



*The* LEWIN GROUP

# **The Cost and Coverage Impacts of the CDF Healthy Children Proposal**

## **Final Report**

*Prepared for:*

**The Children's Defense Fund (CDF)**

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## EXECUTIVE SUMMARY AND INTRODUCTION

There are 79.0 million children in the US. About 9.5 million are uninsured, which is about 12.0 percent of the nation's children. Of 9.5 million uninsured children, about 5.2 million children (54.7 percent) are actually eligible for the existing Medicaid or State Children's Health Insurance Program (SCHIP) in their state of residence, but are not enrolled. About 75 percent of all uninsured children are living at or below 300 percent of the federal poverty level (FPL). These data reveal a need for an expansion in eligibility for lower-income children and improved enrollment and retention of children in these programs.

The Children's Defense Fund Healthy Children proposal creates a new consolidated health insurance program for all needy children and pregnant women in the US. The program combines the children's portion of Medicaid and the SCHIP program into a single program operated by states with federal financial participation. All children and pregnant women with incomes at or below 300 percent of the federal poverty level (FPL) would be eligible for this program. Children living above 300 percent of the FPL would be permitted to buy-in to the program by paying a premium. All children residing in the US would be eligible for full coverage under the program.

### Program Features

Participants would be covered under a comprehensive benefits package based upon the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) benefits provided under the current Medicaid program. The EPSDT model requires regular screening of children for physical, mental, and developmental conditions and provides coverage for all medically necessary services required to address the problems identified. To encourage provider participation, providers would be reimbursed at not less than 80 percent of private payer rates, which can be up to twice what is paid for comparable services under existing Medicaid programs. There would be no premiums for children and pregnant women living at or below 300 percent of the FPL, and only nominal co-pays for those in families with incomes from 201 to 300 percent of the FPL.

To assure coverage for all children, the program simplifies the enrollment process and implements automatic enrollment mechanisms to ensure all eligible children are enrolled (*Figure ES-1*). Uninsured children would be enrolled automatically at birth, upon school registration, or through other income-tested programs, such as Food Stamps or the Women, Infants, and Children (WIC) program. However, parents would have the option to decline enrollment of their children in the program if they wish.

Another key feature of each Healthy Children proposal option is to increase provider payment levels to at least 80 percent of private payer rates, which is substantially higher than the Medicaid payment rates. These increases in reimbursement would provide an added incentive for provider participation and improved offering and utilization of all medically necessary services consistent with the EPSDT benefit package.



**Figure ES-1  
Summary Provisions of the CDF Healthy Children Proposal Base Plan**

<b>Eligibility Simplification</b>	
Self-attestation of income	Enrollees will be able to self-attest to their income rather than provide documentation, albeit subject to verification and periodic audit.
Twelve-month attestation	Children and pregnant women would remain eligible for a period of 12 months without the need to recertify their eligibility.
No premiums	There would be no premium for enrollees at or below 300 percent of the FPL.
No co-pays at or below 200% FPL	Children and pregnant women in families with an income at or below 200 percent of the FPL will have no co-payments. Families between 201 and 300 percent of the FPL would pay nominal co-payments.
Automatic enrollment through means-tested programs with opt-out	Children and pregnant women are automatically enrolled through other means-tested programs such as the National School Lunch Program, Food Stamps, and the Women, Infants, and Children (WIC) program. Parents may opt-out.
Upgrade SCHIP benefits to Medicaid	All children would be guaranteed full coverage for Early and Periodic Screening, Diagnosis and Treatment (EPSDT) services, including all medically necessary services for all physical, mental, vision, and dental problems identified in that screening and diagnosis process.
<b>Eligibility Expansion</b>	
Eligibility up to and including 300% FPL	The proposal provides coverage to all children under age 19 and pregnant women through 60 days post-partum with incomes up to and including 300 percent of the FPL.
Buy-in	Children over 300 percent of the FPL can buy-in to the program by paying a full cost premium. Premiums could be subsidized if needed to ensure they do not exceed 7.5 percent of income for a family with one child, or 15 percent of income for a family with multiple children.
Preventing Crowd out	Children must have been without employer coverage for at least four months prior to enrollment, to discourage employers from discontinuing coverage. The waiting period rule is waived for people changing jobs or experiencing a change in family status.
Citizenship	The proposal extends coverage to all children and pregnant women regardless of citizenship and eliminates the 5-year residency requirement (i.e., waiting period) for children who are not citizens.
Foster children age 19 and 20	The proposal provides transitional coverage to all children age 19 and 20 who are aging out of the foster care programs through age 20.
No assets test	The proposal eliminates the assets test for children now used in several states.
Supplemental coverage	Children who would have qualified for supplemental coverage through Medicaid or children who are SSI disabled would receive supplemental coverage.
<b>Auto Enrollment of Newborns and In-School Kids, with Opt-out<sup>21</sup></b>	
Enroll newborns with opt out	Uninsured newborns would be automatically enrolled at birth or upon application for a Social Security number. Parents can opt-out.
Enroll at schools with opt out	Uninsured children would be automatically enrolled upon their registration at school. Parents can opt-out.
Enroll through Providers	Uninsured children would be enrolled by providers when they use services.
<b>Provider Payment Levels and Access to Services</b>	
80 percent Private Rates	All services under the Healthy Children proposal would be paid at the levels equal to at least 80 percent of private payer rates for comparable service.
Guaranteed Access to Services	Eligible children are guaranteed access to all medically necessary services. Providers may not refuse services for non-payment of co-payments (where applicable).



## Impact on Coverage

In this study, we estimated the number of children and pregnant women who would become covered under the Healthy Children Proposal including provisions to increase enrollment, increase program retention for eligible people and the expansions in eligibility for children and pregnant women under the program. We base our estimates on the most recent data available from the Bureau of the Census on insurance coverage for children, and available data on the cost of covering children under Medicaid and SCHIP. The effectiveness of various automatic enrollment and eligibility simplification measures are based upon published research on the effect these approaches have had on enrollment in states that have already adopted similar measures.

We estimate that when fully implemented, the program would cover a total of about 38.1 million children. This includes about 28.7 million children currently covered under Medicaid and SCHIP, and an additional 9.3 million children who would be enrolled through the eligibility simplifications, automatic enrollment, and expanded eligibility provisions of the Healthy Children proposal. The 9.3 million children newly enrolled in the Healthy Children program include 7.5 million newly insured children and 1.8 million children who drop individual or employer COBRA coverage to enroll.<sup>1</sup>

The program would reduce the number of uninsured children by 7.9 million children, which is about 83 percent of the 9.5 million children now without insurance (*Figure ES-2*). This includes about 7.5 million newly insured children under the Healthy Children program and about 355,700 additional children who enroll in private health insurance as a consequence of automatic enrollment.<sup>2</sup> The proposal would also cover an additional 187,200 pregnant women.

The estimates presented in *Figure ES-2* below, show the combined effects of the enrollment simplification and eligibility expansion provision of the CDF Healthy Children proposal. However, there are significant interactions and overlaps among the various provisions of the proposal. For example, the estimates under the eligibility expansions alone would be lower if it is implemented without the eligibility simplification provisions. The impacts of self-attestation of income at initial application overlap with the automatic enrollment through means-tested programs. Later in the report we show the impact of individual eligibility simplifications if implemented alone.

## Program Spending

Total spending for children under the Healthy Children proposal would be \$89.8 billion, including costs for children currently covered under Medicaid and SCHIP and children newly enrolled through eligibility simplification, eligibility expansions (including foster care children

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<sup>1</sup> Under the Consolidated Budget Reconciliation Act, employers with health plans are required to offer coverage to laid-off workers and divorcee's spouses with the employee paying a premium equal to 102 percent of the actuarial value of the employer's plan.

<sup>2</sup> These 355,700 children would have been enrolled in the buy-in as a result of the auto-enrollment feature under the proposal. However, because the pool is expected attract the sickest children needing the most services of, we estimate the buy-in premium cost would be higher on average than the premium they would pay for private coverage, we assume that these particular children would opt to become privately insured.



through 20 years of age), and automatic enrollment. This includes \$65.5 billion in spending for children now covered under the current Medicaid and SCHIP programs plus the \$24.3 billion in new spending for children under the CDF proposal.

**Figure ES-2**  
**Cost and Coverage Impacts of the CDF Healthy Children proposal**  
**Assuming Full Implementation in 2007**

Spending and Enrollment under Current Medicaid and SCHIP Programs							
Medicaid and SCHIP Programs	Newly Eligible (1,000's)	Current Enrollment (1,000's)	Newly Insured Under Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions) <sup>b/</sup>	Net Cost to State Govt. (millions) <sup>b/</sup>	Net Cost to Federal Govt. (millions) <sup>b/</sup>
Current programs <sup>a/</sup>	n/a	28,700.0	n/a	n/a	\$65,500.0	\$28,800.0	\$36,700.0
Healthy Children proposal	Newly Eligible (1,000's)	Newly Enrolled Under Healthy Children (1,000's)	Newly Insured Under Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Cost to State Govt. (millions)	Net Cost to Federal Govt. (millions)
Key Provisions of the CDF Healthy Children proposal for Children (i.e., Excluding Pregnant Women)							
Eligibility simplification	n/a	1,590.0	1,288.4	0.0	\$1,856.5	\$0.0	\$1,856.5
Auto-enrollment through means-tested programs	n/a	2,793.0	2,793.0	0.0	\$2,941.0	0.0	\$2,941.0
Eligibility expansion	3,983.0	2,974.6	2,074.0	0.0	\$3,762.4	\$0.0	\$3,762.4
Auto enrollment of newborns and in-school kids	n/a	3,480.7	3,480.7	355.7	\$5,345.1	\$0.0	\$5,345.1
Foster children	79.3	59.5	36.3	--	\$83.5	\$0.0	\$83.5
Combined Impact of Eligibility Simplification, Eligibility Expansions and Automatic Enrollment of Children							
Combined impact for Children before payment rate increase <sup>c/</sup>	4,062.3	9,261.7	7,560.9	355.7	\$12,937.3	\$0.0	\$12,937.3
Provisions Affecting Pregnant Women							
Pregnant women	347.7	187.2	163.2	--	\$1,858.5	\$0.0	\$1,858.5
All provisions Affecting Pregnant Women and Children Without Provider Payment Rate Increases							
All provisions for pregnant women and children	4,410.0	9,448.9	7,724.1	355.7	\$14,795.8	\$0.0	\$14,795.8
Cost of Provider Payment Rate Increases (for Children and Pregnant Women)							
Adopt 80 percent of private provider payment levels	n/a	n/a	n/a	n/a	\$11,353.3	\$0.0	\$11,353.3
Combined Impact of All Provisions Including Rate Increase <sup>b/</sup>							
Total Change	4,410.0	9,448.9	7,724.1	355.7	\$26,149.0	\$0.0	\$26,149.0
Combined Program Including Existing Medicaid and SCHIP Spending for Children							
Total Program	4,410.0	38,148.9	7,724.1	355.7	\$91,649.0	\$28,800.0	\$62,849.0

a/ March 2006 baseline assumptions from the Congressional Budget Office.

b/ Includes cost of benefits and administration less premium revenues.

c/ Numbers do not sum to totals due to overlapping effects.

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



About 53 percent (\$12.9 billion) of the \$24.3 billion in new spending for children under the CDF proposal is attributed to increased enrollment. These include the expansions in eligibility, enrollment simplifications and automatic enrollment. The remaining \$11.4 billion is due to increasing provider payment amounts from the current Medicaid and SCHIP levels to 80 percent of private-payer reimbursement levels.

The expansions in eligibility for pregnant women under the proposal would cover an additional 187,200 pregnant women, of whom 163,200 would be newly insured. Coverage for newly enrolled pregnant women would result in about \$1.9 billion in new spending. Thus, the aggregate net cost to the federal government for pregnant women and children would be \$26.1 billion (Figure ES-3). This includes \$24.3 billion in spending for children and \$1.9 billion in spending for pregnant women.

Under the CDF Healthy Children proposal, the federal government would pay the full amount of these \$26.1 billion in new costs so that there is no net increase in spending for states.

**Figure ES-3**  
**Cost and Coverage Impacts of the CDF Healthy Children proposal Assuming Full Implementation in 2007 (Children and Pregnant Women)**

Key Provisions	Newly Eligible (1,000's)	Newly Enrolled Under Healthy Children (1,000's)	Newly Insured Under Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Cost to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Option 1: Base Plan as Described above in Figure ES-1: Key Provisions of the Healthy Children proposal – No Premiums with Anti-Crowd-out Provisions</b>							
Children	4,062.3	9,261.7	7,560.9	355.7	\$24,290.5	\$0.0	\$24,290.5
Pregnant women	347.7	187.2	163.2	--	\$1,858.5	\$0.0	\$1,858.5
<b>Combined impact of all with payment rate increase</b>	<b>4,410.0</b>	<b>9,448.9</b>	<b>7,724.1</b>	<b>355.7</b>	<b>\$26,149.0</b>	<b>\$0.0</b>	<b>\$26,149.0</b>
<b>Option 2: Healthy Children with Premiums and Anti Crowd-Out Provisions</b>							
Children	4,062.3	7,187.9	6,058.5	355.7	\$20,045.8	\$0.0	\$20,045.8
Pregnant women	347.7	150.4	134.5	0.0	\$1,718.7	\$0.0	\$1,718.7
<b>Combined impact of all with payment rate increase</b>	<b>4,410.0</b>	<b>7,338.3</b>	<b>6,193.0</b>	<b>355.7</b>	<b>\$21,765.5</b>	<b>\$0.0</b>	<b>\$21,765.5</b>
<b>Option 3: Healthy Children without Premiums and without Anti Crowd-Out Provisions</b>							
Children	10,068.4	12,396.5	7,245.3	355.7	\$29,659.8	\$0.0	\$29,659.8
Pregnant women	748.6	261.0	161.6	0.0	\$1,815.0	\$0.0	\$1,815.0
<b>Combined impact of all with payment rate increase</b>	<b>10,817.0</b>	<b>12,657.5</b>	<b>7,406.9</b>	<b>355.7</b>	<b>\$31,474.8</b>	<b>\$0.0</b>	<b>\$31,474.8</b>
<b>Option 4: Impact of Healthy Children without Premium, with Waiting Period, and with Expansion to 350% FPL</b>							
Children	4,718.9	10,574.1	8,016.1	281.4	\$27,948.5	\$0.0	\$27,948.5
Pregnant women	391.5	217.3	174.4	0.0	\$2,228.0	\$0.0	\$2,228.0
<b>Combined impact of all with payment rate increase</b>	<b>5,110.4</b>	<b>10,791.4</b>	<b>8,193.5</b>	<b>281.4</b>	<b>\$30,176.5</b>	<b>\$0.0</b>	<b>\$30,176.5</b>

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



## Summary of Key Findings

Other findings include the following:

- **Eligibility simplification:** We estimate that the eligibility simplification provisions would result in 1.6 million newly enrolled individuals, of whom about 1.3 million would be newly insured. We estimate that the net federal costs of eligibility simplification would be about \$1.9 billion (*Figure ES-2*).
- **Automatic enrollment through means-tested programs:** Automatic enrollment through the Food Stamp and other means-tested programs would cover an additional 2.8 million children at a cost of \$2.9 billion.
- **Eligibility expansion:** We estimate that the eligibility expansion provisions would result in 3.0 million newly enrolled, of which about 2.1 million would be newly insured. We estimate that the net federal costs of these eligibility expansions would be about \$3.8 billion (*Figure ES-2*).
- **Automatic enrollment of newborns and in school children:** We estimate that auto-enrollment of newborns and in-school kids would result in about 3.5 million newly enrolled children, all of whom will be newly insured. We estimate that the net cost to the federal government would be \$5.3 billion (*Figure ES-2*).

Overall, as highlighted in *Figure ES-3*, we developed estimates for three alternative proposal in addition to the Base Plan presented above. These alternative proposals, beginning with the CDF Base Plan proposal including:

- **Option 1-The CDF Healthy Children “Base Plan” proposal (no premiums with anti-crowd-out provisions):** As discussed above, the combined effect of all the eligibility expansion, simplification and auto-enrollment provisions would result in an enrollment of 9.3 million children in the Healthy Children proposal and enrollment of about 187,200 pregnant women. The number of uninsured children and pregnant women would be reduced by 7.7 million people. We estimate that the net cost to the federal government without the increased provider payments would be about \$14.8 billion. Increased provider payment rates would add about \$11.3 billion to the cost of the Healthy Children proposal, for a total net cost to the federal government of \$26.1 billion (*Figure ES-2*).
- **Option 2-Healthy Children with Premiums and Anti Crowd-Out:** Imposing premiums and anti crowd-out reduces estimated total program enrollment of pregnant women and children from 9.3 million under the base plan to 7.3 million. We estimate that the net cost to the federal government would also be reduced from \$26.1 billion under the base plan, to \$21.8 billion (*Figure ES-3*).
- **Option 3-Healthy Children without Premiums and without Anti Crowd-Out:** We estimate that eliminating premiums and anti crowd-out results in 12.7 million children and pregnant women enrolling in the program and a net cost to the federal government of about \$31.5 billion (*Figure ES-3*).
- **Option 4-Healthy Children without Premiums, with Waiting Period, and with Expansion to 350 percent FPL:** We estimate that expanding eligibility to 350 percent of



the federal poverty level results in 10.8 million children and pregnant women enrolling in the program at a net cost to the federal government of \$30.2 billion (*Figure ES-3*).

Our analysis of the Healthy Children proposal is presented in the following sections:

- Data and Methodology;
- Health Care Coverage for Children;
- Cost and Coverage Impacts of the CDF Healthy Children proposal;
- Alternative Specifications for Eligibility Expansions; and
- Program Cost Projections for 2008 through 2012.



## I. DATA AND METHODOLOGY

In this section, we present our data sources and methodology for measures of health insurance coverage and health care spending for children in the US. Our primary tool for estimating health spending and coverage is the Health Benefits Simulation Model (HBSM), a Lewin-developed micro-simulation model of the US health care system. The model is based upon the most recent population data available from the Bureau of the Census and health spending data available from the Center for Medicare and Medicaid Services (CMS).

The data sources and modeling systems used in this analysis are described below:

### A. Data Sources

Our primary data source for this study is the March 2006 Current Population Survey (CPS), which is conducted annually by the Bureau of the Census. The CPS is based upon a representative sample of US residents in each of the 50 states and the District of Columbia. These data provide information on the sources of health insurance coverage for each member of each household selected for the survey. The CPS also provides detailed information on income, family relationship, employment status, citizen status, and other demographic characteristics. These data permit us to estimate the number of uninsured people by state for various socio-economic groups.

