
Health Care

*Are You
Better Off Today
Than You Were
Four Years Ago?*

A REPORT BY
Families USA

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**Health Care: Are You Better Off Today
Than You Were Four Years Ago?**

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INTRODUCTION

Health care has emerged as one of the top concerns of Americans in recent years, according to polls and public opinion surveys. To understand what forces are driving this change, Families USA posed a variation of a question raised by Ronald Reagan more than two decades ago: When it comes to health care, are we better off today than we were four years ago?

To answer this question, we enlisted the Lewin Group to analyze data drawn from federal government sources, including the Census Bureau, the Department of Labor, and the Department of Health and Human Services. With this analysis, we were able to compare data on health care costs and coverage in 2000 to projections for 2004. (The methodology is fully described in the Technical Appendix.) The results of our analysis show that the answer to our question—are we better off today?— is a clear *no*.

We found that, even using the government's own conservative estimates of health insurance premium growth, the premiums paid by workers rose nearly three times faster than the average U.S. earnings from 2000 to 2004. Workers' health premium costs grew by 35.9 percent, while the average earnings over the same period rose by only 12.4 percent. Consequently, health insurance premiums have consumed a growing share of earnings over the past four years.

As a result of escalating health costs, an increasing number of Americans are spending a very large portion of their annual earnings on health care. From 2000 to 2004, the number of Americans with health care costs of more than one-quarter of their earnings rose by 23 percent, from 11.6 million to 14.3 million.

We also found that many more people are now uninsured: Approximately 85.2 million people were uninsured some time during the 2003-2004 period—an *increase of 12.7 million* from 1999-2000 (when that number stood at 72.5 million). During the last two years, one out of every three people under the age of 65 were uninsured, most of them for lengthy periods of time. This increase in the number of uninsured people over the past four years affected all Americans, regardless of ethnicity, although the growth was higher in minority communities.

These grim findings explain why health care costs and coverage have become a top-priority concern for America's families over the past four years.

KEY FINDINGS

Rising Health Care Costs

- Health insurance premiums paid by workers rose by 35.9 percent from 2000 to 2004.
 - For individual coverage, the average national premium rose from \$2,864 to \$3,798 during the four-year period. For family coverage, the average national premium rose from \$7,028 to \$9,320 (employer and worker share of premiums combined) (Table 1).

Table 1

Average Premium Costs for Employer-Based Health Insurance, by Type, 2000 and 2004

Type of Coverage	2000	2004
For Individual Coverage Only		
Total Premium (Employer and Worker Share)	\$2,864	\$3,798
For Family Coverage Only		
Total Premium (Employer and Worker Share)	\$7,028	\$9,320

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

- From 2000 to 2004, premium costs borne by *workers* alone rose by 35.9 percent (Table 2). (In this study, premium costs borne by workers were assumed to rise at the same rate for both individual and family coverage.)
- For family coverage, the average premium amount paid by workers rose from \$1,433 to \$1,947 (Table 2).
- In 26 states—Alaska, Arizona, Colorado, Connecticut, Delaware, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Wisconsin, and Wyoming—and in the District of Columbia, workers' premium costs rose by more than 40 percent from 2000 to 2004 (Table 3).

Table 2

Increases in Premiums for Family Coverage, Employer-Based Health Insurance, 2000 to 2004

Premiums, by Payer	2000	2004	Percent Change
Total Premium Spending per Worker (Employer and Worker Share)	\$7,028	\$9,320	32.6%
Share of Premium Paid by Worker	\$1,433	\$1,947	35.9%
Share of Premium Paid by Employer	\$5,595	\$7,373	31.8%

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

- **Health premiums paid by workers rose nearly three times faster than the average U.S. earnings from 2000 to 2004 (Table 3).**
 - Nationally, workers' average premium costs rose by 35.9 percent from 2000 to 2004, while average earnings rose by only 12.4 percent (Table 3). Thus, workers' premium costs rose 2.9 times faster than their earnings.
 - In the following 35 states, workers' premium costs rose three or more times faster than the average earnings in the state from 2000 to 2004 (Table 3): Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, South Carolina, South Dakota, Texas, Utah, Vermont, West Virginia, Wisconsin, and Wyoming.
- **The number of people whose total health care costs exceeded one-quarter of their annual earnings rose substantially from 2000 to 2004 (Table 4).** Total costs include premiums, deductibles, copayments, coinsurance, and costs incurred for health services not covered by their insurance.
 - In 2004, there were 14.3 million Americans whose health care costs totaled more than one-quarter of their earnings—up from 11.6 million in 2000, an increase of approximately 22.9 percent (Table 4).
 - Among *insured* people, the number with health care costs in excess of one-quarter of their earnings rose from 8.4 million to 10.7 million between 2000 and 2004 (Table 4).

Table 3

Rate of Increase, Worker Share of Premiums and Average Worker Earnings, by State, 2000 to 2004

State	2000 to 2004		Premium Increases as Multiple of Earnings Growth
	Change in Average Premium Paid by Worker ¹	Change in Average Earnings per Worker ²	
Alabama	36.5%	11.4%	3.2
Alaska	56.7%	9.1%	6.2
Arizona	44.2%	11.0%	4.0
Arkansas	39.1%	12.1%	3.2
California	15.6%	14.3%	1.1
Colorado	44.7%	13.2%	3.4
Connecticut	55.8%	14.4%	3.9
Delaware	48.3%	10.3%	4.7
District of Columbia	51.5%	17.9%	2.9
Florida	35.0%	11.2%	3.1
Georgia	39.6%	13.0%	3.0
Hawaii	21.6%	13.6%	1.6
Idaho	36.7%	9.5%	3.9
Illinois	34.9%	13.0%	2.7
Indiana	39.9%	11.9%	3.4
Iowa	40.7%	10.6%	3.8
Kansas	44.7%	12.5%	3.6
Kentucky	42.3%	11.2%	3.8
Louisiana	23.2%	11.7%	2.0
Maine	53.9%	12.5%	4.3
Maryland	36.6%	15.0%	2.4
Massachusetts	49.8%	14.1%	3.5
Michigan	42.1%	10.0%	4.2
Minnesota	50.0%	14.2%	3.5
Mississippi	50.3%	9.4%	5.4
Missouri	23.4%	12.1%	1.9
Montana	44.0%	11.9%	3.7
Nebraska	43.0%	13.5%	3.2
Nevada	46.4%	14.4%	3.2
New Hampshire	45.6%	14.6%	3.1
New Jersey	42.9%	9.7%	4.4
New Mexico	46.0%	11.2%	4.1
New York	39.7%	13.1%	3.0
North Carolina	37.1%	12.5%	3.0
North Dakota	35.5%	12.8%	2.8
Ohio	34.1%	12.2%	2.8
Oklahoma	30.8%	11.7%	2.6
Oregon	31.9%	11.3%	2.8
Pennsylvania	27.4%	11.3%	2.4
Rhode Island	43.4%	15.5%	2.8
South Carolina	54.5%	11.9%	4.6
South Dakota	49.9%	9.2%	5.4
Tennessee	31.1%	12.1%	2.6
Texas	38.5%	11.2%	3.4
Utah	66.3%	13.2%	5.0
Vermont	57.2%	14.9%	3.9
Virginia	32.8%	13.4%	2.4
Washington	20.4%	10.8%	1.9
West Virginia	38.5%	12.2%	3.2
Wisconsin	49.3%	12.2%	4.0
Wyoming	48.1%	14.4%	3.3
U.S. Average	35.9%	12.4%	2.9

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

¹ See Table A in Appendix. ² See Table B in Appendix.

Table 4

People with Catastrophic Health Care Costs,¹ 2000 to 2004

Number Who Spend More than 25% of Earnings on Health Care	2000	2004	Percent Change
Among All People under Age 65	11,647,000	14,314,000	22.9%
Among Insured People under Age 65	8,449,000	10,692,000	26.5%

¹ Includes premiums, deductibles, coinsurance, copayments, and costs incurred for non-covered services for employee and employee's dependents.

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

- The growth in the population affected by such catastrophic health care costs varied widely by state, ranging from a high of 288,000 (Texas) and 232,000 (Florida) to a low of 4,000 (Alaska) and 5,000 (Vermont) (Table 5).

Growing Numbers of People without Health Insurance

- The number of nonelderly people without health insurance at some point over a two-year period rose from 72.5 million in 1999-2000 to 85.2 million during 2003-2004—an increase of 12.7 million people (Table 6).
- One out of every three Americans under the age of 65 (33.3 percent) went without health insurance for some period of time during 2003-2004 (Table 6).
- The number of people who were uninsured at some point in 2003-2004 exceeds the combined population of 32 states and the District of Columbia.
- Of the 85.2 million uninsured during 2003-2004, more than half (51.3 percent) were uninsured for nine months or more. Almost two-thirds (64.3 percent) were uninsured for six months or more.
- The following 10 states had the highest *percentage* of non-elderly people who went without health insurance for a period of time during 2003-2004: Alaska, Arizona, Arkansas, California, Louisiana, Nevada, New Mexico, New York, Oklahoma, and Texas (Table 7).
- Texas had the highest percentage of non-elderly uninsured: In Texas, that percentage grew from 38.1 percent in 1999-2000 to 46.4 percent in 2003-2004 (Table 7).

Table 5

People under Age 65 with Catastrophic Health Care Costs,¹ by State, 2000 to 2004

State	Number Who Spent More than 25% of Earnings on Health Care		Change, 2000 to 2004
	2000	2004	
Alabama	217,000	247,000	30,000
Alaska	22,000	26,000	4,000
Arizona	213,000	301,000	88,000
Arkansas	141,000	176,000	35,000
California	1,624,000	1,697,000	73,000
Colorado	166,000	229,000	63,000
Connecticut	102,000	120,000	18,000
Delaware	25,000	32,000	7,000
District of Columbia	23,000	32,000	9,000
Florida	710,000	942,000	232,000
Georgia	348,000	486,000	138,000
Hawaii	46,000	58,000	12,000
Idaho	50,000	72,000	22,000
Illinois	507,000	572,000	65,000
Indiana	249,000	320,000	71,000
Iowa	114,000	151,000	37,000
Kansas	104,000	140,000	36,000
Kentucky	179,000	229,000	50,000
Louisiana	239,000	279,000	40,000
Maine	53,000	65,000	12,000
Maryland	152,000	208,000	56,000
Massachusetts	201,000	240,000	39,000
Michigan	379,000	446,000	67,000
Minnesota	140,000	202,000	62,000
Mississippi	133,000	176,000	43,000
Missouri	223,000	271,000	48,000
Montana	53,000	68,000	15,000
Nebraska	66,000	89,000	23,000
Nevada	70,000	111,000	41,000
New Hampshire	35,000	49,000	14,000
New Jersey	255,000	301,000	46,000
New Mexico	91,000	114,000	23,000
New York	758,000	881,000	123,000
North Carolina	324,000	481,000	157,000
North Dakota	32,000	41,000	9,000
Ohio	484,000	514,000	30,000
Oklahoma	158,000	214,000	56,000
Oregon	154,000	201,000	47,000
Pennsylvania	491,000	525,000	34,000
Rhode Island	32,000	47,000	15,000
South Carolina	161,000	226,000	65,000
South Dakota	30,000	47,000	17,000
Tennessee	260,000	319,000	59,000
Texas	916,000	1,204,000	288,000
Utah	75,000	108,000	33,000
Vermont	24,000	29,000	5,000
Virginia	257,000	327,000	70,000
Washington	254,000	314,000	60,000
West Virginia	94,000	107,000	13,000
Wisconsin	196,000	252,000	56,000
Wyoming	20,000	27,000	7,000
U.S. Total*	11,647,000	14,314,000	2,667,000

¹ Includes premiums, deductibles, coinsurance, copayments, and costs incurred for non-covered services for employee and employee's dependents.

