft Access designed to identify patients with potential controlled substance utilization patterns. See Parente, S.T., Kim, S., Finch, M., Schloff, L., Rector, T., Seifeldin, R., Haddox, J.D. "Using Claims Data to Identify Controlled Substance Patterns of Utilization Requiring Evaluation." American Journal of Managed Care, November, 2004; 10(11 Pt 1):783-90.
- Contracted vendor for i3/Innovus to complete health economic and pharmaco-economic analyses.
- Vendor for claims-based evaluations of carriers serving the CHAMPUS Tri-Care program (1998-2003) and the Department of Defense (2005 to 2008).

HSI brings together leading academics from across the country to apply their knowledge and expertise in answering pressing business questions. This results in transfer of state-of-the-art methodology from academics to application in firms. Our associates, who hold Ph.D.'s from institutions such as Johns Hopkins, Wharton, and Harvard University, have published articles in *The Harvard Business Review, Journal of Finance, American Economic Review, Journal of Accounting & Economics,* and health care journals including *Health Affairs, Medical Care, Journal of Health Economics, Health Services Research,* and *Medical Care Research & Review*. In addition to the Ph.D. level associates and partners in the areas of economics, health economics, accounting, and finance, HSI employs a staff of statistical analysts experienced in the use of large administrative claims databases.