The survey asks people to indicate whether they had insurance in the prior year from each of several sources. Those who do not report being covered by any of these sources in the prior year are classified as “uninsured.” Thus, the way the survey is conducted, it reports the number of people uninsured all year. This “all year” uninsured definition omits those who were uninsured for only a portion of the year. The way the survey reports uninsured not only understates the number of uninsured, it would also lead us to under-estimate the cost of covering these people under various proposals to expand insurance coverage. Thus, the most appropriate measure of the uninsured for policy purpose is the average monthly number of uninsured, which also can be thought of as “full-time equivalent” counts of the number of person-years without insurance.

While the CPS provides the most current data on insurance coverage, it also under-reports the number of people covered under the Medicaid program by nearly 40 percent, which causes these data to over-estimate the number of uninsured in the US. Consequently, we corrected the CPS data for under-reporting of Medicaid coverage to provide a more accurate count of the number of people without coverage. We also allocated months of coverage under employer plans across months worked in the year and months of Medicaid enrollment reported for those who are enrolled (months on Medicaid is reported in the CPS). This enables us to provide estimates of the average monthly number of uninsured people that is corrected for under-reporting of Medicaid coverage.

### B. The Health Benefits Simulation Model

The key to simulating the changes in health care coverage and costs is to develop a baseline database that depicts the US health care system for children in detail. We do this by bringing together data from several sources to create a single cross-sectional database with information

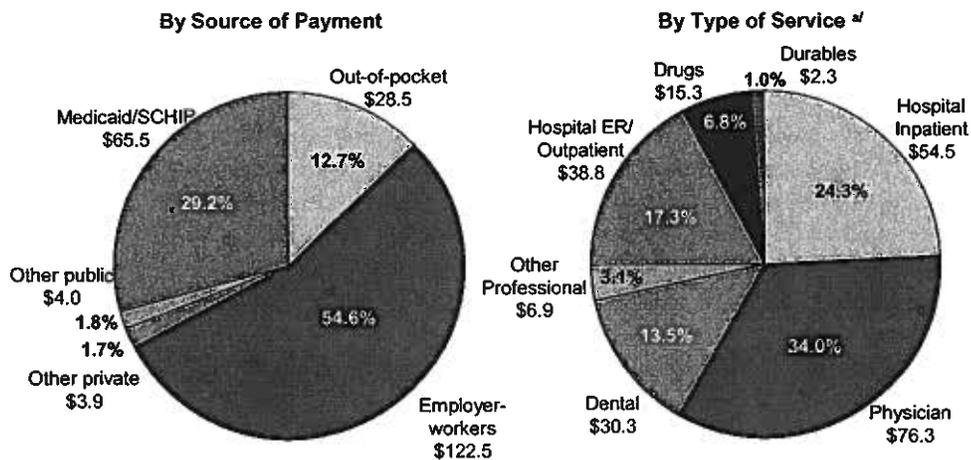


on income, coverage, health spending by type of service and source of payment, family income, employment, and family relationship for each individual in each household. These data are adjusted to reflect the most recent data available on coverage and health spending. This provides a detailed baseline that can be used to simulate changes in coverage and spending under alternative health reform initiatives. A general description of HBSM is presented in *Appendix A*.

Our HBSM baseline data is based upon the 1999 through 2001 Medical Expenditures Panel Survey (MEPS) data, which provides information on sources of coverage and health expenditures for a representative sample of the population. We controlled these data to reflect the population and coverage reported in the 2006 Current Population Survey (CPS) data. We also statistically matched workers in these data to a survey of 2,000 employers conducted by the Kaiser Family Foundation (KFF) and the Health Research and Educational Trust (HRET) Fund survey of employers to provide additional detail on coverage employer.

We estimate that total health spending for children and pregnant women in the US in 2006 will be \$224.4 billion (*Figure 1*). Spending for inpatient hospital care will be about \$54.5 billion, which is about 24.3 percent of total health spending for this group. Spending for physician and other professional services will be about \$83.2 billion (37.1 percent of total spending). Spending on prescription drugs and other medical durables will be about \$17.6 billion (7.8 percent) of health spending for these people. Employer sponsored coverage is the largest payer source of health care for children and pregnant women, accounting for 54.6 percent of health spending. Medicaid and SCHIP covers 29.2 percent of health spending for this group. About 12.7 percent of care provided to children and pregnant women is paid by families as out-of-pocket spending.

**Figure 1**  
**Health Spending in the U.S. for Children and Pregnant Women by Source of Payment and Type of Service (in billions)**



Total Health Spending for Children = \$224.4 billion

a/ Total does not add to 100 percent due to rounding. Spending for mental health services are included in drugs, hospital, other professional, and physician costs.

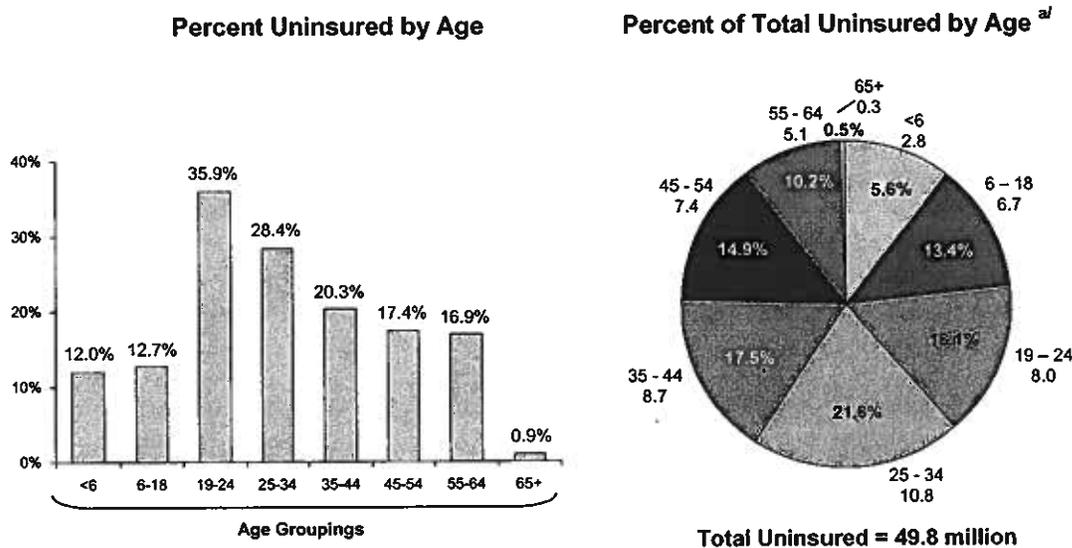
Source: Lewin analysis using the Health Benefits Simulations Model (HBSM).



### C. Estimates of Uninsured Children Used in Lewin Analysis

We estimate that in 2005, there was an average of about 49.8 million uninsured people in the US at any given time. Of these, 9.5 million were children under the age of 19, which is about 12 percent of the 79 million children in this age group in the U.S. About 2.8 million of these uninsured are under age 6, while about 6.7 million are between the ages of 6 and 18 (Figure 2). This reflects the emphasis placed on children’s coverage under the existing Medicaid and SCHIP programs, which typically cover children at higher income levels than for parents. In most states, single-individuals and married couples without children are not covered at any income level.

**Figure 2**  
**Percent of U.S. Residents Who Were Uninsured at a Point in Time in 2005, by Age Group (Number in millions)**



a/ Numbers next to age group in chart are in millions.  
Source: The Lewin Group estimates using the Health Benefits Simulation Model (HBSM).



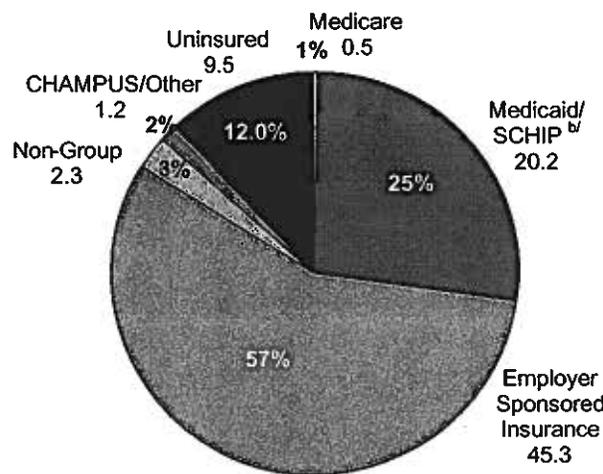
## II. HEALTH CARE COVERAGE FOR CHILDREN

In this section we present estimates of the distribution of uninsured people across selected socio-economic groups. All of the estimates presented in this section are based upon the 2006 CPS with the corrections for underreporting of Medicaid, and the allocation of coverage by month as discussed above.

### A. Primary Source of Health Insurance

Figure 3 presents our estimates of the distribution of children under age 19 by primary source of coverage. Because many people have coverage from more than one source, we defined the primary source of coverage based on the prevailing coordination of benefits practices now in use.

**Figure 3**  
**Children in the US by Average Monthly Primary Source of Health Insurance in 2005<sup>a/</sup>**  
**(in millions and percentages)**



Total Population = 79.0 million

a/ Primary payer is determined on the basis of prevailing coordination of benefits practices now in use.

b/ About 28 million children and pregnant women are enrolled in Medicaid and SCHIP sometime during the year.

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

Employer-sponsored coverage is the primary source of health insurance for most children in the US. More than one half of children in the US (57 percent) are covered by employer – sponsored insurance as dependents at any given point in time (Figure 3). Only 2.3 million (3 percent) of children have individually purchased non-group coverage as their primary source of coverage.

About one-half million children (one percent) receive Medicare as their primary source of coverage. In any given month, there were about 20.2 million children (25 percent) with Medicaid/SCHIP as their primary source of insurance (about 28 million were enrolled at some point during the year). About 1.2 million children (2 percent) are covered as dependents of

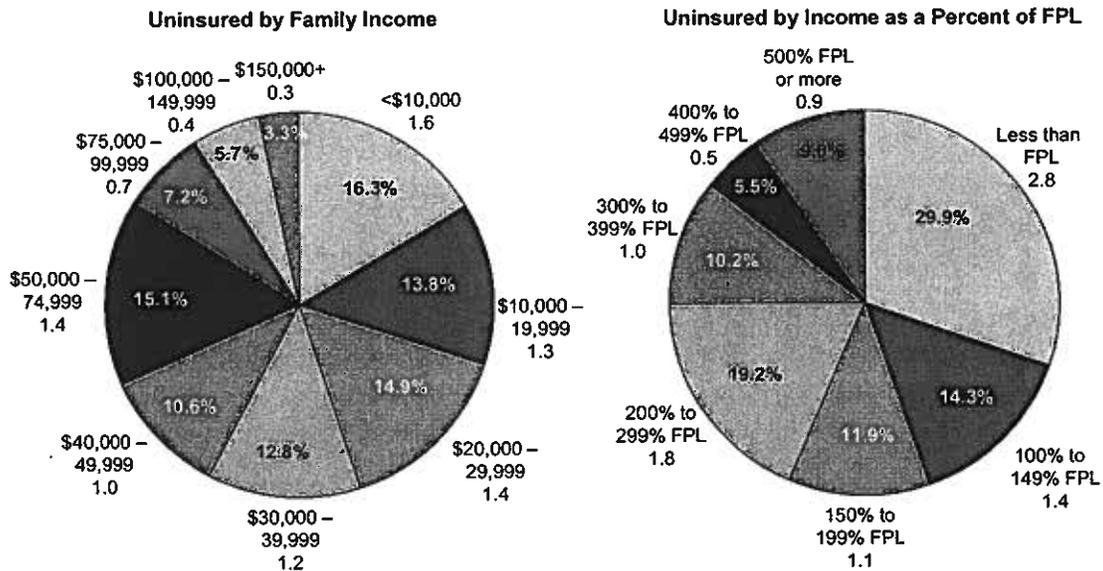


military personnel through the Champus/TriCare program. This leaves about 9.5 million children who are uninsured at any given point-in-time.

### B. Uninsured by Family Income

The uninsured are found in all income groups (Figure 4). Close to one-third (29.9 percent) of uninsured children live below the federal poverty level (FPL). About 45.4 percent of uninsured children are in families with incomes between 100 percent and 300 percent of the FPL, and about 24.7 percent of uninsured children are in families whose income exceeds 300 percent of the FPL. In fact 9.0 percent of uninsured children are in families with annual incomes of \$100,000 or more.

**Figure 4**  
**Average Monthly Uninsured Children by Family Income and Income as a Percent of the Federal Poverty Level (FPL) in 2005 and in millions <sup>a/</sup>**



Average Monthly Uninsured = 9.5 million

<sup>a/</sup> The number of uninsured in the charts are in millions.  
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).



### III. COST AND COVERAGE IMPACTS OF THE CDF HEALTHY CHILDREN PROPOSAL

Under the CDF proposal, all children under the age of 19, pregnant women, and those up to 60 days post-partum with an income at or below 300 percent of the federal poverty level (FPL) would be covered under a newly created program for children's coverage. The current Medicaid and State Children's Health Insurance Programs (SCHIP) would be folded into the new program. Parents living above 300 percent of the FPL would be permitted to enroll their children via a buy-in option by paying a premium that is set to cover the full cost of the coverage, up to a specified percentage of family income. All children, regardless of citizenship, would be eligible for full coverage under the program.

Participants would be covered under a comprehensive benefits package based upon the Early and Periodic Screening Diagnosis and Treatment (EPSDT) benefits provided under the current Medicaid program. The EPSDT model requires regular screening of children for physical, mental, and developmental conditions, and covers all medically necessary services required to address the problems identified in screening and diagnosis. Providers would be reimbursed at no less than 80 percent of private payer rates.

To assure coverage for all children, the program implements a series of automatic enrollment mechanisms to enroll children found to be without coverage. Uninsured children would be enrolled automatically at birth, at school, or through other income-tested programs such as Food Stamps or the Women, Infants, and Children (WIC) program. However, parents would have the option to decline enrollment of their children in the program if they wish.

The program would also adopt several approaches to expand eligibility and simplify the enrollment processes currently used in Medicaid and SCHIP. These include:

- Eliminating the assets test for all children;
- Adopting self-attestation of income at enrollment;
- Providing continuous eligibility for 12 months; and
- Eliminating premiums for all children living at or below 300 percent of the FPL.

As discussed above, we estimate that the proposal reduce the number of uninsured children by about 7.9 million children, including 7.5 million newly insured in the Healthy Children program 355,700 additional children who enroll in private health insurance plans as a consequence of automatic reenrollment at birth or when registering for school. This is about 83 percent of the 9.5 million children who are uninsured (*Figure 5*). The program would also cover an additional 187,200 newly eligible pregnant women. The net cost of the program would be \$26.1 billion, all of which would be paid by the federal government. Our analysis is presented in the following sections.

- Eligibility Simplification Provisions;
- Eligibility Expansion Provisions;
- Automatic Enrollment of Newborns and School-Age Children with Opt-out; and
- Increases in Provider Reimbursements for Services for Children.



Figure 5  
Impact of the CDF Healthy Children proposal on Costs and Coverage if Fully Implemented in 2007

Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Eligibility Simplification</b>							
Self-attestation of income	n/a	796.3	643.4	0.0	\$1,058.7	\$0.0	\$1,058.7
Twelve-month attestation	n/a	532.7	430.4	0.0	\$708.3	\$0.0	\$708.3
Eliminate premiums <200% FPL	n/a	383.0	309.5	0.0	\$1,008.1	\$0.0	\$1,008.1
Eliminate co-pays <200% FPL	n/a	44.4	40.4	0.0	\$59.1	\$0.0	\$59.1
Automatic enrollment through means-tested program with opt-out	n/a	2,793.0	2,793.0	0.0	\$2,941.0	\$0.0	\$2,941.0
Upgrade SCHIP benefits to Medicaid	n/a	n/a	n/a	n/a	\$345.4	\$0.0	\$345.4
<b>Non-overlapping Total</b>							
Combined effect (non overlapping)	n/a	3,626.0	3,323.9	0.0	\$5,096.2	\$0.0	\$5,096.2
<b>Eligibility Expansion</b>							
Supplemental Coverage for ESI	102.5	102.5	0.0	0.0	\$28.8	\$0.0	\$28.8
Cover foster children age 19 and 20	79.3	59.5	36.3	0.0	\$83.5	\$0.0	\$83.5
Buy-in with subsidy (i.e., children in families above 300% FPL) <sup>a)</sup>	30.0	30.0	24.2	0.0	\$138.0	\$0.0	\$138.0
Eliminate assets test	4.6	0.8	0.8	0.0	\$1.0	\$0.0	\$1.0
<b>Coverage Regardless of Citizenship</b>							
Children	1,358.9	845.2	802.9	0.0	\$781.6	\$0.0	\$781.6
Pregnant women	181.7	127.1	120.7	0.0	\$1,446.2	\$0.0	\$1,446.2
<b>Increase Eligibility to 300% FRL</b>							
Children	2,487.0	1,587.8	991.2	0.0	\$2,238.3	\$0.0	\$2,238.3
Pregnant women	166.0	60.1	42.5	0.0	\$412.3	\$0.0	\$412.3
Spill-over for currently eligible	n/a	408.3	254.9	0.0	\$574.8	\$0.0	\$574.8



Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Total Eligibility Expansion</b>							
Total	4,410.0	3,221.3	2,273.5	0.0	\$5,704.4	\$0.0	\$5,704.4
<b>Combined Impact of Simplification and Expansion</b>							
Combined impact	4,410.0	6,847.3	5,597.4	0.0	\$10,800.7	\$0.0	\$10,800.7
<b>Auto Enrollment of Newborns and in School Kids</b>							
Enroll newborns	n/a	332.1	332.1	28.7	\$924.5	\$0.0	\$924.5
Enroll at schools	n/a	3,148.5	3,148.5	327.0	\$4,420.5	\$0.0	\$4,420.5
Total impact	n/a	3,480.7	3,480.7	355.7	\$5,345.1	\$0.0	\$5,345.1
<b>Combined Impact of all Provisions Without Payment Rate Increase<sup>b/</sup></b>							
Combined Impact	4,410.0	9,448.9	7,724.1	355.7	\$14,795.8	\$0.0	\$14,795.8
<b>Provider Payment Levels</b>							
80 percent private payer rates for currently enrolled	n/a	n/a	n/a	n/a	\$8,469.0	n/a	\$8,469.0
80 percent private payer rates for newly enrolled	n/a	n/a	n/a	n/a	\$2,884.3	n/a	\$2,884.3
Total Provider Payment rates	n/a	n/a	n/a	n/a	\$11,353.3	n/a	\$11,353.3
<b>Combined Impact of All with Payment Rate Increase</b>							
Combined Impact	4,410.0	9,448.9	7,724.1	355.7	\$26,149.0	\$0.0	\$26,149.0

a/ The estimated number of individuals in the buy-in is 30,000, of which 24,200 represents those who are newly insured in Healthy Children.

b/ Numbers do not sum to totals due to overlapping effects.