* Numbers do not add due to rounding.

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

Table 6

Uninsured People under Age 65

	1999-2000	2003-2004	Increase
Total Number Uninsured	72,533,000	85,216,000	12,683,000
Total Percent Uninsured	29.6%	33.3%	

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

- New Mexico had the second highest percentage of non-elderly uninsured: In New Mexico, that percentage grew from 41.5 percent in 1999-2000 to 44.7 percent in 2003-2004 (Table 7).
- The eight states with the next highest percentages of non-elderly uninsured in 2003-2004 were: California (38.0 percent); Oklahoma (37.3 percent); Louisiana (37.2 percent); Nevada (36.9 percent); Arkansas (36.1 percent); Arizona (35.7 percent); New York (35.6 percent); and Alaska (35.4 percent) (Table 7).
- **The following 10 states had the largest *number* of non-elderly people who went without health insurance for a period of time during 2003-2004: California, Florida, Georgia, Illinois, Michigan, New York, North Carolina, Ohio, Pennsylvania, and Texas (Table 7).**
 - In 2003-2004, 12.2 million people in California were uninsured—up from 11.0 million in 1999-2000 (Table 7).
 - In 2003-2004, 9.2 million people in Texas were uninsured—up from 7.1 million in 1999-2000 (Table 7).
 - The eight states with the next largest numbers of non-elderly uninsured in 2003-2004 were: New York (6.2 million); Florida (5.0 million); Illinois (3.6 million); Ohio (2.9 million); Pennsylvania (2.8 million); Michigan (2.7 million); Georgia (2.6 million); and North Carolina (2.5 million) (Table 7).

Table 7

Uninsured People under Age 65, by State

State	1999-2000		2003-2004	
	Total Number	Percent of Non-Elderly Population	Total Number	Percent of Non-Elderly Population
Alabama	1,193,000	30.7%	1,166,000	31.1%
Alaska	204,000	33.7%	203,000	35.4%
Arizona	1,487,000	33.5%	1,757,000	35.7%
Arkansas	708,000	31.2%	844,000	36.1%
California	11,021,000	35.2%	12,152,000	38.0%
Colorado	1,038,000	27.1%	1,419,000	33.9%
Connecticut	582,000	20.7%	848,000	29.0%
Delaware	180,000	25.9%	187,000	26.6%
District of Columbia	150,000	32.9%	185,000	34.0%
Florida	4,344,000	33.8%	4,951,000	34.6%
Georgia	2,149,000	30.1%	2,579,000	31.8%
Hawaii	280,000	27.5%	342,000	31.4%
Idaho	344,000	30.6%	393,000	33.6%
Illinois	3,188,000	29.0%	3,597,000	32.6%
Indiana	1,338,000	26.5%	1,634,000	29.2%
Iowa	553,000	22.4%	668,000	26.2%
Kansas	586,000	26.1%	650,000	26.9%
Kentucky	969,000	27.5%	1,073,000	30.6%
Louisiana	1,409,000	37.6%	1,502,000	37.2%
Maine	272,000	24.7%	301,000	28.7%
Maryland	1,067,000	23.6%	1,411,000	27.8%
Massachusetts	1,356,000	24.6%	1,535,000	27.1%
Michigan	2,148,000	24.3%	2,734,000	31.1%
Minnesota	952,000	21.8%	1,070,000	23.1%
Mississippi	763,000	31.2%	859,000	34.3%
Missouri	1,184,000	24.2%	1,317,000	26.9%
Montana	262,000	34.4%	251,000	32.1%
Nebraska	355,000	24.3%	405,000	26.8%
Nevada	588,000	33.0%	718,000	36.9%
New Hampshire	223,000	20.4%	255,000	22.6%
New Jersey	1,972,000	27.1%	2,307,000	30.3%
New Mexico	655,000	41.5%	715,000	44.7%
New York	5,111,000	31.4%	6,155,000	35.6%
North Carolina	1,921,000	28.4%	2,538,000	34.0%
North Dakota	141,000	26.7%	147,000	26.4%
Ohio	2,629,000	26.0%	2,862,000	29.5%
Oklahoma	994,000	34.7%	1,173,000	37.3%
Oregon	881,000	29.2%	1,028,000	32.4%
Pennsylvania	2,287,000	22.0%	2,820,000	27.4%
Rhode Island	163,000	20.0%	269,000	27.1%
South Carolina	917,000	27.6%	1,157,000	32.4%
South Dakota	152,000	25.4%	189,000	27.3%
Tennessee	1,300,000	26.1%	1,496,000	29.3%
Texas	7,123,000	38.1%	9,219,000	46.4%
Utah	576,000	28.1%	643,000	29.5%
Vermont	139,000	25.0%	133,000	24.9%
Virginia	1,609,000	25.9%	1,862,000	29.2%
Washington	1,464,000	27.7%	1,630,000	29.9%
West Virginia	463,000	30.9%	465,000	32.3%
Wisconsin	1,017,000	21.3%	1,262,000	25.9%
Wyoming	125,000	29.0%	139,000	32.5%
U.S. Total*	72,533,000	29.6%	85,216,000	33.3%

* Numbers do not add due to rounding.

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

- Every racial and ethnic group experienced significant growth between 1999-2000 and 2003-2004 in the portion of the nonelderly population that was uninsured (Table 8).
 - From 1999-2000 to 2003-2004, the portion of the white, non-Hispanic population under the age of 65 that experienced a period without health insurance over a two-year period grew from 23.0 percent to 24.4 percent (Table 8).
 - For the black, non-Hispanic population, the increase was from 41.4 percent to 43.7 percent (Table 8).
 - For Hispanics, the increase was from 49.8 percent to 61.2 percent (Table 8).
 - For other minorities, the increase was from 34.2 percent to 47.0 percent (Table 8).

Table 8

Uninsured People under Age 65, by Race and Hispanic Origin

	1999-2000	2003-2004	Increase
White, Non-Hispanic			
Number Uninsured	38,476,000	42,419,000	3,943,000
Percent of Subgroup Uninsured	23.0%	24.4%	
Black, Non-Hispanic			
Number Uninsured	12,840,000	14,338,000	1,498,000
Percent of Subgroup Uninsured	41.4%	43.7%	
Hispanic			
Number Uninsured	16,797,000	22,114,000	5,317,000
Percent of Subgroup Uninsured	49.8%	61.2%	
Other¹			
Number Uninsured	4,420,000	6,345,000	1,925,000
Percent of Subgroup Uninsured	34.2%	47.0%	

¹ Other includes those who identify themselves as American Indian, Aleut or Eskimo, Asian or Pacific Islander, or as a member of more than one group (e.g., white-black, white-Asian, black-Asian).

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

The Census Bureau and the Families USA Study: Two Different and Valid Measures of the Uninsured

The estimates of the number of Americans facing the physical and financial consequences of going without health insurance presented in this study are based on a methodology that Families USA developed with the Lewin Group, a health and human services research consulting firm with 34 years of experience in empirical research and data analysis.

The estimates presented here are a different measure than the widely quoted estimates of uninsured Americans released each year by the Census Bureau in September (although in 2004, the Census Bureau moved its release date back to August). The most recent Census Bureau release reports an estimated 45.0 million uninsured Americans in 2003. This number, derived from the Census Bureau's annual Current Population Survey, is intended to offer an estimate of how many people did not have any type of health insurance for an **entire calendar year**. There are many people, however, who are uninsured for a portion of a year but not for the entire year. These individuals are not reflected in the Census Bureau estimate, but they may be profoundly affected by their uninsured status—in terms of both their physical and their economic well-being.

Thus, this study was designed to take a closer look, to improve our understanding of how many people experience a significant gap in coverage. The Census Bureau's Current Population Survey asks respondents a series of questions in March, which a respondent must answer by looking back at the time period from January 1st through December 31st of the previous year. If, and only if, the respondent

answers that they did not have *any* kind of insurance at *any* point in time during that previous calendar year will they be counted as uninsured. However, there are many people who are uninsured for periods of time that do not neatly fall within a 12-month calendar year. The Families USA/Lewin methodology in this study examines how many people (under the age of 65) were without health insurance for at least one month and for up to 24 months.

By taking this closer look, we found that many more people experienced a significant gap in health insurance than is usually recognized, and that number is increasing rapidly. For example, our methodology includes a person who was uninsured from September 1, 2003 through March 1, 2004. This person would *not* be counted as uninsured in either 2003 or 2004 by the Current Population Survey. Similarly, a person who is uninsured from January 1, 2003 until November 1, 2004—22 months without health insurance—is counted as uninsured in 2003 by the Census but then not counted as uninsured in 2004 (even though the person was uninsured for 10 months in 2004). No picture of the causes and consequences of being uninsured is complete unless it includes *all* who experience a significant gap in health insurance coverage.

As described more fully in the Technical Appendix (see page 31), this study's estimates of the number of uninsured Americans are based exclusively on the most recent data projections from the Census Bureau's Current Population Survey, as well as its Survey of Income and Program Participation.

DISCUSSION

Overview

This study examines trends in the health care system from the beginning of 2000 to the end of 2004. We look at two key areas: first, the rise in health care costs and its impact on job-based health insurance and insured workers; and second, the increase in the number of uninsured Americans. Our findings are deeply discouraging: Over the past four years, American consumers have seen their health care costs going up faster than their earnings and have found themselves at increasing risk of being uninsured.

Premiums for job-based health insurance have risen rapidly over the past four years: Workers have seen their share of premiums rise 35.9 percent—nearly three times faster than average U.S. earnings. An overall increase in health care costs is the key driver—but not the only driver—of rising premiums for job-based health insurance. The growth in the number of Americans without health insurance also drives up premiums. When the uninsured get sick and seek health care services for which they cannot pay, the cost of their care is passed on to others: Doctors and hospitals increase their fees to offset such losses, and insurers pass these increased costs along to consumers in the form of higher premiums.