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



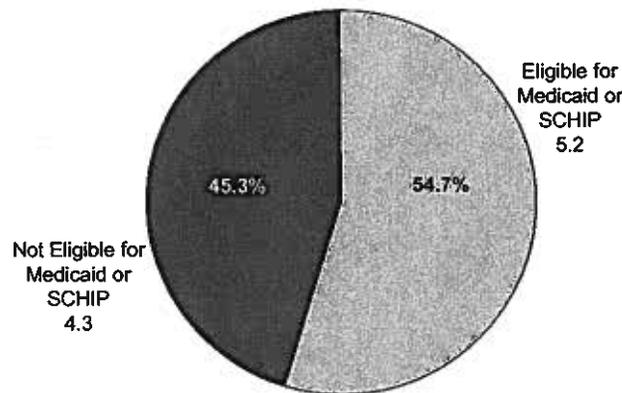
### A. Eligibility Simplification Provisions

About 54.7 percent of all uninsured children are actually already eligible for Medicaid or SCHIP but are not enrolled. The new children’s health insurance program proposed by the CDF includes several provisions designed to achieve higher levels of participation by simplifying and facilitating enrollment. We begin by illustrating how these provisions would affect enrollment and costs under the existing Medicaid and SCHIP programs.

Medicaid and SCHIP cover low-income people in certain categorical groups including children, pregnant women, low-income parents, as well as the aged, blind, and disabled. Medicaid is the primary source of coverage for 12.6 percent of the US population, about half of whom are children. The income eligibility levels for Medicaid and SCHIP vary by state and category of eligibility. Children are generally covered in Medicaid or SCHIP through 200 percent of the FPL while parents with custodial responsibilities are usually eligible if their income is less than the FPL. Non-disabled non-aged adults without children generally are not covered at any income level except for in about six states that have a Medicaid waiver to cover this group.

In this analysis, we estimated the number of people who are eligible for these programs. We used HBSM to identify people and families in the CPS who meet the specific income eligibility criteria for the program in their reported state of residence. The analysis showed that after correcting for under-reporting of Medicaid coverage, there are about 5.2 million uninsured children who are eligible for Medicaid or SCHIP but are not enrolled (Figure 6). Of the eligible but not enrolled population, 1.9 million are under 6 years of age and 3.3 million are between ages 6 and 18 years.

**Figure 6**  
**Average Monthly Uninsured Children by Medicaid/SCHIP Eligibility Status**  
(In percentage and millions)



Uninsured Children = 9.5 million

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



Below, we discuss the cost and coverage impacts of the eligibility simplification mechanisms proposed by CDF. The full cost of instating these provisions would be paid by the federal government. These provisions include:

- Self-Attestation of Income;
- Twelve Month Attestation;
- Elimination of Premiums below 300 percent of FPL;
- Elimination of Co-payments below 200 percent of the FPL;
- Automatic Enrollment with Opt-Out;
- Upgrading SCHIP Benefits Package to Medicaid EPSDT Benefits; and
- Combined Effect of Eligibility Simplification

### **1. Self-Attestation of Income**

Under this simplification mechanism, individuals would attest to their income, subject to verification and random audits following enrollment and re-enrollment. This reduces the screening paperwork required at initial application, resulting in increased enrollment.

In about 38 states, applicants are required to provide documentation of income, such as pay stubs or tax information at the point of application for Medicaid and/or SCHIP. In some states, this documentation is required for only one or the other program. Even when documentation of income is provided, the states generally verify reported income with the automated income and eligibility verification system (IEVS) and other sources following eligibility determination. However, federal law permits states to allow individuals to self-attest income, thus eliminating the requirement that applicants provide documentation for these items as they apply for the programs. Reported income would continue to be verified after eligibility determinations are made to ensure accuracy and minimize errors in eligibility determinations.<sup>3</sup>

Self-attestation of income is currently allowed in 13 states when applying for children's Medicaid or SCHIP.<sup>4</sup> In 7 of these 13 states, parents can also self-certify income when applying for coverage themselves. Many of these states have experienced increases in enrollment, although it is difficult to isolate the impact of these provisions from the effects of other changes occurring at the same time in the program and the eligible population.<sup>5</sup> Most of these state officials report increased case worker productivity and increased speed of eligibility determination. Many states have also eliminated or simplified the assets test.

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<sup>3</sup> "Enrolling and Retaining Low-Income Families and Children in Health Care Coverage," Centers for Medicare and Medicaid Services (CMS), August 2001.

<sup>4</sup> Ross, D.C., Cox, L. (June 2002). *Enrolling Children and Families in Health Coverage: The Promise of Doing More*. Kaiser Commission on Medicaid and the Uninsured. Arkansas, Connecticut, Florida, Georgia, Idaho, Maryland, Michigan, Mississippi, Oklahoma, Vermont, Washington, Wisconsin, and Wyoming allow self-certification of income when applying for children's coverage in Medicaid.

<sup>5</sup> Danielle Holahan and Elise Hubert, "Lessons from States with Self-certification of Income Policies," The United Hospital Fund, 2004.



Some of the available evidence on the impact of self-attestation of income includes:

- **Michigan:** Implemented self-attestation of income in Medicaid and SCHIP. Enrollment increased by 8.5 percent;
- **Ohio:** Implemented self-attestation of income for children in one county. Enrollment is reported to have increased by 24,000 children;
- **Washington:** Reinstating income documentation requirements eliminated 12 months of continuous eligibility and reduced the certification period to 6 months. Medicaid enrollment declined by 11 percent;
- **Wisconsin:** Reinstated documentation of income and required written verification of insurance status from employer. Enrollment declined by 11.3 percent; and
- **Wyoming:** Allowed self-attestation of income for families and eliminated the face-to-face interview. A large increase in enrollment is reported.

The impact of self-attestation on enrollment is difficult to discern from these results because they were implemented together with other changes in the eligibility process. Also, most states saw a significant increase in enrollment during the same period regardless of whether or not steps were taken to simplify the eligibility process. Thus, it is difficult to isolate the effect of self-attestation on enrollment.

A recent study by Kronenbusch and Elbel attempted to isolate the effect of self-attestation of income on enrollment from other factors contributing to enrollment trends.<sup>6</sup> They developed a multivariate model of enrollment of children in Medicaid and SCHIP nationally, controlling for the various enrollment procedures in each state. The data on Medicaid enrollment are based upon the Current Population Survey (CPS), which provides information on Medicaid enrollment for a representative sample of families across the country.

This study indicates that self-attestation of income increases enrollment of children in Medicaid and SCHIP by about 3.5 percent, after controlling for other effects. In our analysis, we assume that adopting self-attestation of income in New York would increase enrollment by 3.5 percent for both children and adults in Medicaid/SCHIP (i.e., excluding the aged, blind, and disabled). These estimates were adjusted to reflect a general under-reporting of Medicaid enrollment in the CPS, which can affect the magnitude of estimated effects.<sup>7</sup>

Based upon these analyses, we estimate that if self-attestation of income is adopted, an additional 796,300 children would enroll, of whom 643,400 would be newly insured. The total cost for these newly enrolled would be \$1.1 billion.

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<sup>6</sup> K. Kronenbusch and B. Elbel, "Enrolling Children in Public Insurance: SCHIP, Medicaid and State Implementation," *Journal of Health Politics, Policy, and Law*, Vol. 29, No. 3, June 2004.

<sup>7</sup> The CPS underreports the number of people on Medicaid and SCHIP by about one-third. To adjust for this, we estimated the increase in enrollment using the CPS reported data on enrollment in the New York Medicaid program.



## 2. Twelve-Month Certification

Under this provision, all children would be certified for continuous enrollment for 12 months upon initial determination and re-determination of eligibility. In most states, children are certified for enrollment for six months before re-determination of eligibility is required. However, eligibility is certified for 12 months in 15 state Medicaid programs and 21 state SCHIP programs. This reduces the number of children going on and off of the program each month (i.e., “churning”), thus increasing enrollment by retaining children in these programs for longer periods of time.

Under the existing programs, a large number of children go on and off of the program each month, even though there is no change in their eligibility.<sup>8</sup> An earlier Lewin Group study of disenrollment for children in the Medicaid and SCHIP programs showed how extensive churning is in the existing programs. Using the California sub-sample of the Survey of Income and Program Participation (SIPP) for 2001 and 2002, we estimated the eligibility status of children who are disenrolled from Medi-Cal during the year.

These data indicated that there are about 79,600 children who disenrolled from Medi-Cal or Healthy Families (i.e., the California SCHIP program) each month during this period.<sup>9</sup> Based upon the month-by-month incomes reported in SIPP for these people, about 60.9 percent appeared to still be eligible for Medi-Cal or SCHIP in that state (*Figure 7*). Only about 11.3 percent of people disenrolling had incomes in excess of Healthy Families income eligibility level and about 27.8 percent of disenrollees became covered under private insurance. The SIPP data indicate that about 80 percent of enrollees who were uninsured upon disenrollment will re-enroll in the program within six months.<sup>10</sup> This is a dramatic example of the problem because California already uses 12-month attestation in its Medicaid and SCHIP programs.

Using the SIPP data, we estimated the effect of adopting twelve-month vs. six-month certification for children in all state Medicaid and SCHIP programs. We estimate that if twelve-month certification were adopted for all children, enrollment would increase by about 532,700 children, of whom 430,400 would be newly insured. The cost of implementing twelve-month certification of eligibility would be about \$708.3 million.

## 3. Eliminate Premiums At or Below 200 Percent of the FPL

Under the CDF proposal, children and pregnant women living at or below 300 percent of the FPL would not pay any premiums or co-payments for all medically necessary services. This includes currently eligible children and those who are newly eligible under the eligibility expansion to 300 percent of the FPL. Under current law, about 25 percent of states require SCHIP participants to pay a premium. Also, federal SCHIP regulations allow states to adopt

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<sup>8</sup> Donna Ross and Laura Cox, “Beneath the Surface: Barriers Threaten to Slow Progress on Expanding Health Coverage of Children and Families”, (report to the Kaiser Family Foundation), Center on Budget and Policy Priorities, October 2004.

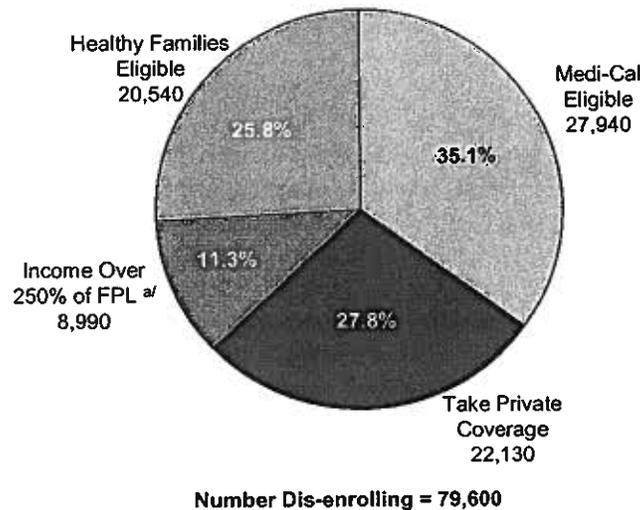
<sup>9</sup> Program data indicate an average Medi-Cal disenrollment among children of 2.3 percent per month. This implies a monthly disenrollment of about 74,000 children, which is close to our estimates from SIPP for this population.

<sup>10</sup> People who re-enroll within the year are uninsured an average of six months before re-enrolling.



benefits and cost-sharing requirements similar to the state’s benchmark plans.<sup>11</sup> Federal law requires that total cost-sharing may not exceed 5 percent of family income. Many states also require nominal co-payments for people enrolled in Medicaid.

**Figure 7  
Children Disenrolling from Medi-Cal by Status at Termination  
(By Number and Percent)**



a/ These children have incomes that exceed 250 percent of the FPL.  
Source: Lewin Group analysis of the Survey of Income and Program Participation.

We estimate that eliminating premium requirements for those currently enrolled in the program would result in 383,000 newly enrolled children, of which 309,500 would be newly insured. This is based upon Lewin Group analyses of program enrollment data showing that enrollment is reduced by about 37 percent when a premium is required. We estimate that the cost of eliminating all premiums for those under 200 percent FPL would be about \$1.0 billion. This includes both the reduction in premium revenues under the program (\$470.3 million), and the cost of increased enrollment (\$537.8 million).

**4. Eliminate Co-payments At or Below 200 Percent of the FPL**

We estimate that eliminating co-payments for health services would result in about 44,400 people enrolling in the program. This estimate was developed by assuming that the reduction in cost-sharing would be seen as a reduction in the cost of having health coverage, resulting in an increase in enrollment. The increase was estimated using research showing that a one percent reduction in the price of insurance results in a 0.34 increase in the number of people taking coverage. The total cost of adopting this provision for children would be about \$59.1 million.

<sup>11</sup> National Academy for State Health Policy, “Income Eligibility and Cost Sharing for Children in Medicaid and SCHIP and Other Populations Covered with SCHIP Funds,” July 2005.



## 5. Automatic Enrollment through Means-Tested Programs with Opt-Out

The CDF proposal would take advantage of enrollment of children in existing means-tested programs to automatically enroll children for coverage under the new health insurance program. Uninsured children would be automatically enrolled if: they are currently enrolled in the National School Lunch Program; they are in a family receiving Food Stamps or assistance through the Women, Infants and Child Program; if the family is eligible for the Earned Income Tax Credit; or if the family is receiving subsidized child care. Families will have the option to affirmatively opt-out of the program.

As shown in *Figure 8*, up to 85.9 percent of uninsured children and 60.9 percent of uninsured adults in low income groups are enrolled in other income tested programs including: the subsidized school lunch program, the Women, Infants, and Children (WIC) program and Food Stamps. Those who are eligible for Medicaid or SCHIP due to enrollment in these other programs could be auto-enrolled, and their income information would be shared with the newly established Healthy Children Program. However, parents would be permitted to opt-out of this auto enrollment procedure if they wish.

**Figure 8**  
**Percent of Uninsured Receiving School Lunch, WIC, or Food Stamps**

Income as a Percent of FPL	Uninsured Children	Uninsured Adults
<100%	85.9%	60.9%
100-150%	79.2%	54.9%
150-200%	70.5%	40.6%
200-250%	53.3%	31.7%
250-300%	40.9%	23.8%
300-400%	27.9%	15.0%
400+%	13.9%	7.4%
<b>Total</b>	<b>62.5%</b>	<b>37.1%</b>

Source: Lewin Group analysis of 2003 Survey of Income and Program Participation (SIPP) data.

We estimate that almost 2.8 million children and pregnant women would become newly enrolled (all of whom will be newly insured) as a result of automatic enrollment through other means-tested programs. We estimate that the total cost of automatic enrollment would be \$2.9 billion.

## 6. Upgrade SCHIP Benefits Package to Medicaid Benefits

A critical aspect of the CDF proposal is to ensure access to all medically necessary services as reflected under the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) model, presently required for all Medicaid-eligible children from birth through age 21 years. The EPSDT program requires that states provide comprehensive screening services including a physical exam, health and developmental history, diagnostic testing, appropriate



immunizations, laboratory testing and lead toxicity screening, health education, vision services, dental services, and hearing services. In addition, if a screening, evaluation, or diagnostic test identifies a physical, mental, or other health condition, the state must provide all services that are medically necessary to correct or ameliorate the condition.

However, presently, those children who are enrolled in a SCHIP program that is implemented separately from the Medicaid program (i.e., about one-half of states) do not have the breadth or depth of coverage that the Medicaid program offers. The CDF proposal extends the Medicaid EPSDT benefit package to all children who are enrolled in the new program. This ensures that children currently enrolled in a separate SCHIP program and newly eligible children would be guaranteed the comprehensive benefits package essential to their health.

We estimate that extending the full range of Medicaid EPSDT services to all of those children currently enrolled in separate SCHIP programs would add about \$345.4 million in new costs. This is based upon an analysis of per-capita costs for children in the California Medi-Cal and their SCHIP program (named "Healthy Families"). It showed that per-child costs in Medi-Cal were about 12 percent greater than in SCHIP, which has a less comprehensive benefits package than is provided under Medi-Cal. Due to similarities in the managed care contracting practices in the state for Medi-Cal and SCHIP, we assumed that all of this difference is attributed to differences in benefits.

#### **7. Combined Effect of Eligibility Simplification**

We estimate that the above eligibility simplification mechanisms, in combination, would result in more than 3.6 million children enrolling in the program of which 3.3 million children would be newly insured. The total cost of these provisions would be about \$5.1 billion. Under the CDF proposal, the federal matching rates for the program would be adjusted so that the federal government is paying the full cost of these changes.

### **B. Eligibility Expansion Provisions**

The coverage program proposed by CDF would extend eligibility to many children and pregnant women who are not eligible for public coverage today. As discussed above, the federal government would pay the full cost of these increases in coverage. These expansions and our estimates of cost and coverage effects are presented in the following sections:

- Increase Eligibility to 300 Percent of the FPL
- Institute Buy-In program for Those over 300 Percent of the FPL;
- Cover Children and Pregnant Women Regardless of Citizenship;
- Eliminate the Assets Test;
- Provide Supplemental Coverage for Those in ESI, where needed; and
- Extend Coverage for Foster Children 19 and 20 Years of Age who Transition from Foster Care at Age 18 Years.

Under all of these expansions, children must have been without employer coverage for at least four months to be eligible for the program. This "waiting period" rule is designed to discourage



workers and employers from discontinuing their employer-sponsored coverage to enroll in the publicly subsidized insurance. With the waiting period, employers would have to be willing to allow workers to “go bare” of insurance for four months before they can enroll in the program, thus making it impractical to discontinue coverage for the purpose of shifting to subsidized public coverage. The waiting period rule is waived for people who are on “lay-off”, changing jobs or experiencing changes in family status.

The costs and coverage impacts below are overlapping and are presented for purpose of understanding the impacts of each provision individually. Non-overlapping totals are presented in *Figure 5*.

### **1. Increase Eligibility to 300 Percent of the FPL**

The Healthy Children proposal would establish a minimum income eligibility level for children and pregnant women of 300 percent of the FPL. Under today’s Medicaid and SCHIP programs, the maximum income eligibility level varies by state from about 140 percent of the FPL, to as high as 350 percent of the FPL in New Jersey. The program created under Healthy Children would establish a uniform minimum income eligibility level of 300 percent of the FPL. States would have the option of covering children at higher income levels. Other features of the program include:

- No premiums would be charged for those at or below 300 percent of the FPL;
- Nominal co-payments would be permitted for people between 200 and 300 percent FPL.
- Children can not be denied services for failure to pay co-payments;
- As discussed above, children must have been without employer coverage for up to four months to be eligible for the program. This “waiting period” rule is designed to discourage people from discontinuing their employer-sponsored coverage to enroll in the publicly subsidized coverage; and
- The waiting period is waived for children of parents who lose coverage due to job change or changes in family status. Also, as discussed below, children with employer coverage could enroll in the Healthy Children program to obtain supplemental coverage for services not covered by the employer plan.