Rising health insurance premiums have forced employers to confront hard choices over the last four years. Some employers have concluded that they can no longer offer health insurance to their workers. Many employers who have continued to provide coverage are asking their workers to pay a greater share of the premiums. And many employers now provide “thinner coverage”—fewer benefits and/or higher deductibles, copayments, and coinsurance—in order to bring down the cost of health insurance for themselves and their workers.

The increase in overall health care costs has not only driven up health insurance premiums and eroded job-based health insurance coverage, it has also had a direct effect on the pocketbooks of Americans who have serious health problems. Even for *insured* workers, the out-of-pocket costs of serious illness can wipe out family budgets. In 2004, 10.7 million *insured* people will have health care costs that exceed 25 percent of their annual earnings.

And finally, the number of Americans without health insurance continues to mount. Today, *one of three* Americans under age 65 will go without health insurance over a two-year period. Rising health insurance costs over the past four years have contributed to this increase in the number of uninsured. As health insurance costs escalated, some employers stopped offering plans to their workers. In other cases, workers—especially lower-wage workers—dropped coverage when premium increases made that coverage unaffordable. At the same time, the economic recession that began in 2001 has spurred the growth in uninsured Americans by simultaneously increasing unemployment rates (thus reducing the number of people with access to job-based health coverage) and by reducing the state tax dollars available to support health care safety nets (primarily Medicaid and the State Children’s Health Insurance Program, or SCHIP).

Rising Premiums for Job-Based Health Insurance

On a national basis, health insurance premiums for employment-based coverage rose rapidly for both individuals and families from 2000 to 2004. Premiums rose from \$2,864 to \$3,798 for individuals and from \$7,028 to \$9,320 for families (these numbers include both the employer and the worker share of premiums) (Table 1). During this four-year period, premium costs borne by workers alone rose by 35.9 percent (Table 2). (Our analysis assumes that the increase in the worker share of premium costs for individual and family coverage rose at the same rate.) Over the same period, the share of premium costs borne by workers rose slightly faster than the share of premium costs covered by employers (31.8 percent) (Table 2).

In 26 states—Alaska, Arizona, Colorado, Connecticut, Delaware, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Wisconsin, and Wyoming—and in the District of Columbia, workers’ premium costs rose by more than 40 percent from 2000 to 2004 (Table 3).

Rising health insurance premium costs are driven by many factors. Certainly, the overall rise in health care costs is key. Another factor, often overlooked, is the impact of growing numbers of uninsured Americans on premium costs.

Looking first at rising health care costs, we note that increases in the cost of health care are the result of a number of factors that go beyond the scope of this report. Both hospital spending and spending on physician care have increased significantly. Another important driver of health care spending increases over the past four years has been prescription drug spending. Prescription drug spending has increased by 14.5 percent in 2000, 13.8 percent in 2001, 13.2 percent in 2002, and 9.1 percent in 2003.¹

One little-mentioned cause of premium increases is the cost of providing health care to uninsured people. These health care service costs are financed directly from federal, state, and local taxes (which fund various government payments to hospitals and other providers), through non-patient revenue sources (primarily philanthropy), and by those with private health insurance.²

Any uncompensated care not directly reimbursed by government, philanthropy, or other sources is built into the cost bases of hospitals and physicians. In other words, hospitals and physicians recover these dollars by raising fees and charges, which, in turn, increases total private insurance costs. A recent study found that the cost of private insurance in Georgia is approximately 9 percent higher than it would be if all Georgia residents were insured.³ In Maine, the Governor's office has calculated that the total cost of uncompensated health care is 19.6 percent of total premiums paid in the state each year. The state is building a new program based on the assumption that covering *uninsured* Mainers will significantly reduce premiums for *insured* Mainers.⁴

Ironically, as the costs of health care for the uninsured drive up premiums for private insurance, some employers drop coverage and more people become uninsured, further increasing costs for private coverage. Thus, the rising cost of private coverage and the rising number of uninsured Americans together form a vicious circle, with each trend exacerbating the other

Workers' Premiums Grew Faster than Earnings (While Paying More for Less)

The increasing costs of health care and the associated increase in health insurance premiums for worker coverage are leaving employers, particularly smaller businesses, struggling to cope. Some employers are forced to take the

drastic step of dropping coverage for their workers. Small businesses, which have seen the highest premium increases, are the most likely to stop offering health insurance.⁵ Other employers are trying to hold down the rise in premiums by shifting health care costs to workers.⁶ They do this in two ways.

First, employers are increasing the dollars that workers must pay out of their paychecks for their share of health insurance premiums (Table 2). Besides shifting a portion of the premium increase to workers, employers also recouped a portion of the higher costs by cutting back on wage increases for workers: A 2003 national survey of employers found that 15 percent reported that they offset their premium cost increases by giving smaller raises to their workers.⁷

The result is that nationally, average health premiums paid by workers rose nearly three times faster than average earnings from 2000 to 2004. At the same time that workers' average health premiums rose by 35.9 percent, average earnings rose by only 12.4 percent (Table 3). (Note, however, that this increase in average earnings was driven largely by gains for higher-paid people; earnings for middle- and lower-income Americans were largely stagnant after 2000.⁸) In 35 states—Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, South Carolina, South Dakota, Texas, Utah, Vermont, West Virginia, Wisconsin, and Wyoming—workers' health care premiums rose three or more times faster than average worker earnings in those states from 2000 to 2004 (Table 3).

Second, in addition to asking workers to pick up more premium costs, employers are providing “thinner” health insurance coverage packages—increasing the size of the deductible, adding separate deductibles for certain services such as inpatient hospital care, increasing the size of copayments and coinsurance, and decreasing the scope of covered services.⁹ These changes directly pass increased health care costs on to workers.

More Insured Workers Face Catastrophic Health Care Costs

The result of this combination of higher premium costs and thinner coverage is that insured workers with serious illnesses, those with chronic conditions or disabilities, or those who experience a one-time medical crisis often find

themselves in real financial trouble. In 2004, having health insurance does not necessarily guarantee protection against high medical bills. A growing number of *insured* workers are facing catastrophic health care costs. By 2004, some 10.7 million *insured* workers incurred health care costs that exceeded 25 percent of their annual earnings—an increase of 26.5 percent over four years (Table 4). Obviously, the impact of such enormous health care costs on financial security is greatest for low-income workers.¹⁰

Thus, it is not only the uninsured who face bankruptcy and financial ruin: Today, America's *insured* workers also are at severe financial risk. In 2003, one in seven American families (20 million families) had significant problems paying medical bills; more than two-thirds (68 percent) *had health insurance*, but they still had trouble paying rising deductibles, copayments, and other out-of-pocket health care costs.¹¹ Even among adults who were insured continuously over the previous 12 months, more than one-third (35 percent) reported that they had problems with past medical bills or paying off accrued medical debt.¹² Nearly half of all personal bankruptcies are due in part to medical expenses; 80 percent of these families in bankruptcy *had health insurance*.¹³

Increasing Numbers of Uninsured Americans

Rising health insurance premiums and out-of-pocket costs for workers are part of the reason for the dramatic increase in the number of Americans under the age of 65 going without health insurance. The number of people without health insurance at some point over a two-year period rose from 72.5 million in 1999-2000 to 85.2 million in 2003-2004—an increase of 12.7 million people (Table 6). These 85.2 million Americans who experienced a period without insurance exceed the combined population of 32 states and the District of Columbia.

Looking at 2003-2004, a shocking one out of three Americans under the age of 65 (33.3 percent) was uninsured at some point during the two-year period (Table 6). The vast majority of uninsured Americans were without health insurance coverage for a *significant period of time*: More than half (51.3 percent) were uninsured for at least nine months, and nearly two-thirds (64.3 percent) were uninsured for at least six months.

In 2003-2004, *more* than one-third of the non-elderly population was without health insurance in the following 15 states and the District of Columbia: Alaska, Arizona, Arkansas, California, Colorado, Florida, Idaho, Louisiana, Mississippi, Nevada, New Mexico, New York, North Carolina, Oklahoma, and Texas (Table 7). In Texas, which had the highest percentage of uninsured people under the age of 65, that percentage grew from 38.1 percent in 1999-2000 to 46.4 percent in 2003-2004. In New Mexico, which had the second-highest percentage of non-aged uninsured, that percentage grew from 41.5 percent in 1999-2000 to 44.7 percent in 2003-2004 (Table 7).

The 10 states with the largest *number* of people who were uninsured in 2003-2004 were: California (12.2 million); Texas (9.2 million); New York (6.2 million); Florida (5.0 million); Illinois (3.6 million); Ohio (2.9 million); Pennsylvania (2.8 million); Michigan (2.7 million); Georgia (2.6 million); and North Carolina (2.5 million) (Table 7).

Key Factors Contributing to the Rapidly Rising Number of Uninsured Americans

From 1999-2000 to 2003-2004, the number of uninsured people under the age of 65 going without health insurance increased by 12.7 million (Table 7). This increase alone is more than the sum of the total under-65 population of 12 states and the District of Columbia. A number of factors have driven this dramatic and rapid increase—in addition to the rise in health insurance premium costs (which has already been discussed), the rise in the unemployment rate, loss of jobs in the economy, and fraying of the public health care safety net have all contributed.

■ Rising Cost of Health Insurance

During the past four years, rapidly rising health insurance premiums were one reason why the number of working uninsured increased.¹⁴ One estimate of the correlation between premium increases and people losing coverage, prepared for the U.S. House of Representatives, found that a 1 percent real increase in premiums would be associated with a loss of coverage for 300,000 people.¹⁵ When premiums go up too fast, some employers, particularly small businesses, stop offering health insurance benefits to workers. Many other employers pass on a greater share of health insurance premiums to workers, and this leaves coverage simply too expensive for

lower-wage workers.¹⁶ The simultaneous combination of rising premiums, higher cost-sharing, and fewer benefits for more money forces other workers to do a tough cost-benefit analysis. Sadly, this balancing act between other critical demands on family budgets and the cost of health insurance can force many low-wage workers to forgo coverage.¹⁷

Clearly, rising premiums are a barrier to low-income workers who want to enroll in health insurance, because workers' share of premiums consume a higher percentage of their earnings. However, this study's findings do not reveal the full extent of the impact of premium size and growth on low-wage workers. This study only presents data on *average* worker premium size and growth—across all income categories—and thus masks the fact that the actual cost of health insurance is often higher for low-wage workers than workers in middle- and upper-income categories.¹⁸

■ Rising Unemployment

Losing a job is financially devastating to families, and the impact is often compounded by the concurrent loss of health insurance coverage. Roughly two-thirds of the nonelderly population has employment-based health benefits, either directly (through a worker's employer) or indirectly (through an employed person in the family).¹⁹ As a result, when workers lose their jobs, they and their families often lose their health insurance as well.

The unemployment rate climbed from 4.0 at the beginning of 2000 to a peak of 6.3 percent in June of 2003 and averaged 6.0 percent during 2003.²⁰ However, the unemployment rate only tells part of the story of the recession, which, according to the National Bureau of Economic Research, began in March 2001.²¹ The unemployment rate counts former workers who are *actively seeking* a job and does not consider former workers who have become discouraged and stopped looking. During a recession, it is not uncommon for people to stop looking for work, so economists look at the employment-to-population ratio as an alternative measure. This ratio captures the percent of the total population 16 years and older that is employed. The percent of Americans who work dropped from a peak of 64.7 percent in April of 2000 to 62.1 percent in March of 2004; it has improved little since then.²²

This decline in employment drives up the rate of uninsured Americans: An analysis by the Kaiser Family Foundation found that, for every 100 people who lose their jobs, the number of uninsured people grows by 85.²³ Thus, in the last four years, at the same time that employers were dropping health insurance benefits or passing on costs and forcing workers to forgo coverage, rising unemployment also drove up the number of uninsured.

Some workers who lose employer-based health insurance are eligible to remain temporarily on their former employer's plan through the federal Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) statute or a state COBRA-like law affecting small employers. Although these federal and state COBRA laws provide a potential, temporary health insurance lifeline for some unemployed workers, the costs of such coverage are usually prohibitive. The vast majority of workers, who receive relatively meager unemployment compensation benefits, cannot afford to pay both the employer's and their own share of premiums (plus a 2 percent administrative fee). A 2001 study estimated that 57 percent of non-elderly workers were potentially eligible for COBRA, but only 7 percent of unemployed workers had COBRA coverage.²⁴

■ **State Limits and Cuts to the Health Care Safety Net**

The likelihood that an employer offers health benefits to its workers varies considerably according to the characteristics of the employer. Low-wage employers are less likely to offer health coverage to their employees than are their higher-wage counterparts.²⁵ And, contrary to popular belief, Medicaid does not provide coverage to most workers in low-wage jobs. Medicaid income eligibility levels are set by each state. A parent in a family of three who works full-time all year at the federal minimum wage (\$5.15 an hour) earns too much to qualify for Medicaid in half the states, even though the family's annual income would only be about \$10,700—well below the poverty level. A parent working full-time and earning \$7.50 an hour would have income just above 100 percent of the federal poverty level, but she/he would be in-

eligible for Medicaid in 36 states. In 42 of 50 states, adults without dependent children are ineligible for Medicaid—even if they have no income at all.²⁶

While the health care safety net for adults leaves most working, low-wage adults unprotected, children in low-income families should fare better. Since the passage of the State Children's Health Insurance Program (SCHIP) in 1997, almost all children are eligible for public health insurance coverage if their family income is less than 200 percent of the federal poverty level, even though their moms and dads are often not covered. But recent data show a decline in public health coverage of children.

Since 2001, low-income children's access to health insurance coverage has been negatively affected by state budget cuts. The economic recession has caused state tax revenues to decline and, in turn, created state fiscal crises that led to pressure to reduce state Medicaid and SCHIP budgets. Many states have frozen enrollment in their SCHIP programs or lowered income eligibility levels at the same time that rising unemployment increased the number of children who might have been eligible for assistance. The federal government has offered very little fiscal relief to the states to help them cope with the parallel problems of reduced revenue and greater need for services, both of which resulted from the recession.

During the last three years, Alabama, Colorado, Florida, Maryland, Massachusetts, Montana, and Utah temporarily froze SCHIP enrollment. At least 14 states lowered income eligibility levels for portions of the SCHIP or Medicaid population.²⁷ And additional states required families to pay monthly premiums to receive health services. The inability of an unemployed or low-wage parent to pay these premiums may result in loss of SCHIP eligibility, at least temporarily, until the premium is paid. And other states acted to raise subtler barriers to enrollment, including periodic eligibility review processes, requiring extensive paperwork, demanding frequent resubmissions of required forms, and requiring frequent in-person interviews.²⁸ The cumulative effect at the national level was that children's

enrollment in the SCHIP program declined during the second half of 2003, the first decrease since the program was implemented in 1997.²⁹ In Texas alone, since the fall of 2003, 130,000 children have lost coverage as the state reduced benefits and enacted new restrictions.³⁰

CONCLUSION

This study explored the question, “When it comes to health care, are we better off today than we were four years ago?” Our analysis leaves no room for debate: The clear answer is *no*.

Health care costs are driving up health insurance premiums and forcing employers to ask workers to pay more for their health insurance. Workers are now running hard to get ahead and yet still ending up behind—premium increases alone are growing much faster than earnings. The wage and salary raises of the past four years have been erased by rising health costs. With no end in sight to rising premiums, employers are trying to reduce premium growth by offering workers a thinner health insurance package. The combination of paying more for less coverage, in turn, forces some workers to forgo health insurance coverage. Others, even *with* insurance, find that a serious illness will wipe them out financially.

At the same time, rising health care costs are driving up the number of uninsured Americans of all races and ethnicities. Other factors in the past four years also have accelerated the increase—including a recession that increased unemployment and reduced jobs.

The negative health care trends of the past four years described in this report have undermined the health security and well-being of the vast majority of America’s families. Indeed, recent polls and public surveys confirm that Americans are increasingly concerned about health care and that the affordability of health care has become a top domestic issue. The challenge in the next four years will be for our nation’s leaders to move from debate to action—making health care a top budget and issue priority.

Who Are the Uninsured?

All Races and Ethnicities

Lack of health insurance coverage is a problem that affects people of all races and ethnic origins in this country. Further, every racial and ethnic group experienced significant growth between 1999-2000 and 2003-2004 in the portion of the population that was uninsured.

- While white, non-Hispanic people made up nearly half (49.8 percent) of those under the age of 65 without health insurance for all or part of the two-year period from 2003-2004 (Table 9), other groups were much more likely to be uninsured (Table 8).
- Hispanics were the most likely to be uninsured: 61.2 percent of Hispanics were uninsured in 2003-2004, up 11.4 percentage points from 1999-2000 (Table 8).
- African Americans were the next most likely to be uninsured: 43.7 percent of African Americans were uninsured in 2003-2004, up 2.3 percentage points from 1999-2000 (Table 8).

Four Out of Five Work

Contrary to popular perception, the overwhelming majority of people who go without health insurance were connected to the workforce. And the number of working uninsured experienced significant growth between 1999-2000 and 2003-2004 (Table 9).

- More than four in five individuals (83.7 percent) who went without health insurance during 2003-2004 were connected to the workforce—78.0 percent were employed, and 5.7 percent were actively looking for employment (Table 9).
- Of the people who were uninsured during 2003-2004, only 16.3 percent (of the uninsured adults and the parents of uninsured children) were not in the labor force—because they were disabled, chronically ill, family caregivers, or not looking for employment for other reasons (Table 9).

Table 9

Uninsured People under Age 65, by Race and Hispanic Origin and by Employment Status

	1999-2000	2003-2004
Total Uninsured	72,533,000	85,216,000
Uninsured, by Race and Hispanic Origin		
White, Non-Hispanic		
Number Uninsured	38,476,000	42,419,000
As a Percent of All Uninsured	53.0%	49.8%
Black, Non-Hispanic		
Number Uninsured	12,840,000	14,338,000
As a Percent of All Uninsured	17.7%	16.8%
Hispanic		
Number Uninsured	16,797,000	22,114,000
As a Percent of All Uninsured	23.2%	26.0%
Other ¹		
Number Uninsured	4,420,000	6,345,000
As a Percent of All Uninsured	6.1%	7.4%
Uninsured, by Employment Status²		
Employed (full- or part-time)		
Number Uninsured	58,264,000	66,451,000
As a Percent of All Uninsured	80.3%	78.0%
Unemployed (actively seeking work)		
Number Uninsured	3,060,000	4,882,000
As a Percent of All Uninsured	4.2%	5.7%
Not in Labor Force		
Number Uninsured	11,209,000	13,883,000
As a Percent of All Uninsured	15.5%	16.3%

¹ Other includes those who identify themselves as American Indian, Aleut or Eskimo, Asian or Pacific Islander, or as a member of more than one group (e.g., white-black, white-Asian, black-Asian).

² Employment status reflects status at end of period. For adults (ages 18 to 64), employment status reflects the individual's employment status. For children (under age 18), if one parent was employed, the child was counted as "employed" or as a member of an employed family.

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

Why Insurance Matters

Previous reports by Families USA and others have highlighted the extensive research documenting the negative health impact of going without health insurance, even for a short period of time.³¹ There is no question that uninsured Americans are sicker and die earlier because they lack coverage.

- Every year, the deaths of 18,000 people between the ages of 25 and 64 can be attributed to a lack of health insurance. This makes uninsurance the sixth leading cause of death, ahead of HIV/AIDS and diabetes.³²
- Uninsured adults are 25 percent more likely to die prematurely than adults with private health insurance coverage.³³
- Uninsured Americans are up to four times less likely to have a regular source of care than the insured. Uninsured children are nearly eight times less likely to have a regular source of care than insured children.³⁴
- Long-term uninsured adults are three to four times more likely than insured adults to go without preventive services, such as screening for hypertension or breast cancer.³⁵
- Uninsured adults are more likely than insured adults to put off or delay seeking medical care (39 percent versus 10 percent).³⁶
- Nearly 70 percent of uninsured adults in poor health, and nearly 50 percent of uninsured adults in fair health, report that they were unable to see a physician in the past year when they needed to because of the high cost of care.³⁷

The financial impact of going without health insurance is also significant, but it is harder to measure because uninsured people often avoid seeking care and therefore never incur medical bills or debt. When they do, the uninsured are often charged more for health services than people with insurance.³⁸

- When the uninsured can no longer avoid seeking care, they borrow money to pay costs up front, work more than one job, charge credit cards for large health care bills that will take years to repay, or eventually file for bankruptcy.³⁹
- Nearly 40 percent of uninsured adults report problems paying medical bills, and 40 percent report that they would have to cut back on necessary items such as food, rent, and utility bills to buy health insurance.⁴⁰