We used HBSM to estimate the number of children and pregnant women who would become eligible under this expansion in eligibility. We first used the 2006 Current Population Survey (CPS) to simulate eligibility for Medicaid and SCHIP using the actual income eligibility criteria used in each state. We then estimated the number of children and pregnant women who would become newly eligible under the minimum income eligibility level (i.e., those between the current eligibility level and 300 percent of the FPL). We estimated the percentage of these eligible children who would enroll (i.e., “take-up”) using the following assumptions:

- We assumed that about 76 percent of all newly eligible children who are currently without coverage would enroll. This is based upon the estimated participation rate for Medicaid and SCHIP under the current law; in addition, this reflects improvements in



participation rates due to the eligibility simplification mechanisms adopted under Healthy Children.

- We assumed that about 39 percent of income eligible children, who are exempt from the four-month waiting period due to job change, would shift to the program. This includes children of workers who have been laid-off or changed jobs who had ESI;<sup>12</sup> and
- All eligible children who currently have private non-group coverage are assumed to discontinue that coverage to enroll in the Healthy Children proposal.

We adjusted these take-up rates to reflect the impact of the other eligibility simplifications described above.

Using this approach, we estimate that expanding eligibility to 300 percent of the federal poverty level results in about 2.5 million children and 166,000 pregnant women becoming newly eligible. We estimate that about 1.6 million of these children would enroll, of whom 991,200 would be newly insured children. The net cost of covering newly enrolled children is about \$2.2 billion. We estimate that 60,100 pregnant women would be newly enrolled, of whom 42,500 are newly insured. Net costs for covering pregnant women would be \$412.3 million.

We also estimated an increase in enrollment among the currently eligible-but-not-enrolled population resulting from the expansion in eligibility for children. This estimate is based upon a Mathematica Policy Research, Inc. study of the effects of a program sponsored by the county of Santa Clara in California that provides coverage to uninsured children living between 250 percent of the FPL and 300 percent of the FPL. The study showed that for each child enrolled in the new program, another 0.86 children were enrolled in the existing Medicaid or SCHIP programs. We estimate that this enrollment spill-over was equal to about 16 percent of the eligible-but-not-enrolled population in that area.<sup>13</sup>

Using these data, we estimated the number of currently eligible-but-not-enrolled children who would enroll due to the spill-over effect. We assumed that the spill-over effect would apply only to those eligible-but-not-enrolled people who are not enrolled through the eligibility simplification measures discussed above. We estimate that the spill-over effect would cover another 254,900 uninsured children.

## **2. Institute Buy-In program for Those over 300 Percent of the FPL**

The program would permit parents with incomes above 300 percent of the FPL to enroll their children in the Healthy Children proposal by paying a “full cost” premium. The premium would be based upon costs incurred for those who enroll in the buy-in, so that the program is fully funded with premium payments. The benefits provided under the program would be the same as for other children covered under the program. The co-payment amounts would be

<sup>12</sup> National Academy for State Health Policy, “Income Eligibility and Cost Sharing for Children in Medicaid and SCHIP and Other Populations Covered with SCHIP Funds,” July 2005.

<sup>13</sup> Christopher Trenholm and Sean Orzol “The Impact of the Children’s Health Initiative (CHI) of Santa Clara County on Medi-Cal and Healthy Families Enrollment,” (report to the David and Lucile Packard Foundation), Mathematica Policy Research, inc., September 2004.



determined by the Secretary of HHS, based upon what is consistent with co-pays under employer-sponsored insurance plans.

However, the buy-in includes provisions that subsidize premiums in excess of specified levels. Each state would be required to provide premium subsidies to a family of a child over 300 percent of the FPL, if necessary, to reduce the premium costs for such a child (taking into account any private coverage in which the child is enrolled as well as supplemental coverage purchased through this program) to 7.5 percent of family income or, in the case of multiple children within a family, 15 percent of family income. However, such subsidies would not be required if the family rejects an offer of employer-sponsored insurance (ESI) covering the child where the employer pays at least 50 percent of the premium for the child.

The buy-in is likely to attract primarily higher-cost children in the private market and those who can not obtain adequate coverage through an employer. Due to the full-premium requirement, the premium would be high, leaving only the highest cost children enrolled in the program. We estimated the effect of this provision using HBSM, which provides detailed income and health spending data. We assumed that children would enroll in all cases where they would qualify for a subsidy. Those who are not eligible for a subsidy would likely buy private coverage as the cost of the buy-in premium would be more expensive than private coverage. Using this approach, we estimate that the buy-in would cover about 30,000 children. We estimate that the cost for those in the subsidized buy-in group is \$138.0 million.<sup>14</sup>

### **3. Covering Children Regardless of Citizenship**

Under this proposal, all US children residing in the US would be eligible for the program regardless of citizenship status. Thus, they would be covered according to the same income eligibility provisions as are citizens. Also, the four month waiting period would apply to help preserve private coverage.

About 1.4 million of the 9.5 million uninsured children in the nation are not citizens of the US and 5 percent of uninsured children are non-citizens who have been in the US less than 5 years. Another 9.0 percent of uninsured children are non-citizens who have been in the U.S for more than 5 years.

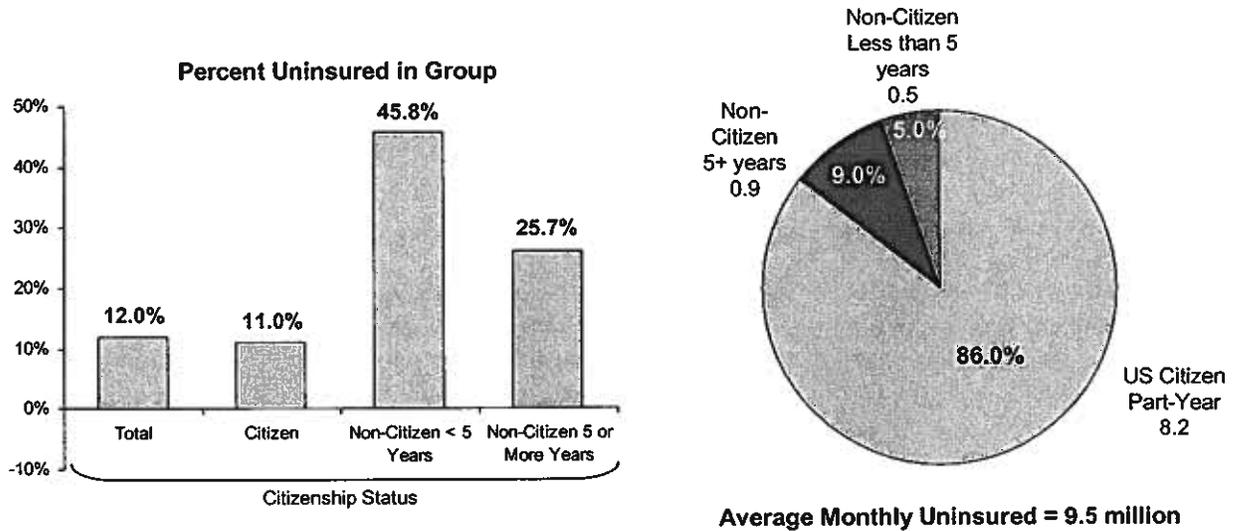
Uninsured children who are non-citizens and have been in the US for less than 5 years presently do not qualify for assistance except for emergencies (*Figure 9*). This is important in a policy context because presently non-citizens must wait 5 years before they can qualify for Medicaid. Non-citizens with unsatisfactory immigration status are ineligible for Medicaid regardless of income, except for emergency services. These data do not permit us to identify those without documentation separately from non-citizens with satisfactory immigration status.

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<sup>14</sup> We calibrated the estimates based upon the assumption that average costs for these children would be comparable to costs for children with disabilities currently covered under the Supplemental Security Income program, which was about \$10,000 per child in 2005.



**Figure 9**  
**Uninsured Children by Citizenship Status**  
**(in percentage and millions)**



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

About 45.8 percent of all non-citizen children who have been in the US less than five years are uninsured. Among non-citizen children who have been in the US for five or more years, 25.7 percent are uninsured. About 11.0 percent of US citizen children are uninsured (Figure 9). Unfortunately, the data do not permit us to identify those without satisfactory immigration status separately from those with satisfactory immigration status. As a proxy for this population, we assume that all non-citizens who have been in the US for less than five years would be newly eligible for the program.

The Healthy Children proposal would cover all income-eligible children and pregnant women, regardless of citizenship status. With this provision, we estimate that about 1.4 million children and 181,700 pregnant women would become eligible under the program. Of these, about 802,900 children and 120,700 pregnant women would have been uninsured in the absence of the program.

Our estimates include an adjustment to reflect the results of studies indicating that non-citizens use less care than the general population, even after adjusting for insured status. A recent article by Mohanty et al. reports that health spending for non-citizen children (regardless of documentation) is about 75 percent less than for native born children, even after adjusting for insurance status and other demographic characteristics.<sup>15</sup> Also, an evaluation of the San Mateo County Healthy Kids program by Mathematica indicates that, for a comparable list of services, spending for children in the Healthy Kids program was about 53 percent less than for children covered under Medi-Cal but only about 10 percent lower than costs for SCHIP children in the

<sup>15</sup> Sarita Mohanty, et al., "Health Care Expenditures of Immigrants in the United States: A Nationally Representative Analysis," *American Journal of Public Health*, August 2005, Vol 95, No. 8.



study.<sup>16</sup> To reflect this research, we assumed that costs for these children and pregnant women would be about 75 percent of costs for the currently enrolled population.

#### **4. Eliminating the Assets Test**

About 45 state Medicaid programs and 33 state SCHIP programs have eliminated the assets test for children, although the assets test is often used to determine eligibility for parents and other adults. The assets test, which still applies to adults in most states, specifies a maximum amount of assets a family may have to be eligible for these programs. For example, New York has an assets limit of \$5,900 for a family of three, including financial assets (e.g., savings etc.) and the value of automobiles in excess of \$4,650. The assets threshold differs across states. The Healthy Children proposal would eliminate the assets test for all children applying for the program.

We estimated the impact of eliminating the assets test for children using data from the Survey of Income and Program Participation (SIPP) for 2001 and 2002. These data provide detailed income and assets information for a representative sample of the population. We used these data to estimate the number of income-eligible children with family assets in excess of asset limits typically used in states with an assets limit.<sup>17</sup> We extrapolated from these data to estimate the impact of eliminating the asset test for children.

We estimate that eliminating the assets test would result in 4,600 children who are newly eligible for the program. However, of these only about 800 (17 percent) would enroll at a cost of \$1.0 million. The percentage enrolling is small because the SIPP data showed that most of the income eligible people with assets in excess of these limits have health insurance coverage from some other source. Only about 14.7 percent of these people are uninsured. About 71.1 percent have employer coverage, and about 12.6 percent have private non-group coverage. These data suggest that this population is composed largely of people with some level of resources experiencing temporary reductions in income.

#### **5. Supplemental (Wrap-Around) Coverage**

The program would extend supplemental coverage to children enrolled in employer-sponsored coverage (1) if they would have been eligible for supplemental coverage through Medicaid under state law in effect on October 1, 2005, (2) if the children are SSI disabled, or (3) if states opt to cover other reasonable classification of eligible children enrolled in ESI. In states that operate an SCHIP program that is separate from Medicaid, children must be uninsured to enroll in the program.<sup>18</sup> This differs from the Medicaid program, where there is no requirement that children be uninsured to enroll (this includes the portion of SCHIP implemented through a state's Medicaid program). In instances where a child has employer coverage, the employer plan is the primary payer for the services it covers, while Medicaid effectively provides wrap-around coverage for co-payments and services not covered by the employer plan.

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<sup>16</sup> Embry Howell et al, "Evolution of the San Mateo County Children's Health Initiative: Second Annual Report," (report to the San Mateo County Children's Initiative Coalition), The Urban Institute, August 2005.

<sup>17</sup> This was done only for children in the states identified in the SIPP.

<sup>18</sup> This should not be confused with anti-crowd-out waiting periods where an individual is required to have been uninsured for up to six months prior to enrollment. Most states have eliminated anti-crowd-out waiting periods for children. All that is required is that the child be uninsured at the time of enrollment.



Under the Healthy Children proposal, children with employer coverage would be permitted to enroll for the purpose of obtaining wrap-around coverage for services not covered by the employer plan. In these instances, Healthy Children would become the secondary payer to the employer plan, with Healthy Children covering co-payments and services not covered by the employer plan. This is an exception to the four-month waiting period that allows the program to distinguish between those who would continue their current employer coverage as opposed to those who might discontinue their employer coverage to obtain subsidized coverage under Healthy Children.

We estimate that about 102,500 children would enroll through this provision. We assume that in states operating a separate SCHIP program, enrollment would increase by about 5.0 percent with children who have employer coverage. We base this estimate upon Medi-Cal program data indicating that about 5.0 percent of Medicaid enrollees have private coverage.<sup>19</sup> We assume that SCHIP pays 20 percent of health care costs for these enrollees. Using these assumptions, we estimate that the net cost to the program would be about \$28.8 million.

#### **6. Coverage for Foster Children**

The Healthy Children proposal also provides coverage for youth 19 and 20 years old who are aging out of state Foster Care programs. The program would provide coverage for these young adults leaving the Foster Care program while they transition into other systems of coverage. These young adults would be eligible for coverage under Healthy Children regardless of income.

We estimate that this transition coverage would result in 79,300 youth becoming newly eligible. This is based upon CPS data on the number of unrelated children living in families who are ages 17 and 18, which we used as a proxy for the number of adults age 19 and 20 who have aged out of a foster care situation. We estimate that 59,500 youth enroll, of whom 36,300 would be newly insured as a result of the program. These estimates are based upon enrollment rates in existing programs. We estimate the net cost of these provisions to be \$83.5 million.

#### **7. Combined Impact of Eligibility Simplification and Expansion**

We estimate that 4.4 million children and pregnant women would be newly eligible under these provisions of the proposal. When combined with the eligibility simplification provisions for the currently eligible population, we estimate a net increase in enrollment of 6.8 million children and pregnant women, of whom 5.6 million would be newly insured. We estimate that the total program cost of these combined provisions would be \$10.8 billion.

### **C. Automatic Enrollment of Newborns and School-Age Children**

The Healthy Children proposal would establish automatic enrollment mechanisms designed to maximize the number of children who have coverage. As discussed above, uninsured children are automatically enrolled in the Healthy Children proposal when they participate in Food Stamps or other income-tested programs. In addition, uninsured children are automatically

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<sup>19</sup> These are cases where Medicaid receives "third-party recoveries".



enrolled at birth, at time of obtaining social security card, or through school registration. However, the parents of these children are permitted to decline the coverage if they choose to do so.

Under this system, unless their parents affirmatively decline coverage, uninsured children shall be enrolled into the state plan, with an income-appropriate level of premiums and cost-sharing, if any. Parents shall be advised at the time of such enrollment of the estimated cost of premiums and mechanisms for payment for those enrolled in the buy-in. Failure to pay the initial premium shall be considered an affirmative rejection of coverage.

We assumed that all children are enrolled in the program at birth unless they have coverage from some other source. Also, all uninsured children of school age are assumed to be enrolled at the beginning of the school year. We assume that 72 percent of these children would remain covered under the program, which is the average participation rate for children under the current program.

In cases where a premium is required (i.e., income over 300 percent FPL), we assume that some would be disenrolled due to non-payment of premium. We assume that about 32 percent pay the premium and remain covered throughout the year. This estimate is based upon a Lewin Group estimate of the increase in enrollment in private health plans attributed to the convenience of enrolling in coverage offered through work (after adjusting for premium amounts and demographics).<sup>20</sup>

We estimate that these automatic enrollment mechanisms would reduce the number of uninsured children and pregnant women by about 3.8 million people. These include about 3.5 million children who would receive subsidized coverage (i.e., income at or below 300 percent of the FPL), and about 355,700 children who enroll in private coverage. These include children with incomes above 300 percent of the FPL who would obtain private insurance. The cost of subsidies provided for these new enrollees in the public program would be about \$5.3 billion.

#### **D. Improvements in Provider Reimbursement for Children**

Provider reimbursement is a major issue in securing access for patients covered under public programs. Under the current Medicaid program, payment rates for physicians are about 31 percent lower than under Medicare for comparable services, but are more than half of what is paid under private health plans (*Figure 10*). Payments to hospitals are also substantially less than under both Medicare and private health plans.

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<sup>20</sup> We performed an econometric analysis of enrollment in employer plans where available as compared with enrollment in non-group insurance for those who do not have access to coverage through work. After adjusting for differences in income, demographics and the out-of-pocket premiums, the availability of coverage through work increased coverage by about 32 percent. See: "Documentation for the Health Benefits Simulation Model (HBSM)", the Lewin group, October 2003.



**Figure 10**  
**Medicaid and Private Payer Provider Payments as a Proportion of Medicare Provider Payment Rates**

	Medicaid	Medicare	Private
Hospital	0.85 <sup>a/</sup>	1.00	1.35
Physician	0.69	1.00	1.20

a/ Excludes disproportionate share hospital payments.

Source: MedPAC 2006 Reports, AHA 2004 Survey of Hospitals, Kaiser StateHealthFacts.

The Healthy Children proposal would increase provider reimbursement levels for children now covered under Medicaid and SCHIP not less than 80 percent of private payer rates for comparable services. We estimated the cost of this provision using the payment rate differentials shown in *Figure 10*. However, we adjusted these data to reflect that under Medicaid, federally funded clinics are reimbursed according to actual costs and many participants are enrolled in managed care plans where providers are typically paid at higher rates than under the fee-for-service component of Medicaid. Using these assumptions, we estimate that using 80 percent of private payer reimbursement levels for children and pregnant women would add about \$11.4 billion to costs under Healthy Children.



#### IV. ALTERNATIVE SPECIFICATIONS FOR ELIGIBILITY EXPANSIONS

The following summarizes three alternatives to the CDF Healthy Children proposal base plan that were analyzed. The first alternative requires certain individuals, based on income level, to pay premiums and imposes disincentives for individuals to drop coverage. The second alternative eliminates all premiums and anti-crowd-out provisions. The third raises eligibility to 350 percent FPL without any premiums charged and with anti-crowd-out provisions.

##### A. The CDF Healthy Children Proposal with Premiums and Anti Crowd-Out Provisions

Under this scenario, states would be permitted to charge premiums for eligible children and pregnant women children in families with income above 200 percent of poverty through 300 percent of poverty. The premium would be set in accordance with the following:

- 1.5 percent of income above 200 but below 250 percent of poverty; and
- 3 percent of income at or above 250 percent through 300 percent of poverty.

Under the Healthy Children proposal, states would be required to enact policies to prevent Healthy Children from eroding employer sponsored coverage. Under this scenario, we assume that states would require that children and pregnant women would not be enrolled in Healthy Children unless they have been uninsured for four months. However, the waiting period would not be applicable to children who would have qualified for Medicaid under current law.