ENDNOTES

- ¹ Bradley C. Strunk and Paul B. Ginsburg, "Tracking Health Care Costs: Trends Turn Downward in 2003," *Health Affairs Web Exclusive*, W4-354 - W4-362, June 9, 2004, downloaded on July 9, 2004 from www.healthaffairs.org. The rate of increase in drug spending slowed in 2003 primarily because insurance plans have developed new incentives to encourage reliance on generic drugs. For example, insurance plans now widely use multi-tiered drug copayments that charge people more if they use an expensive brand-name drug rather than an alternative generic drug. In some cases, insurance plans do not cover brand-name drugs at all. The growth rate of prescription drug spending in 2003, therefore, was pulled down by the greater mix of generic to brand-name drugs in the total basket of prescription drugs sold to privately insured people, not by an across-the-board slowing of prescription drug price increases.
- ² Jack Hadley and John Holahan, "How Much Medical Care Do the Uninsured Use and Who Pays for It?" *Health Affairs Web Exclusive* (1): W66-W81, 2003, cited in Institute of Medicine, *Insuring America's Health: Principles and Recommendations* (Washington: The National Academies Press, 2004) .
- ³ Kenneth E. Thorpe and Kelly Howell, *Financing Health Care for the Uninsured in Georgia: How Much are Georgia Residents Already Paying?* (Atlanta: Emory University, 2003). In addition, a team of economists and health policy analysts working for Representative Dick Gephardt's 2004 presidential bid analyzed his plan to extend health insurance coverage to 97 percent of the uninsured and estimated that this reduction in uninsured would lower health premium costs nationally by 5 to 7 percent (see Summary of the Gephardt Health Plans online at <http://www.dickgephardt2004.com/issues/healthcare6.html>).
- ⁴ Correspondence with Adam Thompson, Legislative and Constituent Liaison, Governor's Office of Health Policy and Finance, Augusta, Maine, August 8, 2004, on file at Families USA. The Governor's office states, "It is safe to say that bad debt and charity care costs are almost 20% of total premiums paid in the state each year (based on 2002 numbers). We know that providers recover bad debt and charity care costs by raising their rates, which translates into higher premiums for payers—these uncompensated costs are shifted to those who can pay. Therefore, reducing bad debt and charity care could have a significant effect on premium rates."
- ⁵ Jon Gabel, Gary Claxton, Erin Holve, Jeremy Pickreign, Heidi Whitmore, Kelley Dhont, Samantha Hawkins, and Diane Rowland, "Health Benefits in 2003: Premiums Reach Thirteen-Year High as Employers Adopt New Forms of Cost-Sharing," *Health Affairs* 22 (September/October 2003): 117-126; Ashley C. Short and Cara S. Lesser, *Cutting Back But Not Cutting Out*, Issue Brief No. 56 (Washington: Center for Studying Health System Change, October 2002); Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2003 Annual Survey* (Menlo Park, California: The Henry J. Kaiser Family Foundation, September 2003); Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2002 Annual Survey* (Menlo Park, California: The Henry J. Kaiser Family Foundation, September 2002).
- ⁶ Lydia E. Regopoulos and Sally Trude, *Employers Shift Rising Health Care Costs to Workers: No Long-Term Solution in Sight* (Washington: Center for Studying Health System Change, May 2004); Washington Business Group on Health and Watson Wyatt Worldwide, *Creating a Sustainable Health Care Program: Eighth Annual Washington Business Group on Health/Watson Wyatt Survey Report 2004, Executive Summary*, downloaded on July 14, 2004 from www.watsonwyatt.com; Watson Wyatt Worldwide, *Health Care Costs 2002 – Watson Wyatt Worldwide Survey Results, Health Plan Cost Trends and Employers Passing on More Cost Increases*, downloaded on July 14, 2004 from www.watsonwyatt.com; Bradley C. Strunk and Paul B. Ginsburg, op. cit.; Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2002 Annual Survey*, op. cit.; Kaiser Family Foundation and Health Research and Educational Trust, *Employer Health Benefits: 2002 Annual Survey*, op. cit.; Vanessa Fuhrmans, "Shifting Burden Helps Employers Cut Health Costs," *The Wall Street Journal*, December 8, 2003, reporting on a survey of 3,000 employers by Mercer Human Resource Consulting that asked employers about decisions made in 2003 and expected behavior in 2004.
- ⁷ Sara R. Collins, Cathy Schoen, Michelle M. Doty, and Alyssa L. Holmgren, *Job-Based Health Insurance in the Balance: Employer Views of Coverage in the Workplace* (New York: The Commonwealth Fund, March 2004).
- ⁸ Edmund L. Andrews, "How Does It Feel in the Middle?" *The New York Times*, August 1, 2004, citing a paper to be published by the Economic Policy Institute as well as Dr. David Autor, associate professor of economics at Massachusetts Institute of Technology.
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plans, and 74 percent of employers have/will change their plan design and cost-sharing features—copayments and deductibles—to update their level of employee cost-sharing and “increase point-of-care accountability.” See also Bradley C. Strunk and Paul B. Ginsburg, *op. cit.*; Jon Gabel, Gary Claxton, Erin Holve, Jeremy Pickreign, Heidi Whitmore, Kelley Dhont, Samantha Hawkins, and Diane Rowland, *op. cit.*

¹⁰ Sally Trude, *op. cit.*; Mark Merlis, *Family Out-of-Pocket Spending for Health Services: A Continuing Source of Financial Insecurity* (New York: The Commonwealth Fund, June 2002); Claudia L. Schur, Michelle M. Doty, and Marc L. Berk, *Lack of Prescription Drug Coverage Among the Under 65: A Symptom of Underinsurance* (New York: The Commonwealth Fund, February 2004).

¹¹ Jessica H. May and Peter J. Cunningham, *Tough Trade-Offs: Medical Bills, Family Finances and Access to Care* (Washington: Center for Studying Health System Change, June 2004).

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¹⁵ Letter to Mr. Greg Crist, Committee on Ways and Means, U.S. House of Representatives, from John F. Sheils, Vice President, The Lewin Group, Inc., October 7, 1999, on file at Families USA.

¹⁶ See citations for employer surveys at footnote 9 above. See also Employee Benefit Research Institute, *Small Employers and Health Benefits: Findings from the 2002 Small Employer Health Benefits Survey* (Washington: EBRI, January 2003); Ashley C. Short and Cara S. Lesser, *Cutting Back But Not Cutting Out: Small Employers Respond to Premium Increases*, Issue Brief 56 (Washington: Center for Studying Health System Change, October 2002).

¹⁷ Sara R. Collins, Cathy Schoen, Michelle M. Doty, and Alyssa L. Holmgren, *op. cit.*; Sally Trude, *op. cit.*; Mark Merlis, *op. cit.*

¹⁸ Peter J. Cunningham, Elizabeth Schaefer, and Christopher Hogan, *Who Declines Employer-Sponsored Health Insurance and Is Uninsured?* (Washington, Center for Studying Health System Change, October 1999). Cunningham et al. cites findings from the 1997 RWJF Employer Health Insurance Survey on average employee premiums and take-up rates by the typical wage level of the firm. These findings show that employee contributions, even for the least expensive plan offered, tend to be higher in firms that employ primarily low-wage workers.

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²⁹ Vernon K. Smith, David M. Rousseau, and Molly O'Malley, *SCHIP Program Enrollment: December 2003 Update* (Washington: Kaiser Commission on Medicaid and the Uninsured, July 2004).

³⁰ Ian Hill, Holly Stockdale, and Brigitte Courtot, *Squeezing SCHIP: States Use Flexibility to Respond to the Ongoing Budget Crisis* (Washington: Urban Institute, June 2004).

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³⁶ *The NewsHour with Jim Lehrer/Kaiser Family Foundation National Survey on the Uninsured, 2000*, available online at www.pbs.org/newshour/health/uninsured.

³⁷ John Z. Ayanian, Joel S. Weissman, Eric C. Schneider, Jack A. Ginsburg, and Alan M Zaslavsky, op. cit.

³⁸ Irene Wielawski, "Gouging the Medically Uninsured: A Tale of Two Bills," *Health Affairs* 19, No. 5 (September/October 2000): 180-185.

³⁹ Jack Hadley, *Sicker and Poorer*, op. cit.; Cheryl Fish-Parcham, *Getting Less Care: The Uninsured with Chronic Health Conditions* (Washington: Families USA, February 2001); Martha Shirk, *In Their Own Words: The Uninsured Talk about Living Without Health Insurance* (Washington: Henry J. Kaiser Family Foundation, 2000).

⁴⁰ *The NewsHour with Jim Lehrer/Kaiser Family Foundation National Survey on the Uninsured, 2000*, op. cit. See also Jessica H. May and Peter J. Cunningham, op. cit.; Sara R. Collins, op. cit.

APPENDIX TABLES

Appendix Table A

Growth in Worker Share of Premiums, by State, 2000 to 2004

State	2000		2004		Percentage Increase in Average Worker Share, 2000 to 2004
	Average Premium	Average Worker Share	Average Premium	Average Worker Share	
Alabama	\$5,023	\$1,318	\$6,648	\$1,800	36.5%
Alaska	\$5,470	\$940	\$7,274	\$1,473	56.7%
Arizona	\$4,261	\$949	\$6,104	\$1,368	44.2%
Arkansas	\$4,268	\$975	\$5,983	\$1,357	39.1%
California	\$4,709	\$968	\$5,703	\$1,118	15.6%
Colorado	\$4,433	\$885	\$6,220	\$1,281	44.7%
Connecticut	\$5,983	\$1,006	\$7,624	\$1,568	55.8%
Delaware	\$4,621	\$850	\$6,449	\$1,261	48.3%
District of Columbia	\$5,126	\$920	\$6,778	\$1,394	51.5%
Florida	\$4,800	\$1,231	\$6,431	\$1,661	35.0%
Georgia	\$4,534	\$1,041	\$6,255	\$1,453	39.6%
Hawaii	\$4,191	\$774	\$5,479	\$941	21.6%
Idaho	\$3,652	\$966	\$5,538	\$1,321	36.7%
Illinois	\$4,993	\$895	\$6,350	\$1,208	34.9%
Indiana	\$5,056	\$901	\$6,502	\$1,261	39.9%
Iowa	\$4,496	\$1,060	\$6,296	\$1,492	40.7%
Kansas	\$4,636	\$923	\$6,385	\$1,336	44.7%
Kentucky	\$4,156	\$997	\$6,038	\$1,419	42.3%
Louisiana	\$4,852	\$1,250	\$6,123	\$1,541	23.2%
Maine	\$4,517	\$1,105	\$6,666	\$1,701	53.9%
Maryland	\$5,043	\$1,179	\$6,665	\$1,611	36.6%
Massachusetts	\$5,576	\$1,065	\$7,251	\$1,595	49.8%
Michigan	\$4,776	\$729	\$6,291	\$1,036	42.1%
Minnesota	\$4,513	\$907	\$6,476	\$1,360	50.0%
Mississippi	\$3,924	\$853	\$5,938	\$1,281	50.3%
Missouri	\$4,275	\$1,062	\$5,725	\$1,311	23.4%
Montana	\$4,387	\$1,021	\$6,231	\$1,471	44.0%
Nebraska	\$4,490	\$1,045	\$6,331	\$1,495	43.0%
Nevada	\$3,574	\$712	\$5,541	\$1,042	46.4%
New Hampshire	\$4,544	\$1,058	\$6,523	\$1,540	45.6%
New Jersey	\$5,324	\$922	\$6,822	\$1,318	42.9%
New Mexico	\$4,298	\$1,001	\$6,186	\$1,461	46.0%
New York	\$5,191	\$841	\$6,556	\$1,175	39.7%
North Carolina	\$3,842	\$1,142	\$5,797	\$1,566	37.1%
North Dakota	\$4,666	\$1,086	\$6,233	\$1,472	35.5%
Ohio	\$5,087	\$917	\$6,388	\$1,230	34.1%
Oklahoma	\$4,035	\$913	\$5,610	\$1,194	30.8%
Oregon	\$4,137	\$916	\$5,737	\$1,208	31.9%
Pennsylvania	\$4,929	\$858	\$6,104	\$1,094	27.4%
Rhode Island	\$4,981	\$954	\$6,626	\$1,369	43.4%
South Carolina	\$4,263	\$776	\$6,253	\$1,199	54.5%
South Dakota	\$4,265	\$993	\$6,305	\$1,489	49.9%
Tennessee	\$4,225	\$921	\$5,780	\$1,207	31.1%
Texas	\$4,199	\$967	\$5,944	\$1,339	38.5%
Utah	\$4,708	\$844	\$6,813	\$1,404	66.3%
Vermont	\$4,868	\$964	\$6,904	\$1,516	57.2%
Virginia	\$4,584	\$1,120	\$6,213	\$1,487	32.8%
Washington	\$4,140	\$874	\$5,463	\$1,053	20.4%
West Virginia	\$4,549	\$1,059	\$6,212	\$1,467	38.5%
Wisconsin	\$4,723	\$813	\$6,490	\$1,215	49.3%
Wyoming	\$4,323	\$1,006	\$6,311	\$1,490	48.1%
U.S. Average	\$4,703	\$959	\$6,236	\$1,303	35.9%

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

Appendix Table B

Growth in Worker Earnings, by State, 2000 to 2004

State	Average Earnings		Percentage Change In Average Earnings, 2000 to 2004
	2000	2004	
Alabama	\$28,721	\$31,984	11.4%
Alaska	\$37,965	\$41,427	9.1%
Arizona	\$30,883	\$34,271	11.0%
Arkansas	\$25,984	\$29,126	12.1%
California	\$36,303	\$41,488	14.3%
Colorado	\$34,687	\$39,273	13.2%
Connecticut	\$38,351	\$43,867	14.4%
Delaware	\$34,722	\$38,303	10.3%
District of Columbia	\$46,808	\$55,168	17.9%
Florida	\$29,864	\$33,219	11.2%
Georgia	\$31,508	\$35,608	13.0%
Hawaii	\$32,040	\$36,404	13.6%
Idaho	\$29,425	\$32,209	9.5%
Illinois	\$33,724	\$38,119	13.0%
Indiana	\$30,183	\$33,760	11.9%
Iowa	\$28,556	\$31,596	10.6%
Kansas	\$29,896	\$33,648	12.5%
Kentucky	\$28,936	\$32,168	11.2%
Louisiana	\$27,791	\$31,045	11.7%
Maine	\$29,371	\$33,046	12.5%
Maryland	\$35,222	\$40,488	15.0%
Massachusetts	\$38,332	\$43,724	14.1%
Michigan	\$35,355	\$38,906	10.0%
Minnesota	\$34,092	\$38,936	14.2%
Mississippi	\$25,485	\$27,880	9.4%
Missouri	\$30,757	\$34,475	12.1%
Montana	\$26,447	\$29,585	11.9%
Nebraska	\$28,488	\$32,341	13.5%
Nevada	\$30,133	\$34,465	14.4%
New Hampshire	\$31,834	\$36,496	14.6%
New Jersey	\$38,157	\$41,876	9.7%
New Mexico	\$29,169	\$32,423	11.2%
New York	\$38,138	\$43,152	13.1%
North Carolina	\$30,197	\$33,965	12.5%
North Dakota	\$26,590	\$29,993	12.8%
Ohio	\$31,729	\$35,598	12.2%
Oklahoma	\$27,707	\$30,943	11.7%
Oregon	\$32,612	\$36,292	11.3%
Pennsylvania	\$32,159	\$35,792	11.3%
Rhode Island	\$32,810	\$37,895	15.5%
South Carolina	\$28,420	\$31,810	11.9%
South Dakota	\$25,814	\$28,197	9.2%
Tennessee	\$29,069	\$32,576	12.1%
Texas	\$31,446	\$34,975	11.2%
Utah	\$29,767	\$33,709	13.2%
Vermont	\$29,777	\$34,199	14.9%
Virginia	\$33,250	\$37,701	13.4%
Washington	\$36,493	\$40,427	10.8%
West Virginia	\$26,875	\$30,157	12.2%
Wisconsin	\$30,911	\$34,689	12.2%
Wyoming	\$27,831	\$31,841	14.4%
U.S. Average	\$32,784	\$36,852	12.4%

Source: Estimates prepared by The Lewin Group for Families USA (see Technical Appendix for details).

**TECHNICAL APPENDIX:
DATA AND METHODS**

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EXECUTIVE SUMMARY

The Lewin Group produced national and state-level estimates of trends for the following indicators of health care coverage and costs for non-elderly Americans between 2000 and 2004:

- **Insurance coverage**—number of individuals lacking insurance for at least one month over a two-year period;
- **Burden of health care spending**—number of people with catastrophic levels of health spending relative to their income in a given year; and
- **Cost of employer-based coverage**—average employer and employee spending for health care.

The approach used for each set of estimates is described separately below.

■ Insurance Coverage

Estimates were produced for the number of individuals under age 65 with a gap in health insurance coverage of at least one month over the two-year period. To make the comparison between 2000 and 2004, estimates were produced for the two-year period 1999-2000, and projections were made for the two-year period 2003-2004. Several data sources were statistically combined to produce these estimates. National estimates were based primarily on the Survey of Income and Program Participation (SIPP), which was chosen for its large sample size and its longitudinal tracking of monthly health insurance status. The 1996 and 2001 SIPP panels provide direct national estimates of two-year insurance coverage for the periods 1998-1999 and 2001-2002, respectively. These were conservatively trended forward to 1999-2000 and 2003-2004, respectively, to reflect population growth.¹

State-level data on monthly insurance status over two years do not exist. State-level estimates were therefore derived by applying a set of regression equations derived from the national SIPP data to state-level data from the Current Population Survey (CPS) Annual Demographic Supplement. The CPS provides the most recent data on employment, income, annual health insurance coverage, and population characteristics, and it supports state-level estimates.

The logistic regression models predicted whether an individual would not have health insurance for at least one month and for at least six months over a 24-month period, given his or her annual insurance status and other characteristics from the CPS. The 1998-1999 data from the 1996 SIPP panel were used to create the equations for the 1999-2000 estimates, and 2001-2002 data from the 2001 SIPP panel were used to create the equations for the 2003-2004 estimates.

Separate sets of equations were estimated for children and non-elderly adults. For the children's equations, state-level variables were added to reflect state-by-state differences in Medicaid coverage for children. For the adults' equations, state-level variables were added to reflect state-by-state differences in unemployment.

The state-level estimates that resulted from applying the national SIPP equations to the state-level CPS data were scaled to be consistent with the direct national estimates from the SIPP, once the SIPP estimates were trended forward to reflect population trends. The SIPP was judged to be a more reliable source for national uninsuredness trends than the sum of *modeled* state-level estimates, because it provides *direct* measures of monthly uninsuredness from before and after the economic downturn of 2001.

These estimates should not be directly compared to previous estimates of uninsuredness produced by The Lewin Group for Families USA. The most recent set of estimates The Lewin Group produced prior to these were published in June 2004. Since the completion of that analysis, the Census Bureau released additional file weights that allowed for more precise estimates of insuredness over a two-year period. Reanalysis using the new weights suggests that Lewin's previous uninsuredness estimates, which were for 2002-2003, were conservative. Similarly, Lewin estimates for 2001-2002, published in March 2003, were produced prior to the release of the 2001 SIPP panel and were therefore based on data collected prior to the unemployment increases of 2001 and 2002. These estimates also proved to be conservative compared to reanalysis based directly on 2001-2002 data.

In contrast, the approach described in this report was designed to produce estimates that allow for direct comparison of estimates for two different time periods. This is achieved principally by relying on changes over time that were directly observed in the same survey data sources.

■ Burden of Health Care Spending

National and state-level estimates were produced for the number of individuals in 2000 and 2004 whose health care expenses exceeded 25 percent of their income—a potentially catastrophic level of health spending. Health expenses include direct spending and, for those with coverage, spending on health insurance premiums. Spending as a percent of income was calculated at the family level and then assigned to each member of the family.

These estimates were developed using The Lewin Group's Health Benefits Simulation Model (HBSM). HBSM is a micro-simulation model of the U. S. health care system. The model is based upon the Medical Expenditure Panel Survey (MEPS) data for 1996, updated to reflect detailed spending level data reported in the 2000 MEPS.

HBSM trends spending forward to 2004 are based upon health spending projections developed by the Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS). These data provide estimates of the levels of health spending by source of payment, including out-of-pocket expenditures and premium payments for several years, including 2000 through 2004. Other sources were used to estimate the level of charity care, including published hospital data. In addition, we used CMS projections of population and income growth in developing our estimates.

Because the MEPS data are not designed to be disaggregated by state of residence, the HBSM was enhanced with additional data on the demographic and income composition of the population in each state and CMS data on health spending by state. This was done by “re-weighting” the MEPS results based upon the distribution of people by demographic characteristic, source of insurance, and income level in each state as reported in the Current Population Survey (CPS) data released in 2003 for the year 2002. Health spending levels were also adjusted to reflect CMS data on differences in health spending levels by state. The re-weighted estimates of health spending burden by state reflect differences in the economic and demographic characteristics of each state’s population and insurance coverage levels and in health spending levels across states.

■ Cost of Employer-Based Coverage

A set of national and state-level estimates were produced that highlight the change in the cost of employer-based coverage from 2000 to 2004. Estimates include the average total premium for employer-based coverage, the average share of the employer premium paid by the employee, and average total out-of-pocket spending by individuals with employer health coverage, including premiums and cost-sharing. Like the estimates of health spending burden, these estimates were generated from the HBSM. Trends in employer premiums and cost-sharing reflect growth estimates and assumptions developed by CMS. These estimates are generally more conservative than estimates from other sources.

Introduction

The Lewin Group produced national and state-level estimates of trends in the following indicators of health care coverage and costs for non-elderly Americans between 2000 and 2004:

- **Insurance coverage**—number of individuals lacking insurance for at least one month over a two-year period;
- **Burden of health care spending**—number of people with catastrophic levels of health spending relative to their income in a given year; and
- **Cost of employer-based coverage**—average employer and employee spending for health care.

The approach used for each set of estimates is described separately below.

Insurance Coverage

There are several methods for estimating the number of uninsured people. A point-in-time estimate reports the number of people who are without health insurance at one point in time (e.g., on a given day or in a given month). Alternatively, an estimate over a period of time reports the number of people who are without health insurance at any time during the period (e.g., during the last year).