We estimate that if fully implemented, about 35.9 million children would be covered under the Healthy Children program. This includes about 7.2 million newly enrolled children and 28.7 million children currently covered under Medicaid and SCHIP. (Another 355,700 children would obtain private coverage.) In addition, the program would cover 134,500 newly enrolled pregnant women (*Figure 11*). We estimate that total spending under the program will be about \$21.8 billion. This includes about \$20.0 billion to cover children and \$1.7 billion to cover pregnant women. All of these costs would be paid by the federal government.



**Figure 11**  
**Impact of the CDF Healthy Children Proposal with Premiums and Anti Crowd-Out Provisions on Cost and Coverage**

Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Spending and Enrollment under Current Medicaid and SCHIP Programs</b>							
<b>Current Programs</b>	n/a	28,700	n/a	n/a	\$65,500.0	\$28,800.0	\$36,700.0
<b>Eligibility Simplification</b>							
Self-attestation of income	n/a	796.3	643.4	0.0	\$1,118.0	\$0.0	\$1,058.7
Twelve-month certification	n/a	39.8	2.1	0.0	\$55.9	\$0.0	\$52.9
Eliminate premiums <200% FPL	n/a	383.0	309.5	0.0	\$537.8	\$0.0	\$1,008.1
Eliminate co-pays <200% FPL	n/a	44.4	40.4	0.0	\$62.4	\$3.3	\$59.1
Automatic enrollment through means-tested program with opt-out	n/a	2,793.0	2,793.0	0.0	\$2,941.0	\$0.0	\$2,941.0
Upgrade SCHIP benefits to Medicaid	n/a	n/a	n/a	n/a	\$345.4	\$0.0	\$345.4
<b>Non-overlapping Total</b>							
Combined effect (non-overlapping)	n/a	3,434.8	3,182.4	0.0	\$4,382.6	\$0.0	\$4,788.4
<b>Eligibility Expansion (assumes no Premium &lt;200% FPL)</b>							
Supplemental Coverage for ESI	102.5	102.5	0	0	\$28.8	\$0.0	\$28.8
Cover foster children age 19 and 20	79.3	59.5	36.3	0.0	\$83.5	\$0.0	\$83.5
Buy-in with subsidy (i.e., children in families above 300% FPL) <sup>af</sup>	30.0	30.0	24.2	0	\$138.0	\$0.0	\$138.0
Eliminate assets test	4.6	0.8	0.8	0.0	\$1.0	\$0.0	\$1.0
<b>Coverage Regardless of Citizenship</b>							
Children	1,358.9	782.1	743.0	0.0	\$723.2	\$0.0	\$688.8
Pregnant woman	181.7	117.6	111.7	0.0	\$1,446.2	\$0.0	\$1,377.3



Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Increase Eligibility to 300% FPL</b>							
Children	2,487.0	870.2	531.2	0.0	\$634.3	\$0.0	\$634.3
Pregnant women	166.0	32.8	22.8	0.0	\$395.7	\$0.0	\$341.4
Spill-over for currently eligible	n/a	207.1	126.4	0.0	\$291.6	\$0.0	\$291.6
<b>Total Eligibility Expansion</b>							
Total	4,410.0	2,202.5	1,575.2	0.0	\$4,336.2	\$0.0	\$3,584.7
<b>Combined Impact of Simplification and Expansion</b>							
Combined impact	4,410.0	5,637.3	4,757.6	0.0	\$8,718.8	\$0.0	\$8,373.0
<b>Auto Enrollment of Newborns and in-School Kids</b>							
Enroll newborns	n/a	332.1	332.1	28.7	\$924.5	\$0.0	\$611.6
Enroll at schools	n/a	2,432.1	2,432.1	327.0	\$3,414.6	\$0.0	\$3,052.5
Total impact	n/a	2,764.2	2,764.2	355.7	\$4,339.1	\$0.0	\$3,664.1
<b>Combined Impact of All Provisions without Payment Rate Increase<sup>b/</sup></b>							
Combined impact	4,410.0	7,338.3	6,193.1	355.7	\$11,388.91	\$0.0	\$11,017.7
<b>Provider Payment Levels</b>							
80 percent of private payer rates for currently enrolled	n/a	n/a	n/a	n/a	\$8,469.0	n/a	\$8,469.0
80 percent of private payer rates for newly enrolled	n/a	n/a	n/a	n/a	\$2,277.8	n/a	\$2,277.8
Total Provider Payment Rates	n/a	n/a	n/a	n/a	\$10,746.8	n/a	\$10,746.8
<b>Combined Impact of CHIA Provisions</b>							
Combined Impact of All Provisions Including Payment Rate Increase	4,410.0	7,338.3	6,193.1	355.7	\$22,135.7	\$0.0	\$21,764.5

<sup>a/</sup> The estimated number of individuals in the buy-in is 30,000, of which 24,200 represents those that are newly insured in Healthy Children.

<sup>b/</sup> Numbers do not sum to totals due to overlapping effects.

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



## B. The CDF Healthy Children Proposal without Premiums and without Anti Crowd-Out Provisions

Under this alternative, Healthy Children would provide coverage to eligible children and pregnant women with no premium required for all up to 300 percent of the FPL. Also, states would not be permitted to impose any waiting periods. Thus, eligible children in families in which a worker has employer sponsored dependent coverage would be enrolled in Healthy Children if the worker elects not to take employer coverage or if the worker drops dependent coverage under ESI.

In contrast, under the base plan of the Healthy Children proposal, states would be required to enact policies to prevent Healthy Children from eroding employer-sponsored coverage. Under that scenario, we assume that states would require that children and pregnant women would not be enrolled in Healthy Children unless they have been uninsured for 4 months. However, the waiting period would not be applicable to children who would have qualified for Medicaid under current law.

We estimate that, if fully implemented, about 41.1 million children would be covered under the Healthy Children program. This includes about 12.4 million newly enrolled children and 28.7 million children currently covered under Medicaid and SCHIP). (Another 355,700 children would obtain private coverage.) The program would also cover an additional 261,600 newly enrolled pregnant women (*Figure 12*). We estimate that total spending under the program would be about \$31.5 billion. This includes about \$29.7 billion to cover children and \$1.8 billion to cover pregnant women. All of these costs would be paid by the federal government.



**Figure 12**  
**Impact of the CDF Healthy Children Proposal without Premiums and without Anti Crowd-Out Provisions on Cost and Coverage**

Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net-Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Spending and Enrollment under Current Medicaid and SCHIP Programs</b>							
<b>Current Programs</b>	n/a	28,700	n/a	n/a	\$65,500.0	\$28,800.0	\$36,700.0
<b>Eligibility Simplification</b>							
Self-attestation of income	n/a	796.3	643.4	0.0	\$1,118.0	\$0.0	\$1,058.7
Twelve-month certification	n/a	39.8	2.1	0.0	\$55.9	\$3.0	\$52.9
Eliminate premiums <200% FPL	n/a	383.0	309.5	0.0	\$537.8	\$0.0	\$1,008.1
Eliminate co-pays <200% FPL	n/a	44.4	40.4	0.0	\$62.4	\$3.3	\$59.1
Automatic enrollment through means-tested program with opt-out	n/a	2,793.0	2,793.0	0.0	\$2,941.0	\$0.0	\$2,941.0
Upgrade SCHIP benefits to Medicaid	n/a	n/a	n/a	n/a	\$345.4	\$0.0	\$345.4
<b>Non-overlapping Total</b>							
Combined Effect (non overlapping)	n/a	3,434.8	3,182.4	0.0	\$4,382.6	\$0.0	\$4,788.4
<b>Eligibility Expansion (assumes no premium &lt;200% FPL)</b>							
Supplemental Coverage for ESI	102.5	102.5	0	0	\$28.8	\$0.0	\$28.8
Cover foster children age 19 and 20 years	79.3	59.5	36.3	0.0	\$83.5	\$0.0	\$83.5
Buy-in with subsidy (i.e., children in families above 300% FPL) <sup>ar</sup>	30.0	30.0	24.2	0	\$138.0	\$0.0	\$138.0
Eliminate assets test	4.6	0.8	0.8	0.0	\$1.0	\$0.0	\$1.0
<b>Coverage Regardless of Citizenship</b>							
Children	1,358.9	845.2	802.9	0.0	\$781.6	\$0.0	\$781.6
Pregnant women	181.7	127.1	120.7	0.0	\$1,446.2	\$0.0	\$1,446.2



Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program Costs (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Increase Eligibility to 300% FPL</b>							
Children	8,493.1	3,585.3	953.5	0.0	\$5,049.9	\$0.0	\$5,049.9
Pregnant women	566.9	133.9	40.9	0.0	\$368.8	\$0.0	\$368.8
Spill-over for currently eligible	n/a	853.5	227.0	0.0	\$1,201.3	\$0.0	\$1,201.3
<b>Total Eligibility Expansion</b>							
Total	10,817.0	5,737.7	2,185.1	0.0	\$9,099.0	\$0.0	\$9,099.0
<b>Combined Impact of Simplification and Expansion</b>							
Combined impact	10,817.0	9,172.5	5,367.6	0.0	\$13,481.6	\$0.0	\$13,887.4
<b>Auto Enrollment of Newborns and in-School Kids</b>							
Enroll newborns	n/a	332.1	332.1	28.7	\$924.5	\$0.0	\$924.5
Enroll at schools	n/a	3,148.5	3,148.5	327.0	\$4,420.5	\$0.0	\$4,420.5
Total impact	n/a	3,480.7	3,480.7	355.7	\$5,345.1	\$0.0	\$5,345.1
<b>Combined Impact of All Provisions without Payment Rate Increase<sup>a)</sup></b>							
Combined impact	10,817.0	12,657.5	7,406.9	355.7	\$18,833.3	\$0.0	\$19,239.1
<b>Provider Payment Levels</b>							
80 percent of private payer rates for currently enrolled	n/a	n/a	n/a	n/a	\$8,469.0	n/a	\$8,469.0
80 percent of private payer rates for newly enrolled	n/a	n/a	n/a	n/a	\$3,766.7	n/a	\$3,766.7
Total Provider Payment rates	n/a	n/a	n/a	n/a	\$12,235.7	n/a	\$12,235.7
<b>Combined Impact of CHIA Provisions</b>							
Combined Impact of All with Payment Rate Increase	10,817.0	12,657.5	7,406.9	355.7	\$31,069.0	\$0.0	\$31,474.8

<sup>a)</sup> The estimated number of individuals in the buy-in is 30,000, of which 24,200 represents those that are newly insured in Healthy Children.  
<sup>b)</sup> Numbers do not sum to totals due to overlapping effects.

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



### C. The CDF Healthy Children Proposal without Premiums and with Expansion of Eligibility to 350 percent of Federal Poverty Level

Under this alternative, Healthy Children will cover all children, including foster children ages 19 and 20 years, and pregnant women up to 350 percent of federal poverty. There will be no premiums applied. Children and pregnant women above 350 percent of poverty will be allowed to buy-in.

We estimate that, if fully implemented, the program would cover 39.3 million children. These include about 10.6 million newly enrolled children and 28.7 million children currently covered under Medicaid and SCHIP (*Figure 13*). (Another 281,400 children would obtain private coverage.) In addition, about 174,000 pregnant women would become covered. We estimate that total spending under the program will be about \$30.2 billion. This includes about \$27.9 billion to cover children and about \$2.2 billion to cover pregnant women. All of these costs would be paid by the federal government.



**Figure 13**  
**Impact of the CDF Healthy Children Proposal without Premium with Waiting Period with Expansion to 350% FPL**

Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000s)	Total Program (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Eligibility Simplification</b>							
Self-attestation of income	n/a	796.3	643.4	0.0	\$1,118.0	\$0.0	\$1,058.7
Twelve-month attestation	n/a	532.7	430.4	0.0	\$747.9	\$0.0	\$708.3
Eliminate premiums <200% FPL	n/a	383.0	309.5	0.0	\$537.8	\$0.0	\$1,008.1
Eliminate co-pays <200% FPL	n/a	44.4	40.4	0.0	\$62.4	\$0.0	\$59.1
Automatic enrollment through means- tested program with opt-out	n/a	2,793.0	2,793.0	0.0	\$2,941.0	\$0.0	\$2,941.0
Upgrade SCHIP benefits to Medicaid	n/a	n/a	n/a	n/a	\$345.4	\$0.0	\$345.4
<b>Non-overlapping Total</b>							
Combined effect (non overlapping)	n/a	3,626.0	3,323.9	0.0	\$4,721.9	\$0.0	\$5,096.2
<b>Eligibility Expansion</b>							
Supplemental Coverage for ESI	102.5	102.5	0.0	0.0	\$28.8	\$0.0	\$28.8
Cover foster children age 19 and 20	79.3	59.5	36.3	0.0	\$83.5	\$0.0	\$83.5
Buy-in with subsidy (i.e., children in families above 300% FPL) <sup>af</sup>	30.0	30.0	24.2	0.0	\$138.0	\$0.0	\$138.0
Eliminate Assets Test	4.6	0.8	0.8	0.0	\$1.0	\$0.0	\$1.0
<b>Coverage Regardless of Citizenship</b>							
Children	1,358.9	845.2	802.9	0.0	\$781.6	\$0.0	\$781.6
Pregnant woman	181.7	127.1	120.7	0.0	\$1,446.2	\$0.0	\$1,446.2



Key Provisions	Newly Eligible (1,000's)	Newly Enrolled in Healthy Children (1,000's)	Newly Insured in Healthy Children (1,000's)	Newly Privately Insured (1,000's)	Total Program (millions)	Net Costs to State Govt. (millions)	Net Cost to Federal Govt. (millions)
<b>Increase Eligibility to 350% FPL</b>							
Children	3,143.6	2,337.7	1,252.8	0.0	\$4,162.6	\$0.0	\$4,162.6
Pregnant women	209.8	90.2	53.7	0.0	\$781.8	\$0.0	\$781.8
Spill-over for currently eligible	n/a	601.2	322.2	0.0	\$1,069.6	\$0.0	\$1,069.6
<b>Total eligibility expansion</b>							
Total	5,110.4	4,194.1	2,613.7	0.0	\$8,493.0	\$0.0	\$8,493.0
<b>Combined impact of Simplification and Expansion</b>							
Combined impact	5,110.4	7,820.1	5,937.6	0.0	\$13,214.9	\$0.0	\$13,589.2
<b>Auto Enrollment of Newborns and In School Kids</b>							
Enroll newborns	n/a	332.1	332.1	22.7	\$924.5	\$0.0	\$924.5
Enroll at schools	n/a	3,148.5	3,148.5	258.7	\$4,420.5	\$0.0	\$4,420.5
Total impact	n/a	3,480.7	3,480.7	281.4	\$5,345.1	\$0.0	\$5,345.1
<b>Combined impact of all provisions without Payment rate Increase<sup>bl</sup></b>							
Combined impact	5,110.4	10,791.4	8,193.5	281.4	\$17,777.61	\$0.0	\$18,151.9
<b>Provider payment levels</b>							
80 percent of private payer rates for currently enrolled	n/a	n/a	n/a	n/a	\$8,469.0	n/a	\$8,469.0
80 percent of private payer rates for newly enrolled	n/a	n/a	n/a	n/a	\$3,555.5	n/a	\$3,555.5
Total Provider Payment Rates	n/a	n/a	n/a	n/a	\$12,024.5	n/a	\$12,024.5
<b>Combined impact of All with Payment Rate Increase</b>							
Combined impact	5,110.4	10,791.4	8,193.5	281.4	\$29,802.1	\$0.0	\$30,176.5

<sup>al</sup> The estimated number of individuals in the buy-in is 30,000, of which 24,200 represents those that are newly insured in Healthy Children.

<sup>bl</sup> Numbers do not sum to totals due to overlapping effects.

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



## V. PROGRAM COST PROJECTIONS FOR 2008 THROUGH 2012

The estimates presented above assume that the Healthy Children proposal is fully operational in 2007. In fact, the program would take some time to be fully implemented and for all newly eligible people to learn of their eligibility and apply. In particular, an investment in systems and technology would be required to implement the automatic enrollment features of the program.

For budgeting purposes, we developed estimates of program costs over the 2008 through 2012 period reflecting the expected pace of enrollment. Because the Healthy Children proposal is intended to be a new, consolidated program rather than an expansion of the existing Medicaid and SCHIP programs, it will likely take time for states to fully establish their Healthy Children programs. As we saw with the implementation of SCHIP, it may take up to three years for states to reach expected enrollment levels.

Figure 14 presents our estimates of program costs for 2008 through 2012. Based upon the SCHIP experience, we assumed that it would take three years for the program to be fully established, including for and for the eligible population to learn of their eligibility and enroll. We assume that enrollment would reach 25 percent of its expected level of enrollment in 2008, the first year. We assumed that enrollment would reach 60 percent of expected levels in 2009 and 85 percent of expected levels in 2010. By 2011, the program is assumed to be fully operational and meet 100 percent of expected enrollment levels.

**Figure 14**  
Net Federal Cost of the CDF Healthy Children Proposal: 2008-2012 (millions)

Fiscal Year	Provider Payment Rate Increase for Current Program	Program Costs for People Enrolled through Healthy Children Simplification and Eligibility Expansion Provisions <sup>a/</sup>			Total Net Federal Cost of Healthy Children Proposal
		Healthy Children Enrollment Simplification and Expansions At Current Payment Rates	Provider Payment Rate Increase for Newly Covered under Healthy Children Proposal	Healthy Children Enrollment Simplifications and Expansions at Increased Provider Payment Rates	
2008	\$9,115	\$3,981	\$776	\$4,756	\$13,871
2009	\$9,860	\$10,335	\$2,013	\$12,349	\$22,209
2010	\$10,530	\$15,638	\$3,046	\$18,684	\$29,214
2011	\$11,275	\$19,699	\$3,837	\$23,536	\$34,812
2012	\$12,070	\$21,087	\$4,108	\$25,195	\$37,265
Five-Year Total	\$52,851	\$70,740	\$13,781	\$84,520	\$137,371

a/ We assume that the full implementation of the various provisions of the CDF Healthy Children proposal would take a few years, resulting in a gradual up-take in enrollment. The program would reach 25 percent of its ultimate enrollment level in 2008, 60 percent in 2009, 85 percent in 2010, and 100 percent in 2011 and there-after.

Source: Lewin Group estimates.



The provider payment rate increases for those enrolled under current programs would take effect immediately in 2008. Total reimbursement payments for children currently enrolling in the program would be \$52.9 billion over the 2008 through 2012 period. The cost of the enrollment simplification and eligibility expansion provisions would phase-in beginning in 2008. The total cost of these provisions over the 2008 through 2012 period would be \$70.7 billion at current provider payment levels, and \$84.5 billion at the higher provider payment levels. Total program costs over the 2008 through 2012 period would be \$137.4 billion.



## VI. CONCLUSION

The CDF Healthy Children proposal creates a new consolidated health insurance program for all children under the age of 19, pregnant women and postpartum women with income up to 300 percent of the federal poverty level. The current Medicaid and State Children's Health Insurance Program (SCHIP) would be folded into Healthy Children. Foster children ages 19 and 20 would be covered. Higher income individuals would be permitted to buy-in.