For this analysis, estimates of the uninsured over a period of time were used for several reasons. First, because many of the uninsured are without insurance for a short period of time, a point-in-time estimate understates the population at risk of being without health insurance. Second, estimates of the number of individuals uninsured over a period of time provide a more accurate representation of all of the people who lose their insurance. This is because a point-in-time estimate will contain a disproportionate share of people who were uninsured for a long period of time, and these individuals often have a different mix of characteristics than those uninsured for a shorter period of time.

The Lewin Group developed national and state-level estimates of the number of individuals who did not have health insurance at any point over a two-year period and those without insurance for six months or more over a two-year period. To make the comparison between 2000 and 2004, estimates were produced for the two-year period 1999-2000, and projections were made for the two-year period 2003-2004. Separate estimates were produced for children (younger than 18) and non-elderly adults (ages 18 to 64). Detailed estimates were also produced showing the number and proportion of individuals with one or more months of uninsuredness by selected characteristics.

The principal data sources used for this analysis are the Survey of Income and Program Participation (SIPP) and the Current Population Survey (CPS) Annual Demographic Supplement. Both surveys are nationally representative and contain basic demographic and economic characteristics of the non-institutionalized population. The SIPP provides information at the national level about monthly insurance coverage over a 24-month period

but does not support state-level estimates. The CPS provides state-level information about annual insurance coverage but does not contain monthly coverage information. Thus, state-level estimates of insurance coverage over two years had to be modeled by statistically combining the SIPP and CPS data.

A. National Estimates

The 1996 and 2001 SIPP panels provide direct national estimates of two-year insurance coverage for the periods 1998-1999 and 2001-2002, respectively. CPS data indicate that the national rate of insurance coverage grew from 1998 to 2000 and then dropped in 2001 and 2002 as a result of decreased employment and increased health insurance costs.² Thus, the SIPP provides a direct measure of the monthly dynamics of health insurance coverage both before and during the economic downturn and corresponding decreases in health coverage. This analysis takes advantage of the richness of the SIPP information by relying heavily on the direct SIPP estimates for national uninsuredness estimates, rather than relying too heavily on model assumptions at the national level. The estimates for 1998-1999 and 2001-2002 were trended forward by age-specific population growth to produce conservative estimates of uninsuredness for the periods 1999-2000 and 2003-2004, respectively. (See the Caveats and Limitations section on page 50 for a discussion of the implications of this approach for the national estimates.)

B. State-Level Estimates

CPS data were used to adjust the national uninsuredness information from SIPP to the state level. The CPS asks whether an individual was covered at any time over the prior year by each of the following: Medicare, Medicaid, private health insurance, or a military health plan.³ Combining the questions allows one to count individuals who, in theory, were not covered by any type of insurance during the year. The resulting estimate, which should be a period-of-time estimate, actually appears to be more comparable to a point-in-time estimate generated from the SIPP than to an all-year estimate (Technical Appendix Table 1).

Some researchers have hypothesized that the CPS may be closer to a point-in-time estimate because individuals interviewed may be reporting their current health insurance status rather than their coverage over the past year (Nelson and Short, 1990 and Swartz, 1994). However, Robert Bennefield of the Census Bureau argued that the CPS primarily appears to underreport insurance coverage in general, resulting in higher than expected reporting of the percent uninsured (Bennefield, 1996). However, a verification question added to the CPS beginning in 2001 only modestly reduced the CPS uninsured estimate (e.g., from 17.4% to 16.1% in the March 2002 CPS). Given that the point-in-time prevalence of uninsuredness from the SIPP was much closer to the CPS prevalence rate than the uninsured-all-year estimate from the SIPP, the CPS data were treated as point-in-time estimates in order to generate estimates of insurance coverage over a period of time.

Technical Appendix Table 1

1999 Estimates of the Prevalence of Uninsuredness among Persons under Age 65

Data Source	Percent Uninsured All Year	Percent Uninsured at Any Time during the Year	Percent Uninsured at a Point in Time
Current Population Survey	15.9%	n/a	n/a
Survey of Income and Program Participation	8.5% ^a	25.4% ^a	16.6% ^b
Medical Expenditure Panel Survey	12.2%	25.0%	17.3%

^a Calculated using longitudinal weight for year 1999.

^b Calculated using monthly weight for month 24, roughly representing the end of 1999.

Note: The Medical Expenditure Panel Survey (MEPS) asks about health insurance status in each quarter over a one-year period.

SIPP Equations

In order to use the state-level information available from the CPS to generate estimates of the lack of health insurance for one or more months among those with health insurance at a point in time, logistic regression equations were estimated describing the relationship between an individual's characteristics at a point in time and his or her health insurance status over the course of two years. Technical Appendix Table 2 presents selected characteristics of the population insured at a point in time from the SIPP and CPS files used in the analysis.

The two-year SIPP analysis files—both for 1998-1999 and 2001-2002—necessarily were restricted to individuals who had data for a full two-year period. Survey drop-outs and additions over the period tend to distort the sample, and two-year weights specific to the two-year analysis periods (which would adjust for these missing respondents) were not available from the Census Bureau at the time of analysis. This posed a potential problem because lack of insurance may be more common among survey dropouts, whose lives may be more transient and subject to dislocation, as demonstrated by their lack of continued participation in the survey.

This problem was further complicated by the lack of analogous sets of file weights for the 1998-1999 SIPP sample and the 2001-2002 SIPP sample, the result of a change in the way the Census Bureau provided the weights on the public use files. In both cases, file weights specifically designed for a two-year sample were not available. However, annual weights for 2001 and 2002 existed for the 2001-2002 sample, but only the longitudinal panel weight was available for the 1998-1999 sample. To provide maximum consistency across the two periods, each set of weights was adjusted twice. The first adjustment reweighted the file “internally” so that the joint distribution by age, sex, race, and income as a percent of poverty matched the joint distribution ob-

served in the cross-sectional SIPP sample representing the end of the two-year period.⁴ Adjusting the weights this way mitigated the bias in health insurance coverage caused by survey dropouts because health insurance coverage is also correlated with the factors used to adjust the weights. Moreover, the regression equations included these same factors and therefore controlled for them. Results from the logistic regression equations were very similar with and without the weights, suggesting that the bias produced by survey dropouts was minimal.⁵ The second adjustment further modified the weights to be consistent with broad population totals by age group (under 18, 18-64) derived from the CPS, roughly representing the population at the end of each two-year period.⁶

Technical Appendix Table 2

Comparison of SIPP and CPS Data Used in Model Characteristics of People under 65 without Health Insurance at a Point in Time

	SIPP 2001-2002 ^a	CPS March 2003 ^b
Age		
Less than 6	7.9%	6.0%
6 to 17	17.1%	13.7%
18 to 34	38.4%	41.3%
35 to 64	36.5%	38.9%
Family Income as Percent of Federal Poverty Threshold		
<100%	29.4%	26.3%
100-199%	31.3%	28.7%
200-299%	18.3%	18.4%
300-399%	9.3%	10.1%
400%+	11.5%	16.3%
Race		
White, non-Hispanic	49.6%	47.7%
Black, non-Hispanic	15.2%	15.7%
Hispanic	29.2%	29.2%
Other	5.8%	7.2%

^a Based on 2001-2002 SIPP sample, weighted using monthly weight for month 24.

^b Model assumes that estimate of lack of insurance from March 2003 CPS represents a point-in-time measure for March 2003.

The 1998-1999 data from the 1996 SIPP panel were used to create the equations for the 1999-2000 estimates, and 2001-2002 data from the 2001 SIPP panel were used to create the equations for the 2003-2004 estimates. The analysis assumes that the March CPS represents a point-in-time insurance estimate, providing a proxy for insurance status at the end of the previous calendar year. Thus, for example, using March 2003 as a proxy for the end of calendar year 2002, it is already

assumed that all individuals reporting a lack of coverage in the March 2003 CPS are uninsured for at least one month over the two-year reference period. Thus, these individuals are excluded from the 1+ month equations and leave the equation to predict which of those who have coverage at the end of 2003 lack coverage at some other point during the previous two years. In contrast, all records are used for the 6+ month equations, and lack of insurance at the end of the year is used to predict lack of insurance for 6+ months.

For each analysis period (1999-2000 and 2003-2004), four separate equations were estimated from the SIPP, for a total of eight equations, to predict the following outcomes:

- Children uninsured 1+ months over two years;
- Children uninsured 6+ months over two years;
- Adults uninsured 1+ months over two years; and
- Adults uninsured 6+ months over two years.

Separate equations were estimated for children and adults because children's insurance coverage has been driven in recent years by changes in State Children's Health Insurance Program (SCHIP) enrollment. The application of these equations to the CPS serves two functions. First, it provides state-level, over-time estimates of uninsuredness from the (assumed) point-in-time information available from the CPS at the state level. Second, by incorporating key state-level trend variables that influence insurance coverage (i.e., unemployment and SCHIP enrollment), it serves to trend the state-level estimates forward consistent with observed and expected trends through the end of the desired analysis periods (i.e., 1999-2000 and 2003-2004).

Technical Appendix Table 3 summarizes the samples and variables used for each equation. The equations use a combination of variables representing characteristics of individuals, their parents (for children), and their state. The following variables represent the characteristics of the individual in all equations:

- **Age** (0-5, 6-16, 17, 18-20, 21-24, 25-34, 35-60, 61-64)—Age groups were chosen to correspond with likely differences in availability of insurance by age. For example, Medicaid eligibility in some states is more restrictive for children ages 6-16 than for children ages 0-5 and more restrictive still for children above 16.
- **Family income as a percent of the Federal Poverty Threshold** (<100%, 100-199%, 200%+)—Family income is the same for all members of a family. The poverty level used is the Federal Poverty Threshold, which is the measure typically used for statistical reporting of poverty rates.
- **Race/ethnicity** (white, non-Hispanic; black, non-Hispanic; Hispanic; other)
- **Sex**

Technical Appendix Table 3

Samples and Variables Used for Logistic Regression Equations from SIPP Predicting Lack of Insurance over 24 Months