The CDF Healthy Children proposal would adopt several eligibility simplification mechanisms, including self-attestation of income, 12-months continuous eligibility, and automatic enrollment of children in other means-tested programs. There will be no assets test. School-age children and newborns will be automatically enrolled.

The program would reduce the number of uninsured children by 7.9 million children (about 7.6 million newly insured children in the Healthy Children program and about 355,700 children who take private coverage) thereby reducing the 9.5 million uninsured children by 83 percent. We estimate that the net costs for covering children, including increased provider reimbursement rates, will be about \$24.3 billion, all of which would be paid by the federal government. Together with coverage for pregnant women, 9.4 million people will be newly enrolled under the program, of which 7.7 would be newly insured (and an additional 355,700 children will enroll in private coverage in the individual market). We estimate that the total net cost to the federal government is \$26.1 billion in 2007, assuming full implementation in the first year. Total program costs over the 2008 through 2012 period would be \$137.4 billion.



## Appendix A

### Summary Description of the Health Benefit Simulation Model (HBSM)

The purpose of this document is to provide a summary of the data and methods used in the Lewin Group Health Benefits Simulation Model (HBSM). We begin by summarizing the overall modeling approach used to simulate the cost and coverage impacts of programs to expand insurance coverage. We also provide a discussion of key components of the model that are most relevant to some of the policy proposals that have emerged in recent years. A more detailed documentation of the full model is available upon request.

We present our summary of HBSM in the following sections:

- Modeling Approach;
- Database;
- Medicaid Expansions;
- Employer and Employee Take-up; and
- Insurance Markets Model.

### Modeling Approach

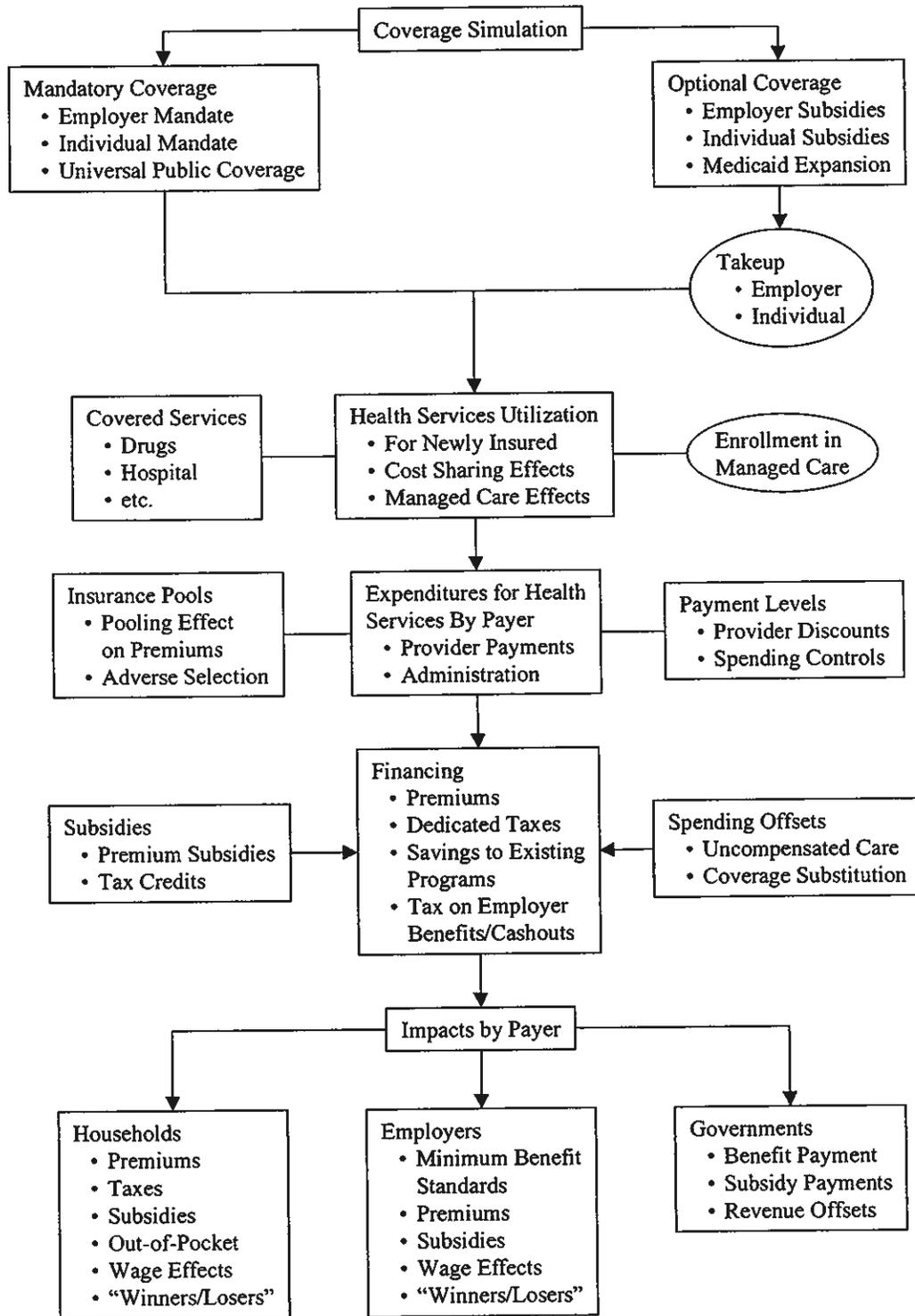
The Health Benefits Simulation Model (HBSM) is a micro-simulation model of the U.S. health care system. HBSM is a fully integrated platform for simulating policies ranging from narrowly defined Medicaid coverage expansions to broad-based reforms such as changes in the tax treatment of health benefits. The model is also designed to simulate the impact of numerous universal coverage proposals such as single-payer plans and employer mandates. The use of a single modeling system for these analyses helps assure that simulations of alternative proposals are executed with uniform and internally consistent methodologies.

HBSM was created to provide comparisons of the impact of alternative health reform models on coverage and expenditures for employers, governments and households. The key to its design is a “base case” scenario depicting the distribution of health services utilization and expenditures across a representative sample of households under current policy for a base year such as 2006. We developed this base case scenario based upon recent household and employer data on coverage and expenditures. We also “aged” these data to be representative of the population in 2006 based upon recent economic, demographic and health expenditure trends. The resulting database provides a detailed accounting of spending in the U.S. health care system for stakeholder groups. These base case data serve as the reference point for our simulations of alternative health reform proposals.

The model first simulates how these policies would affect sources of coverage, health services utilization and health expenditures by source of payment (*Figure 1*). Mandatory coverage programs such as employer mandates or single-payer models can be simulated based upon the detailed employment and coverage data recorded in the database. The model also simulates enrollment in voluntary programs such as tax credits for employers and employees, based upon multivariate models of how coverage for these groups varies with the cost of coverage (i.e., modeled as the premium minus the tax credit). In addition, the model simulates enrollment in Medicaid and SCHIP expansions based upon a multivariate analysis of take-up rates under these programs, including a simulation of coverage substitution (i.e., “crowd out”).



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





HBSM is designed to facilitate comparisons of alternative health reform initiatives using uniform data and assumptions. For example, take-up rates for Medicaid and various tax credit/premium voucher proposals are simulated using uniform take-up equations and modules. Uniform methods are also used to simulate changes in health services utilization attributed to changes in coverage status and cost-sharing parameters. The model uses a series of uniform table shells for reporting the impacts of these policies on households, employers and governments. This uniform approach assures that we can develop estimates of program impacts for very different policies using consistent assumptions and reporting formats. The use of uniform processes also enables us to simulate the impact of substantially different policy options in a short period of time.

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

HBSM is based upon a representative sample of households in the U.S., which includes information on the economic and demographic characteristics of these individuals as well as their utilization and expenditures for health care. The HBSM household data are based upon the 1999 through 2001 Medical Expenditures Panel Survey (MEPS) that we use together with the March 2005 Current Population Survey (CPS). We also used the Kaiser/HRET survey of employers for policy scenarios involving employer level decisions. We adjusted these data to show the amount of health spending by type of service and source of payment as estimated by the office of the Actuary of the Centers for Medicare and Medicaid Services (CMS) and various agencies. The methods used to develop these baseline data are discussed below.

Changes in employer costs are assumed to be passed-on to workers in the form of changes in wage growth over time. For example, policies that increase employer costs would result in a corresponding reduction in wages for affected workers, with a corresponding reduction in income and payroll tax revenues. Similarly, reductions in employer costs are assumed to be passed on to workers as wage increases. HBSM includes a tax module that simulates tax effects due to these changes in wages as well. The model will simulate wage pass-through under varying assumptions on how long it would take for the labor markets to adjust.

The model includes a simulation of health insurance premiums in the private small group and individual markets using the range of rating practices permitted in each state. This permits us to simulate the impact of options for implementing rate compressions proposals. It is also designed to simulate "adverse selection" that may result under policies that give employers and/or individuals a choice of alternative insurance pools with their own unique rating practices.

For example, some of the proposals analyzed in this study would give employers the option of enrolling in a public insurance pool at a community-rated premium. This would tend to attract employers and individuals with high health care costs who find that the community-rated



premium is less than the cost of an experience-rated plan for that group in the private market. The HBSM insurance market simulation is based upon a “synthetic firm” methodology, which we present below.

## Baseline Database

The key to simulating changes in the health care system is to develop a baseline database that depicts the U.S. health care system in detail. Our HBSM baseline data is based upon the 1999 through 2001 Medical Expenditures Panel Survey (MEPS) data, which provide information on sources of coverage and health expenditures for a representative sample of the population. These data are adjusted to reflect the population and coverage levels reported in the 2005 Current Population Survey (CPS) data (with adjustments for under-reporting discussed below). We also statistically match workers in these data to the Kaiser/HRET survey of employers which provides additional detail on coverage provided through work.

The creation of the baseline data for the model is presented in the following sections:

- Household data;
- Employer data; and
- Benchmarking data.

### 1. Household Database

The HBSM baseline data is derived from a sample of households that is representative of the economic, demographic and health sector characteristics of the population. HBSM uses the 1999 through 2001 MEPS data to provide the underlying distribution of health care utilization and expenditures across individuals by age, sex, income, source of coverage and employment status. The use of data for three years substantially increases sample size, thus permitting us to develop more stable estimates of narrowly defined policy options.

We re-weighted the MEPS household data to reflect population control totals reported in the 2005 March CPS data. These weight adjustments were performed with an iterative proportional-fitting model, which adjusts the data to match approximately 250 separate classifications of individuals by socioeconomic status, sources of coverage and job characteristics in the CPS.<sup>21</sup> Iterative proportional fitting is a process where the sample weights for each individual in the sample are repeatedly adjusted in a stepwise fashion until the database simultaneously replicates the distribution of people across each of these variables in the state.<sup>22</sup>

This approach permits us to simultaneously replicate the distribution of people across a large number of variables while preserving the underlying distribution of people by level of healthcare utilization and expenditures as reported in MEPS. These data can be further “tuned” in the re-weighting process to reflect changes in health service utilization levels (e.g.,

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<sup>21</sup> To bolster sample size for state level analyses, we have pooled the CPS data for 1998 through 2001. This is important when using the model to develop state-level analyses.

<sup>22</sup> The process used is similar to that used by the Bureau of the Census to establish final family weights in the March CPS.



hospitalizations).<sup>23</sup> This approach implicitly assumes that the distribution of utilization and expenditures within each of the population groups controlled for in this re-weighting process are the same as reported in the MEPS data.

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

## 2. *Employer Database*

We re-weighted the MEPS household data to reflect population control totals reported in the 2005 March CPS data. The model includes a database of employers for use in simulating policies that affect employer decisions to offer health insurance. We used the survey of employers conducted by the Kaiser Family Foundation and the Health Research and Educational Trust (HRET). These data include about 2,000 randomly selected public and private employers with 3 or more workers, which provide information on whether they sponsor coverage and the premiums and coverage characteristics of the plans that insuring employers offer.

We statistically match each MEPS worker with one of the firms in the Kaiser/HRET data. Experience has shown that it is important that the individuals assigned to each firm be consistent with the employer’s workforce characteristics. The Kaiser/HRET data provide information on the distribution of workers by wage level. However, additional information such as age of worker and family/single status for insured people are not included in the database. To use these data in our analysis, we statistically matched the Kaiser/HRET data with employers surveyed in the 1991 Health Insurance Association of America (HIAA) employer survey data, which provides detailed information on the characteristics of each employer’s workforce including number of workers by:<sup>24</sup>

Full-time/part-time status;

- Age;
- Gender;
- Coverage status (eligible enrolled, eligible not enrolled and ineligible);
- Policy type for covered people (i.e., single/family); and
- Wage level;

The employer health plan eligibility data in the database is important to simulations of policies affecting employers. One important consideration is that many of those who do not have employer coverage work for a firm that offers coverage to at least some of their workers. About 81.5 percent of all workers are employed by a firm that covers at least some of their workers

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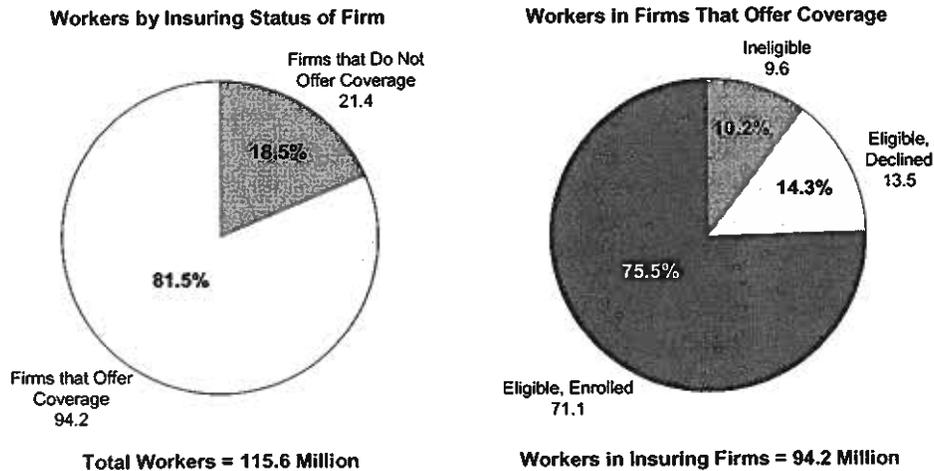
<sup>23</sup> Feature not used for RWJF study.

<sup>24</sup> We controlled for worker wage levels, industry, firm size and other characteristics when matching these firms.



(Figure 2). However, only about 75 percent of these people are eligible and enrolled. About 10.2 percent are ineligible and about 14.3 percent are eligible but have declined coverage.<sup>25</sup>

**Figure 2<sup>26</sup>**  
**Workers by Employer Insurance Status (in millions)**



The model controls for the workforce characteristics for each firm in matching individuals to firms. While the firm data provide information on the number of people in the firm with these characteristics, they do not provide the “joint distribution” across these groups (e.g., by age, sex, income etc.). We estimate the joint distribution for each firm using a process called “iterative proportional fitting.” In this approach, we begin with the joint distribution of workers across these variables as reported nationally in the CPS, and scale them in an iterative process so that in the aggregate they replicate the aggregate number of workers in the firm for each worker characteristic. Each non-zero cell of the joint distribution matrix for each firm is treated as an individual worker, who is matched to MEPS individuals based upon these individual characteristics.

Thus, if a firm reports that it employs mostly low-wage female workers, the firm tended to be matched to low-wage female workers in the MEPS data. This approach helps assure that Kaiser/HRET firms are matched to workers with health expenditure patterns that are generally consistent with the premiums reported by the firm. This feature is crucial to simulating the effects of employer coverage decisions that impact the health spending profiles of workers going into various insurance pools. Controlling for the joint distribution of workers within firms is crucial to simulations of program impacts because premiums and behavioral responses vary widely by age, wage level, part time/full-time status and the number of workers with dependents.

<sup>25</sup> HBSM baseline data based upon Lewin Group Analysis of the February and March CPS data for 1997.

<sup>26</sup> For example, it tells us how many workers there are in each of four age groups and the number of workers who are male and female, but it does not tell us how many of the people in each age group are males and how many are females.



## Medicaid Eligibility Expansion Simulations

HBSM simulates a wide variety of changes in Medicaid and SCHIP eligibility levels for children, parents, two-parent families, and childless adults. It models changes in: certification period rules, deprivation standards (i.e., hours worked limit for two-parent families), “deeming” of income from people outside the immediate family unit and other refinements in eligibility. As under the program, the model simulates eligibility on a month-by-month basis to estimate part-year eligibility.

The model estimates the number of people eligible for the current Medicaid program and under various eligibility expansions using the actual income eligibility rules used in each state for Medicaid and SCHIP. The model then simulates the decision to participate based upon a multivariate analysis of how program participation varies with income, availability of employer coverage, income and demographic characteristics and health status. As discussed above, the model estimates program costs based upon the per-member per-month (PMPM) costs in the existing program in each state by eligibility group, which we adjust to reflect the unique age and sex composition of the newly eligible population.

Our estimates indicate that only about 72 percent of people eligible for Medicaid enroll, although enrollment varies widely by eligibility group (e.g., children, parents, aged etc.). Thus, not all eligible people are expected to enroll in Medicaid when they become eligible. Based upon our multivariate participation analysis, we estimate the on average, Medicaid enrollment for non-disabled adults and children would average about 70 percent for uninsured people and about 39 percent for people with access to employer-sponsored insurance (ESI). Based upon a multivariate model of participation rates in programs requiring a premium, we estimate that premiums reduce participation by 37 percent or more, depending upon the amount of the premium (*Figure 3*).

Our estimates of “crowd-out” (i.e., people shifting from ESI to public coverage) are derived directly from our multivariate model of participation. As discussed above, we estimate that the participation rate for people with access to ESI is about 39 percent. We developed this estimate of take-up rates for people with access to ESI based upon coverage information on children who are eligible under the children’s Medicaid eligibility expansions to the FPL implemented in the early 1990s. Using the 1997 March CPS data, we were able to identify children with a parent who was covered by ESI. Because virtually all employer plans provide family coverage as an option - although workers often pay up to the full cost - we assumed that all of these children were eligible for ESI. This provided a basis for estimating separate participation rates for children with and without access to ESI, thus enabling an estimate of “crowd-out” for each policy simulation.

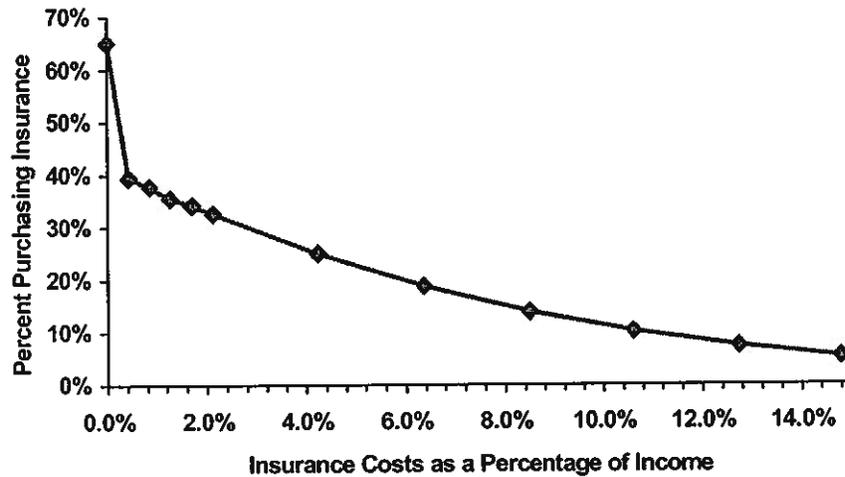
Many eligibility expansion proposals would include a waiting period requirement, which means that individuals must be without employer coverage for at least 12 months to be eligible. The MEPS household data include the information required to simulate the impact of this provision, including exemption for people changing jobs. This approach provides an impact of potential crowd-out with and without the waiting period requirement.

Finally, we estimate an increase in enrollment among the currently eligible but not enrolled population resulting from expansions in eligibility for Medicaid and SCHIP, which has been



called the “spill-over.” This estimate is based upon evaluations of programs that expand coverage for children to higher income groups. One study of a coverage expansion for children in California indicated that for each newly eligible child enrolled, up 0.86 currently eligible but not enrolled children also enrolled. Similar results have been reported for SCHIP outreach programs around the country. These results are used as a basis for modeling the spill-over effect associated with Medicaid eligibility expansions.<sup>27</sup>

**Figure 3**  
**Estimated Percentage of People Who Will Take Subsidized Coverage by Premium Cost as a Percentage of Family Income**



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

### Employer and Employee Take-up Simulations

HBSM models the effects of proposals designed to expand coverage by changing the cost of insurance to the employer and the employee. These include employer tax credits, premium subsidies and other programs that subsidize and/or reduce the cost of insurance to the employer. We assume that premium subsidies will be viewed by employers and employees as a reduction in the cost of insurance, resulting in a price response by both employers and workers. We estimate these price responses using Lewin Group multivariate analyses that measure how the likelihood of offering and taking coverage carries with the price of coverage.

In this section, we explain how we simulate employer and employee take-up in proposals that provide premium subsidies, and present some illustrative results.

<sup>27</sup> Christopher Trenholm and Sean Orzol, “The Impact of the Children’s Health Initiative (CHI) of Santa Clara County on Medi-Cal and Healthy Families Enrollment,” (report to the Davil and Lucile Packard Foundation), Mathematica Policy Research, inc., September 2004.

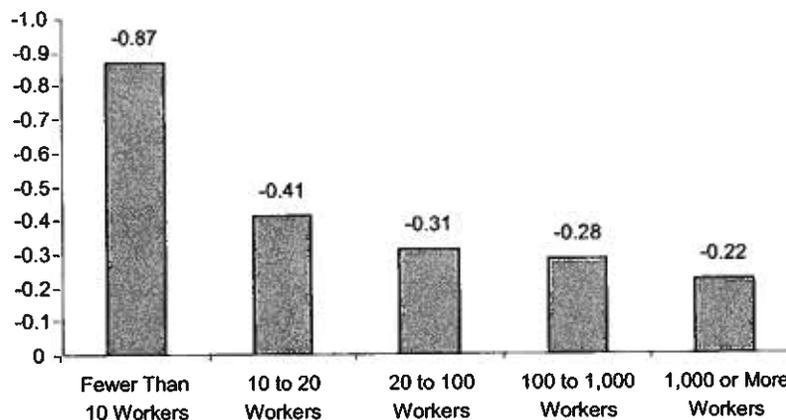


### 1. Employer Decisions to Provide Coverage

We developed a multivariate model of the employer decision to offer coverage which reflects the impact of price on the employer’s purchase decision. We used the 1997 RWJF Survey of Employers which provides data on a representative sample of establishments. These data include information on the size of the firm, industry and workforce characteristics of establishments. Data include both firms that offer insurance and those that do not. It also provides information on the characteristics of the health plans offered by each employer including premium costs and the share of the premium paid by the employer. These data were used to estimate a multivariate model that shows how the likelihood that a firm will offer coverage varies with wage level, workforce composition, firm size, industry, other firm characteristics and the price of health insurance.<sup>28</sup>

The effect of price on the purchase of a good or service is typically summarized by what economists call “price elasticity.” For example, the implicit price elasticity for firms with under ten employees is  $-0.87$ . This means that for each 1.0 percent reduction in price, there is an increase of 0.87 percent in the number of firms offering insurance. The implicit price elasticity declines as firm size increases to  $-0.41$  for firms with 10 to 20 workers, and  $-0.22$  for firms with 1,000 or more workers (Figure 4).

**Figure 4**  
**Employer Health Insurance Price Elasticity Estimates by Firm Size <sup>a/</sup>**



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

<sup>28</sup> While the RWJF data includes premium information for employers that offer coverage, no data is provided on the premiums faced by firms that do not offer coverage. To model the price effect we imputed premiums to non-insuring firms with a multivariate model of how premium levels vary with the workforce and firm characteristics that we estimated from the RWJF data on insuring establishments.



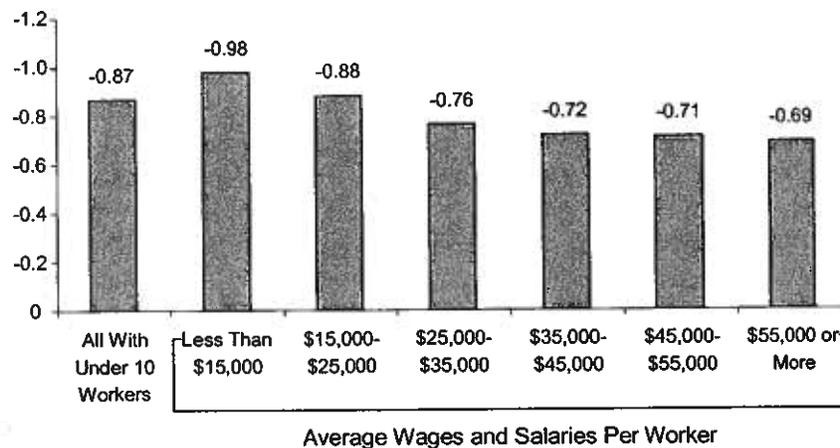
The model simulates the effect of employer premium subsidies using this multivariate model of the employer decision to offer coverage. For each non-insuring employer in the data, we estimate the change in the price of insurance resulting from the premium subsidies. The model then simulates the decisions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

The model reflects variations in firm price elasticity depending upon the characteristics of the firm. For example, the model shows that the firm price elasticity tends to decline as age and income rise, as shown in Figures 5 and 6. This results in a lower estimated price elasticity among currently insuring firms -- averaging about -0.56 for firms with 10 or fewer workers -- because the employers that offer coverage tend to have older and more highly compensated workers.

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

Once firms are selected to offer coverage, we simulate enrollment among workers assigned to these plans. The enrollment decision is simulated with a multivariate model of the likelihood that eligible workers will take the coverage offered to them based upon data reported in the 1996 MEPS data for people offered coverage through an employer. The model measures how take-up varies with the characteristics of the individual as well as the employee premium contribution required by the employer.

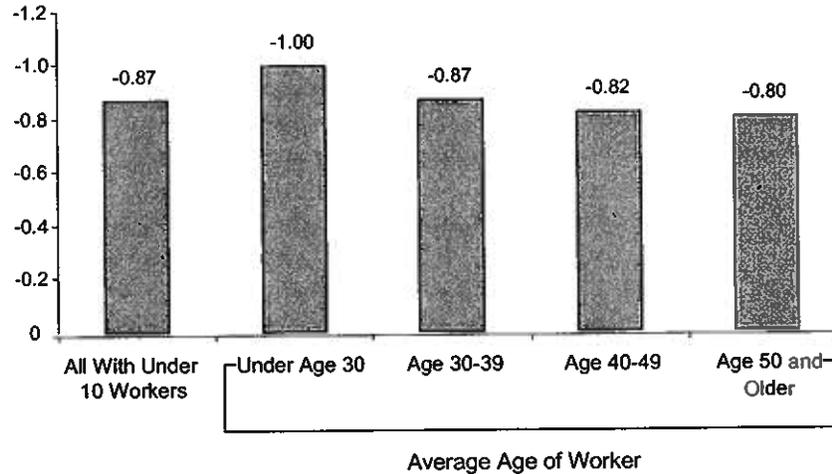
**Figure 5**  
**Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers by Average Wages and Salaries per Worker <sup>a/</sup>**



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



**Figure 6**  
**Employer Health Insurance Price Elasticity Estimates for Firms with Under 10 Workers by Age of Workers<sup>a/</sup>**



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

## 2. Individual Take-up of Health Insurance

Also, some proposals provide tax credits to individuals for the purchase of private coverage, which can include employee contributions for ESI and premium payments for non-group coverage. We simulate the impact of these proposals based upon a multivariate analysis of how the likelihood that an individual will take coverage varies with the amount of the premium. This estimate is based upon a pooled time-series cross-section analysis of private employer coverage reported in the Current Population Survey for the 1987 through 1997 period.<sup>29</sup> These analyses indicate a price elasticity of -0.34 percent, which means that on average, a one percent real reduction (i.e., inflation adjusted) in private employer premiums, corresponds to an increase in the percentage of people with insurance of 0.34 percent.<sup>30</sup>

Our price elasticity estimates vary by age, income and other demographic characteristics. For example, the percentage increase in coverage resulting from a one percent reduction in premiums ranges from a high of 0.55 percent among people with incomes of \$10,000 to 0.09 percent among people with incomes of \$100,000 (*Figure 7*) (i.e. a price elasticity of -0.55 to -0.09). Similarly, the percentage increase in coverage resulting from a one percent reduction in premiums ranges from 0.46 percent for people age 20 to 0.30 percent among people age 60 (*Figure 8*) (i.e. a price elasticity of -0.46 to -0.30). Thus, the model shows that older people and

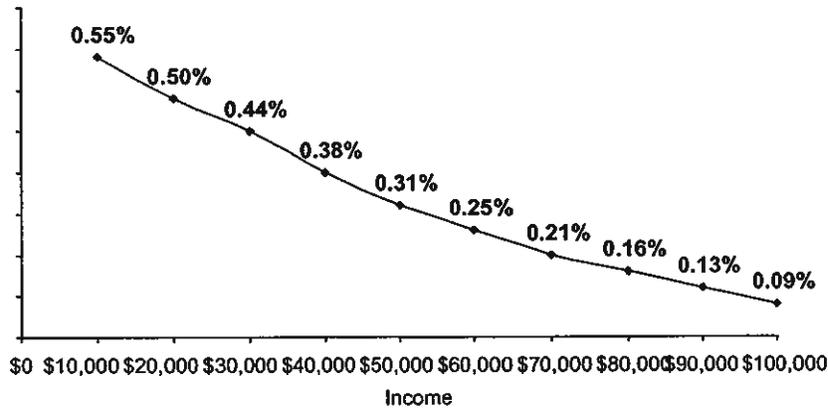
<sup>29</sup> This required imputing premiums based upon employer survey data developed by the Kaiser Family Foundation (KFF) and the Health Research and Education Trust.

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



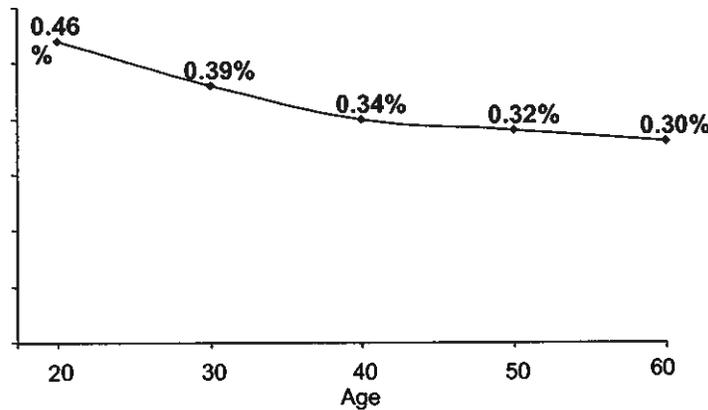
people in higher income groups are less sensitive to changes in price than other population groups.

**Figure 7**  
**Percentage Change in Coverage Resulting from a One-Percent Reduction in Premiums by Income Level (in percentages) *a/***



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

**Figure 8**  
**Percentage Change in Coverage Resulting from a One-Percent Reduction in Premiums by Age (in percentages) *a/***



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



### 3. Reinsurance proposals

Some proposal would subsidize the cost of insurance for selected groups through reinsurance as under the "Healthy New York program." This program permits insurers to provide a streamlined benefits package that includes a government sponsored subsidy to reduce the cost of the benefits. Under the original Healthy New York program, the subsidy comes in the form of a reinsurance mechanism where the state reimburses insurers for 90 percent of costs over \$30,000 up to the maximum of \$100,000 (\$100,000 is the maximum covered amount under the policy).<sup>31</sup>

To illustrate, *Figure 9* presents our estimates of the premiums by age for the health New York benefits package and a typical state worker benefits package with the reinsurance subsidy used in the Healthy New York program. We simulate take-up for employers based upon the amount of the reduction in the premium using the employer price response model discussed above.

**Figure 9**  
**Estimated Cost of Selected Health Benefits Plans <sup>a/</sup>**

Age Group	Percent of Population by Age	Projected PMPM Premiums With Reinsurance in 2006	
		State Worker PPO Plan (Coventry)	Healthy New York
<1	0.5%	\$1,502.26	\$1,236.79
01-04	4.6%	\$200.47	\$165.05
05-09	7.2%	\$94.75	\$78.01
10-14	9.6%	\$88.06	\$72.50
15-17	6.5%	\$109.03	\$89.77
18-19	4.4%	\$129.09	\$106.27
20-24	6.0%	\$130.40	\$107.36
25-29	3.3%	\$220.93	\$181.89
30-34	6.1%	\$235.72	\$194.08
35-39	7.9%	\$235.42	\$193.81
40-44	9.4%	\$263.25	\$216.72
45-49	10.6%	\$313.22	\$257.86
50-54	10.3%	\$405.72	\$334.02
55-59	8.2%	\$469.40	\$386.45
60-64	5.4%	\$650.45	\$535.50
<b>Average Premium to Participate PMPM</b>		<b>\$266.04</b>	<b>\$219.05</b>
<b>Single</b>		<b>\$312.49</b>	<b>\$257.54</b>
<b>Family</b>		<b>\$784.26</b>	<b>\$646.35</b>
<b>State Subsidy PMPM</b>		<b>\$31.44</b>	<b>\$27.45</b>
<b>Total Cost PMPM</b>		<b>297.48</b>	<b>\$246.50</b>

a/ Estimates include benefits and administrative costs.  
Source: Lewin Group estimates.

<sup>31</sup> New York recently revised the reinsurance component of the program to cover 90 percent of costs over \$5,000 per person up the \$75,000.



#### 4. Employer Price Elasticity Estimates Compared

Our firm price elasticity estimates are similar to those estimated by several researchers. For example, Hadley and Reschovsky estimated a price elasticity of -0.63 for firms with fewer than ten workers, and -0.30 for firms with between 10 and 24 workers.<sup>32</sup> They showed variations in firm price elasticity by age and income. Gruber estimated a firm price elasticity of between -0.66 to -0.99 for firms with fewer than 50 workers.<sup>33</sup> However, some studies show larger firm price elasticity estimates. For example, Feldman estimated a firm price elasticity of between -3.9 and -5.5.<sup>34</sup> Blumberg and Nichols recently estimated a firm price elasticity of up to -1.8 for firms with fewer than 10 workers, dropping to -0.66 for firms with 10 to 24 workers and -0.25 for firms with 100 or more workers.<sup>35</sup>

However, all of these price elasticity estimates yield very little change in the number of people with coverage. In all of these studies, the estimated price elasticities are large only for the smallest firms. For example, a 25 percent reduction in premiums (e.g., in the form of a tax credit) for firms with under 50 workers would cover about 3.0 million workers using our price elasticity assumptions, which is only about 10.1 percent of workers without coverage in this firm size group (*Figure 10*). Results are similar under the various firm price elasticity estimates.

The estimated impact is small because the price elasticity yields a percentage increase in the number of people with coverage in each firm size group, which is already quite small. There are about 19.2 million workers in firms with under 50 workers who had insurance in 2003. In this example, the estimated percent increase for all with under 50 workers was 15.5 percent [i.e., the weighted average price elasticity for under 50 workers (-0.64) multiplied by the percent change in premiums (25 percent)]. This is then applied to the number of people in the affected group who now have coverage (about 19.2 million workers) to estimate the change in coverage, which we estimate to be about 3.0 million workers (i.e., 15.5 percent increase over 19.2 million covered workers).

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<sup>32</sup> Hadley, J. and Reschovsky, J., "Small Firms' Demand for Health Insurance: The Decision to Offer Insurance," *Inquiry* 39:118-137, 2002.

<sup>33</sup> Gruber, J., Lettau, M., "How Elastic is the Firm's Demand for Health Insurance?," (report to the National Bureau of Economic Research), Working Paper 8021, November 2000.

<sup>34</sup> Feldman, R., et al., "The Effect of Premiums on the Small Firm's Decision to Offer Health Insurance," *Journal of Human Resources*, vol. 32, no. 4 (fall 1997), pp. 637-658.

<sup>35</sup> Blumberg, B., et al., "The Health Insurance Reform Simulation Model (HIRSM): Methodological Detail and Prototypical Simulation Results," (report to the U.S. Department of Labor), The Urban Institute, July 2003.



**Figure 10**  
**Comparison of Firm Price Elasticity Estimates**

	Lewin <sup>a/</sup>	Gruber <sup>b/</sup>	Blumberg <sup>c/</sup>	Hadley & Reschovsky <sup>d/</sup>
<b>Estimated Price Elasticity</b>				
<b>Less than 10 Workers</b>	-0.87	--	-1.8	-0.63
<b>10-24 Workers</b>	-0.41	--	-0.66	-0.30
<b>25-100 Workers</b>	-0.31	--	-0.25	-0.135 <sup>e/</sup>
<b>Weighted Average for 1-50 Workers</b>	-0.64	-0.66	-1.18	-0.45
<b>Impact of a 25 Percent Reduction in Premiums for Firms With 50 or Fewer Workers</b>				
<b>Change in Number of Workers With ESI (thousands)</b>	2,986	3,079	5,505	2,162
<b>Percent of Workers in Non-insuring Firms Who Become Covered Under ESI</b>	10.1%	10.4%	17.2%	7.3%

a/ John Sheils and Randall Haight, "Covering America: Cost and Coverage Analysis of Ten Proposals to Expand Health Coverage," Appendix A, (report to the Robert Wood Johnson Foundation (RWJF)), October 2003.

b/ Gruber, J., Lettau, M., "How Elastic is the Firm's Demand for Health Insurance?," (report to the National Bureau of Economic Research), Working Paper 8021, November 2000.

c/ Blumberg, B., et al., "The Health Insurance Reform Simulation Model (HIRSM): Methodological Detail and Prototypical Simulation Results," (report to the U.S. Department of Labor), The Urban Institute, July 2003.

d/ Hadley, J. and Reschovsky, J., "Small Firms' Demand for Health Insurance: The Decision to Offer Insurance," *Inquiry* 39:118-137, 2002.

e/ Weighted average for the 25 to 50 worker and 50 to 100 worker firm size groups.  
 Source: Illustrative analysis by the Lewin Group.

### Insurance Market Simulation Model

A number of proposals have emerged in recent years that would offer people a community rated alternative to private coverage, resulting in shifts in coverage and possibly adverse selection. Other proposals would alter the way in which insurance is regulated that would have differential impacts by age of policy-holder and other health risk groups. Examples of these policies include proposals to permit small employers to purchase coverage through the Federal Employees Health Benefits Program and creation of "association health plans (AHPs)" that are exempt from state insurance rating regulations.

We developed HBSM into a model of insurance markets. We did this by creating an employer database that holds information on both firm characteristics and the demographic and health spending information for each individual in those firms. Because no such database now exists, we matched firms in the KFF/HET data to individuals in the HBSM MEPS household data such that for each firm, there is one MEPS worker for each of the workers that each firm reported they employed. This type of database is typically referred to as a "Synthetic Firm" database.



Using these data, we can simulate the premiums each firm would be charged in their market based upon the rating practices and state regulations that apply in each state. The health expenditure data in the database permits us to simulate experience rating and medically underwritten premiums. These data provide a basis for estimating how employer premiums would be affected by changes in regulation of premiums. It also permits simulation of the potential for adverse selection under proposals creating government sponsored insurance pools.

In this section, we describe the creation of the synthetic firm data and the methods used to simulate the effect of proposed health reforms. Our discussion is presented in the following sections:

- Creating Synthetic Firm Database;
- Rating methods for insurance pools;
- Take-up for non-insuring firms;
- Employer shift to less comprehensive coverage;
- Worker take-up; and
- Example policy simulation.

### 1. Synthetic Firms

To be able to simulate employer decisions under alternative health reform plans, it is necessary to develop a database of “synthetic firms” that include both detailed information on employer health plans and the health service use of each worker and dependent in each firm. We create one synthetic firm for each worker in the MEPS data. Once the worker is assigned to one of the KFF/HRET employers, we populate the firm by statistically matching each firm to a sample of workers randomly drawn from the MEPS data for 1999 through 2001, who match the workforce profiles estimated for each firm in the database.<sup>36</sup>

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

*Figure 11* presents the distribution of employers in the Lewin model by average benefits costs per-member-per-month (PMPM) under a standard benefits package. We estimate average premiums of about \$283 PMPM in 2006, which includes benefits and administrative costs for employer health plans over the number of covered workers and dependents. There is wide variability in health plan costs due to differences in administrative costs, claims experience, health status rating and variations in rating practices across states.

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<sup>36</sup> For example, an insuring firm with five low-wage females who work part-time would be matched to five low-wage females in MEPS who are working part-time and have employer coverage.

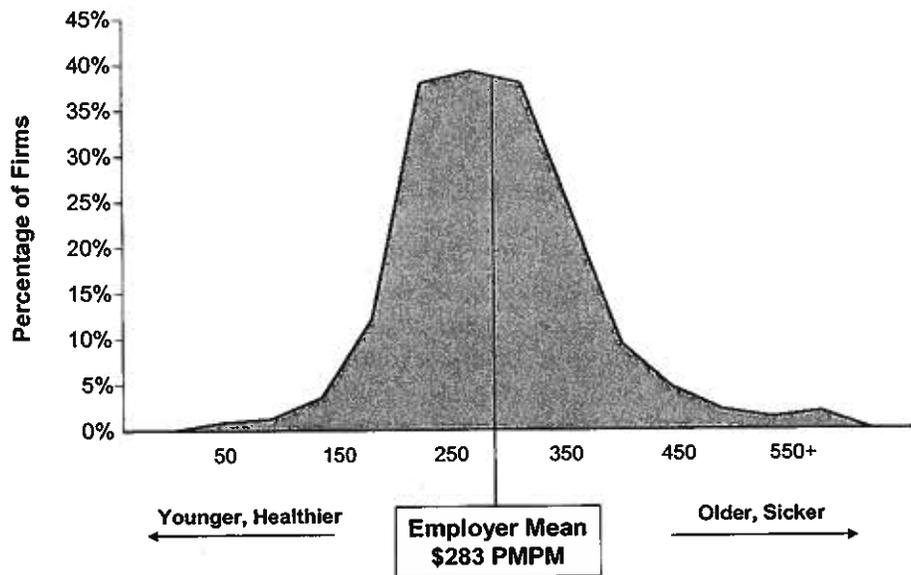


Figure 12 illustrates that the variability in PMPM premium costs varies widely across employers by size of group. For example, among firms with fewer than 10 workers, PMPM premiums range from about \$460 for firms in the 10 percent most costly firms compared with average costs of \$157 for firms in the 10 percent least costly firms. By comparison, PMPM premiums in firms with 1,000 or more workers vary from \$372 for the 10 percent most costly groups to \$215 for the least costly 10 percent of firms.

### 2. Modeling the Effect of Insurance Pools

One of the most crucial elements of insurance pooling models is the manner in which pool premiums are determined. As discussed above, group premiums in today’s market typically vary with the age of the worker, health status and experience (i.e., claims history). Many proposals would use mechanisms for determining premiums in the pool that differ from those used in the insurance markets. This can have a dramatic effect on coverage and premiums in both the pool and the traditional insurance market. There are three ways in which premiums are set under most small group proposals. They include:

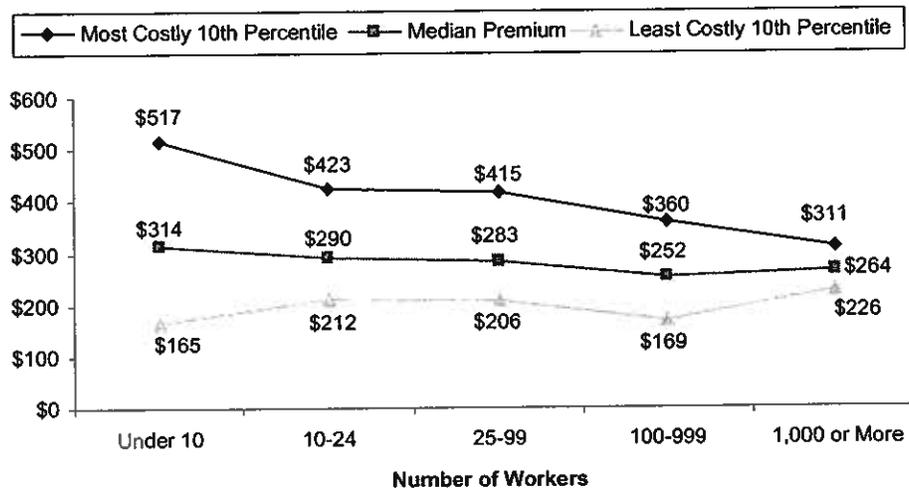
**Figure 11**  
**All Insuring Employers by Premium Cost PMPM in 2006:**  
**Includes Benefits and Administration <sup>a/</sup>**



a/ Estimates for a standard benefits package.  
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).



**Figure 12**  
**Estimated Average Health Insurance Costs (PMPM) for Most Costly and Least Costly 10 Percent of Employer Groups in 2006:**  
**Includes Benefits and Administration<sup>a/</sup>**



a/ Estimates for a standard benefits package.

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

- **Uniform Pool Premium:** In this model, premiums in the pool are set at a single amount per enrollee regardless of age and risk factors. Some of those proposals that would extend FEHBP to small groups would permit plans to charge only a single uniform premium that varies only with family status (i.e., single vs. family etc.). This approach would tend to attract higher cost groups that find the premium in the pool to be less than what they are paying in the traditional insurance market.
- **Risk factor rating of pool premiums:** In this model, plans in the pool are free to set premiums according to any risk factors they choose. This means that pools can fully adjust for health status and age even in states that limit the use of health status and age ratings in the traditional market. Under this model, groups with younger and healthier members would tend to enroll in the pool because they can offer these groups lower premiums than can be charged in the traditional market. Premiums in the traditional market typically increase due to the migration of lower-cost people to the pool.
- **State rating laws apply in pool:** Under this approach, plans selling coverage in the pool must follow the same rating rules that apply to coverage sold in the traditional market, including limit on age and health status rating. Under this model, premiums in the pool are expected to be the same and in the insurance markets, except to the extent that the pool can achieve savings in administration and/or benefits costs.

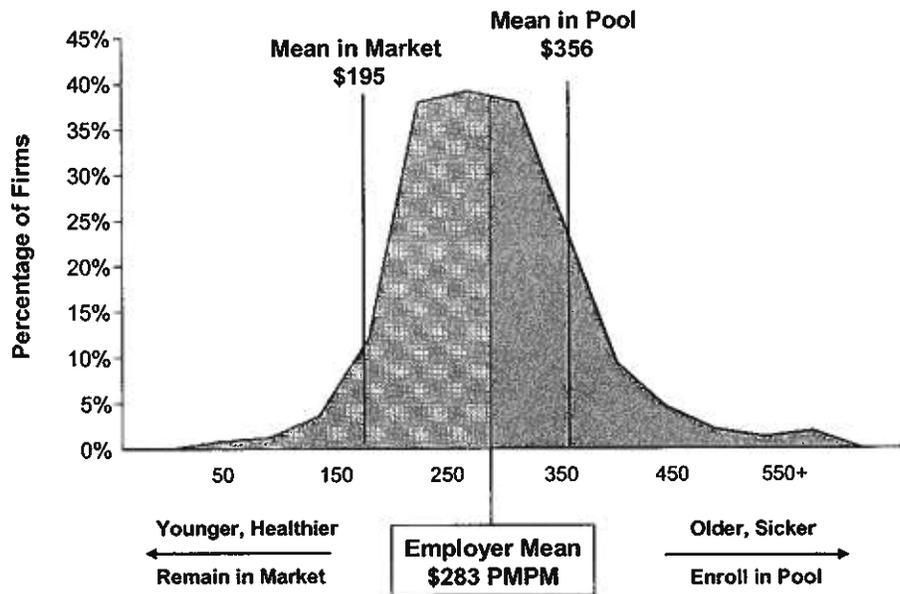
Thus, if the pool is less able to vary premiums with risk factors than the insurers in the traditional market, the pool will tend to acquire a disproportionate share of high-cost groups, with lower cost people remaining in the traditional market. Conversely, if rating variation in the pool is permitted to be greater than is required in the traditional insurance market, the pool will



acquire lower-cost people that left the higher-cost population in the traditional insurance market. This phenomenon - known as "adverse selection" - can have significant implications for the distribution of groups across the pool and traditional insurance markets. This, in turn, will result in premium adjustments in the pool and the traditional insurance market, which will result in further shifts in coverage.

Figure 13 illustrates how the model would simulate a pool that is required to set its premiums based upon the average cost of people enrolled in the pool, regardless of risk characteristic. The figure shows the distribution of insuring firms based on the premiums the firms would pay per-member per-month (PMPM) under current insurer rating practices. If the pool were established with a uniform premium of \$283 - which is our estimate of the average premium in the small group market in 2006 - firms with premiums in excess of that amount would enroll in the pool with the rest remaining in the traditional market. Under this example, the premium in the pool would need to be increased to \$356 PMPM to collect premiums sufficient to meet pool costs.

**Figure 13**  
**All Insuring Employers by Premium Cost PMPM in 2006:**  
**Includes Benefits and Administration <sup>a/</sup>**



<sup>a/</sup> Estimates for a standard benefits package.  
Source: Lewin Group estimates using the Health Benefits Simulation Model (HBSM).

The model simulates these effects on the equilibrium price of insurance in an iterative process. For example, in this example the small pool premium is reset at \$356 PMPM while the premium for those who remain in the traditional insurance market is adjusted to reflect the migration of more costly groups to the pool. Similarly, premiums in the traditional market are adjusted to reflect the accumulation of lower-cost people in the pool. Enrollment in the pool and the private market is then re-simulated at these premium levels. This process is repeated multiple times to



arrive at an equilibrium pool enrollment and premium estimate (equilibrium is defined to be the point where total costs are roughly equal to the cost of benefits and administration for the pool).

The model can also simulate the effect of permitting greater variation in premiums by risk factors than is permitted in the traditional market. Under this model, the pool would tend to accumulate lower-cost groups with higher-cost groups remaining in the traditional market. We simulate the resulting changes in premiums in the pool and the insurance markets using the iterative process described above; the pool and the insurance market are in equilibrium (i.e., premiums equal costs).

Pool premiums are affected by other factors as well. For example, some non-insuring employers are expected to enroll as coverage at a lower premium is made available to them. Also, some small group pool proposals permit the sale of coverage that is exempt from state regulations of insurance such as mandatory benefits and solvency standards. This would tend to attract lower-cost groups that are more willing to accept the reduction in benefits in exchange for the lower premium. Our approach to modeling these effects is summarized below.

### **3. Employer Decision to Shift to Lower Cost Plans**

The impact of insurance pools on firms that already offer coverage is more complex in cases where benefits under the pool differ from those now offered by the employer. For example, the President has proposed the creation of small group insurance pools – called “Association Health Plans (AHPs)” – that would be exempt from state minimum benefits requirements. While the exemption from mandated benefits reduces the cost of insurance (estimated to be 5.0 percent to 7.5 percent), many employers will prefer to continue with their existing benefits.

We simulate the employer decision to shift to the less comprehensive coverage offered in the pool based upon studies of how people respond to changes in the price of insurance in employer groups offering a choice of health plans.<sup>37</sup> One study estimated that a 1.0 percent decrease in the price of an alternative source of coverage was associated with a 2.47 percent migration of enrollees to the alternative health plan (i.e., a cross-price elasticity of -2.47). However, these elasticity estimates vary by age and health status such that older and sicker people are less likely to switch plans in response to a given change in price (*Figure 14*).

These elasticity estimates are used to simulate the employer decision to shift into the pool. Using these assumptions, the model tends to shift younger and healthier groups into the pool, leaving higher cost groups in the private insurance market. This causes premiums to increase for those who remain in the traditional insurance markets. Costs for firms shifting into the pool are included when recalculating small group pool premiums.

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<sup>37</sup> Stombom, B., Buchmueller, T., Feldstein, P. “Switching Costs, Price Sensitivity and Health Plan Choice,” *Journal of Health Economics*, 21 (2002), 89-116.



**Figure 14**  
**Plan Switching Price Elasticity Estimates Used in HBSM**

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

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

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

#### **4. Employer Decision to Offer Insurance**

Pooling proposals are typically designed to increase coverage among employers who do not currently offer insurance. However, if a significant portion of lower-cost groups migrate to the pool, premiums would increase for those left in the private market. This increase in private market premiums would result in a partially offsetting reduction in coverage among those with the highest costs.

The model simulates these changes in coverage for insuring and non-insuring firms. The model does this by calculating the difference between the premium they would pay for comparable coverage in today's insurance markets and the amount they would be charged under the rating methods used by the pool. Non-insuring firms are simulated to take the coverage based upon the change in price and our estimated firm price elasticity estimates presented above. Similarly, these price elasticity estimates are used to simulate the discontinuations of coverage among those facing premium increases in the private market.

#### **5. Example Policy Simulation**

President Bush has proposed the creation of AHPs which are essentially small group insurance pools. AHPs could be established to provide health insurance coverage to small employers (typically defined as firms with under 100 workers), within or across state boundaries. Costs within AHPs would be reduced by exempting these plans from state regulation of insurance, including mandatory benefits and solvency rules. Savings may also result from administrative efficiencies and large group purchases of health services. However, it is unclear whether the AHPs would be exempt from state regulations of rating practices.

We simulated the impact of this proposal under two alternative assumptions. In the first scenario, the AHPs are assumed to be required to rate policies in the same way they are rated in the private market under current law. This means that the primary cost advantage of the AHPs is that they are exempt from state mandated benefits and certain other regulations. In the second scenario, we assume that AHPs are exempt from state regulation and are permitted to set premiums for older and sicker groups at higher levels than are permitted under current state rating regulations. This means that the pool would have an additional cost advantage, in that they can charge younger and healthier groups a lower premium than is permitted in private insurance markets.



Under the first scenario (i.e., under current state rating laws), we estimated that AHP enrollment nationally would be about 6.0 million people. The number of uninsured would be reduced by about 400,000 people (*Figure 15*). We estimate that premiums in the AHPs would be about 5.2 percent lower than in the traditional insurance market resulting in about 490,000 uninsured people enrolling in the AHPs. However, premiums in the traditional market would actually increase by about 0.5 percent resulting in a partially offsetting reduction in coverage of about 90,000 people.

**Figure 15**  
**Summary Comparison of Alternative Estimates of AHP Impacts <sup>a/</sup>**

	AHPs Subject to State Rating Regulations <sup>b/</sup>	AHPs Exempt from State Rating Regulations <sup>c/</sup>
<b>Reduction (Increase) in Number of Uninsured (1,000s)</b>	400	726
<b>Uninsured Who Gain Coverage (1,000s)</b>	490	924
<b>Insured Who Lose Coverage (1,000s)</b>	-90	198
<b>Percent Changes in Premiums</b>	-0.1%	1.0%
<b>People Covered in AHP</b>	-5.2%	-14.1%
<b>People in Traditional Insurance Market</b>	0.5%	2.5%
<b>AHP Enrollment (1,000s)</b>	5,990	13,388
<b>Newly Insuring Firms (1,000s)</b>	490	924
<b>Firms Shifting to AHP (1,000s)</b>	5,500	12,464

a/ The CBO and The Lewin Group studies assume that AHPs are open only to firms with fewer than 50 workers.

b/ Assumes AHPs are exempt from minimum benefits and reserve requirements but not exempt from state ratings regulations. See "Bush and Kerry Health Care Proposals: Cost and Coverage Compared," The Lewin Group, September 2004.

c/ The Lewin Group estimates of AHP impacts assuming that AHPs are exempt from state rating regulation.

Source: Compiled from published estimates.

In the second scenario, we permit AHPs to vary premium with risk factors beyond what is permitted under current state laws. Under this scenario, about 13.4 million people would be induced to take coverage through the AHPs. About 924,000 uninsured would obtain coverage. This would be partially offset by a reduction in coverage of about 198,000 people. These are people in firms facing an increase in premiums in the traditional market. There would be a net reduction in the number of uninsured of about 726,000 people under this scenario.

This example illustrates the model's ability to simulate the impacts of changes in the rating practices permitted under small group pools.