	Children		Adults	
	Uninsured 1+ Months	Uninsured 6+ Months	Uninsured 1+ Months	Uninsured 6+ Months
Sample	Sample: Children (age <18) with health insurance in month 24	Sample: Children (age <18) with health insurance	Sample: Adults (age 18-64) in month 24	Sample: Adults (age 18-64)
Dependent Variable	Uninsured any time over 2 years	Uninsured for 6+ months over 2 years	Uninsured any time over 2 years	Uninsured for 6+ months over 2 years
Independent Variables:				
Age	0-5 6-16 17	0-5 6-16 17	18-20 21-24 25-34 35-60 61-64	18-20 21-24 25-34 35-60 61-64
Family Income (as % of Federal Poverty Threshold)	<100% 100-199% 200%+	<100% 100-199% 200%+	<100% 100-199% 200%+	<100% 100-199% 200%+
Race/Ethnicity	White, non-Hispanic Black, non-Hispanic Hispanic Other	White, non-Hispanic Black, non-Hispanic Hispanic Other	White, non-Hispanic Black, non-Hispanic Hispanic Other	White, non-Hispanic Black, non-Hispanic Hispanic Other
Sex	<Not Used>	<Not Used>	<Not Used>	Male
Education	Parent has less than high school diploma Parent is a high school graduate Parent is a college graduate (Note: Child assigned education of the more highly educated parent or education of employed parent if only one parent employed)	Parent has less than high school diploma Parent is a high school graduate Parent is a college graduate (Note: Child assigned education of the more highly educated parent or education of employed parent if only one parent employed)	Individual has less than high school diploma Individual has high school diploma Individual has college degree or higher	Individual has less than high school diploma Individual has high school diploma Individual has college degree or higher
Marital Status	<Not Used>	<Not Used>	Married Other	Married Other
Employment Status	Employed @ month 24 Unemployed @ month 24 Not in labor force	<Not Used>	<Not Used>	Employed @ month 24 Unemployed @ month 24 Not in labor force
Health Coverage Status for Month 24	<Not Used>	Uninsured for month 24	<Not Used>	Uninsured for month 24
Children's Medicaid Enrollment in State	Ratio of annual children's Medicaid enrollment to number of children in state < 200% of Federal Poverty Threshold	Ratio of annual children's Medicaid enrollment to number of children in state < 200% of Federal Poverty Threshold	<Not Used>	<Not Used>
State Unemploy- ment Rate	<Not Used>	<Not Used>	Average state unemploy- ment rate during two-year analysis period	<Not Used>
Change in state unemployment	<Not Used>	Change in state-level unemployment rate over two-year analysis period	Change in state-level unemployment rate over two-year analysis period	<Not Used>

- **Education** (less than high school diploma, high school diploma [including some college], college degree or higher)—For children, if both parents have the same employment status, education represents the education of the most educated parent.
- **Employment status** (employed, unemployed, not in labor force)—Indicates employment status of the individual at the end of the two-year period. For children, represents the employment status of the “more employed” parent.
- **Health coverage at end of two-year period** (yes, no)—Used only for equations predicting lack of insurance for 6+ months.

The following state-level variables were added to the SIPP to capture characteristics of an individual’s state that could affect his/her likelihood of having insurance:

- **Children’s Medicaid coverage** (continuous variable)—This variable is important because changes in Medicaid coverage for children from 1998 through 2003 varied considerably by state as SCHIP coverage expanded at different rates in each state, subsequently contracting in some states (Technical Appendix Table 4). The variable is a children’s Medicaid enrollment index, defined as the ratio of the number of children in the state enrolled in Medicaid annually to the number of children in the state with family income below 200 percent of the Federal Poverty Threshold. This measure is meant to capture states’ varying levels of progress in covering low-income children during the analysis period. Enrollment includes standard Medicaid plus State Children’s Health Insurance Programs. This measure may not, and is not meant to, resemble states’ own estimates of children’s Medicaid enrollment rates. For example, combining annual enrollment counts with point-in-time estimates from CPS tends to systematically inflate enrollment rates. This bias should have no meaningful effect on the projected estimates of states’ rankings because it is consistent across all states and between years.
- **Average state unemployment rate over two-year analysis period** (continuous variable)—Meant to capture state-by-state differences in unemployment (Technical Appendix Table 5), which is highly correlated with health insurance coverage. In addition to reflecting differences across states in the SIPP analytic file from which the equations are derived, this variable also allows the model to reflect changes in unemployment in each state over time. That is, when the SIPP equations were applied to the CPS data, revised unemployment rates were applied corresponding to the (more recent) period being modeled, as opposed to the period represented by the SIPP data (Technical Appendix Table 6).
- **Change in state unemployment rate over the two-year analysis period** (continuous variable)—Unlike the variable representing states’ level of unemployment, this variable captures changes within the state that could lead to dislocation and possible loss of private health insurance benefits (Technical Appendix Tables 5 and 6).

Technical Appendix Table 4

Ratio of Annual Children's Medicaid Enrollment to Number of Children (under 18) with Family Incomes below 200 Percent of the Federal Poverty Threshold

State	1999-2000	2003	State	1999-2000	2003
Alabama	0.657	0.809	Montana	0.445	0.551
Alaska	1.041	1.133	Nebraska	0.927	1.162
Arizona	0.568	0.783	Nevada	0.357	0.430
Arkansas	0.850	0.843	New Hampshire	0.704	1.017
California	0.772	0.921	New Jersey	0.881	0.888
Colorado	0.596	0.661	New Mexico	0.767	1.046
Connecticut	0.898	0.900	New York	0.682	0.730
Delaware	0.742	1.078	North Carolina	0.847	0.869
District of Columbia	1.412	1.230	North Dakota	0.453	0.580
Florida	0.736	0.886	Ohio	0.646	0.923
Georgia	0.712	0.953	Oklahoma	1.087	1.134
Hawaii	0.729	0.749	Oregon	0.688	0.759
Idaho	0.593	0.684	Pennsylvania	0.767	0.815
Illinois	0.859	0.861	Rhode Island	1.066	1.268
Indiana	0.852	0.907	South Carolina	1.037	1.176
Iowa	0.703	0.757	South Dakota	0.976	0.928
Kansas	0.598	0.777	Tennessee	1.167	1.122
Kentucky	1.045	1.012	Texas	0.615	0.626
Louisiana	0.764	0.970	Utah	0.471	0.492
Maine	0.878	0.897	Vermont	1.040	1.629
Maryland	1.369	1.217	Virginia	0.766	0.661
Massachusetts	0.779	1.082	Washington	1.324	1.003
Michigan	0.747	0.877	West Virginia	0.929	0.910
Minnesota	0.879	0.955	Wisconsin	0.628	0.806
Mississippi	0.904	1.046	Wyoming	0.545	0.758
Missouri	1.076	1.322			

Note: Some states exceed 100 percent because 1) eligibility has been extended to children with incomes greater than 200 percent of the Federal Poverty Threshold, and 2) the numerator represents enrollment over a one-year period, while the denominator represents population at a point in time.

Source: Lewin analysis of annual enrollment data for Medicaid and SCHIP and CPS data on children by family income.

Technical Appendix Table 5

State-Level Unemployment Data Added to SIPP for Equation Specification

State	Average Unemployment Rate		Point Change in Annual State Unemployment Rate	
	1998-1999	2001-2002	1998-1999	2001-2002
Alabama	4.50	5.60	0.60	0.60
Alaska	6.10	7.05	0.60	1.30
Arizona	4.25	5.45	0.30	1.50
Arkansas	5.00	5.20	-1.00	0.40
California	5.55	6.05	-0.70	1.30
Colorado	3.35	4.70	-0.90	2.00
Connecticut	3.30	3.80	-0.20	1.00
Delaware	3.65	3.80	-0.30	0.80
District of Columbia	7.55	6.40	-2.50	0.00
Florida	4.10	5.15	-0.40	0.70
Georgia	4.10	4.55	-0.20	1.10
Hawaii	5.90	4.40	-0.60	-0.40
Idaho	5.10	5.40	0.20	0.80
Illinois	4.40	5.95	-0.20	1.10
Indiana	3.05	4.75	-0.10	0.70
Iowa	2.65	3.65	-0.30	0.70
Kansas	3.40	4.70	-0.80	0.80
Kentucky	4.55	5.50	-0.10	0.20
Louisiana	5.40	6.00	-0.60	0.20
Maine	4.25	4.15	-0.30	0.50
Maryland	4.05	4.20	-1.10	0.40
Massachusetts	3.25	4.50	-0.10	1.60
Michigan	3.85	5.75	-0.10	0.90
Minnesota	2.65	4.05	0.30	0.70
Mississippi	5.25	6.15	-0.30	1.30
Missouri	3.80	5.10	-0.80	0.80
Montana	5.40	4.60	-0.40	0.00
Nebraska	2.80	3.35	0.20	0.50
Nevada	4.35	5.40	0.10	0.20
New Hampshire	2.80	4.10	-0.20	1.20
New Jersey	4.60	5.00	0.00	1.60
New Mexico	5.90	5.10	-0.60	0.60
New York	5.40	5.50	-0.40	1.20
North Carolina	3.35	6.10	-0.30	1.20
North Dakota	3.30	3.45	0.20	1.10
Ohio	4.30	4.95	0.00	1.50
Oklahoma	3.95	4.15	-1.10	0.70
Oregon	5.65	6.90	0.10	1.20
Pennsylvania	4.50	5.20	-0.20	1.00
Rhode Island	4.50	4.90	-0.80	0.40
South Carolina	4.15	5.65	0.70	0.70
South Dakota	2.90	3.25	0.00	-0.30
Tennessee	4.10	4.75	-0.20	0.70
Texas	4.70	5.55	-0.20	1.50
Utah	3.75	5.25	-0.10	1.70
Vermont	3.20	3.65	-0.40	0.10
Virginia	2.85	3.75	-0.10	0.70
Washington	4.75	6.85	-0.10	0.90
West Virginia	6.65	5.45	-0.10	1.30
Wisconsin	3.20	5.00	-0.40	1.00
Wyoming	4.85	4.05	0.10	0.30

Technical Appendix Table 6

State-Level Unemployment Data Added to CPS for Equation Application

State	Average Unemployment Rate		Point Change in Annual State Unemployment Rate	
	1999-2000	2003-2004 (est.)	1998-2000	2001-2002 - 2003-2004 (est.)
Alabama	4.50	5.84	-0.30	0.24
Alaska	6.10	7.62	0.30	0.57
Arizona	4.25	5.26	-0.40	-0.19
Arkansas	5.00	5.99	-0.10	0.79
California	5.55	6.47	-0.30	0.42
Colorado	3.35	5.61	-0.10	0.91
Connecticut	3.30	5.13	-1.00	1.33
Delaware	3.65	4.02	0.40	0.22
District of Columbia	7.55	6.91	-0.60	0.51
Florida	4.10	4.79	-0.30	-0.36
Georgia	4.10	4.21	-0.30	-0.34
Hawaii	5.90	4.18	-1.30	-0.22
Idaho	5.10	4.93	-0.30	-0.47
Illinois	4.40	6.48	0.00	0.53
Indiana	3.05	5.18	0.20	0.43
Iowa	2.65	4.38	0.10	0.73
Kansas	3.40	5.09	0.70	0.39
Kentucky	4.55	5.81	-0.40	0.31
Louisiana	5.40	6.31	0.30	0.31
Maine	4.25	5.01	-0.60	0.86
Maryland	4.05	4.28	0.30	0.08
Massachusetts	3.25	5.53	-0.60	1.03
Michigan	3.85	7.11	-0.30	1.36
Minnesota	2.65	4.85	0.50	0.80
Mississippi	5.25	5.61	0.50	-0.54
Missouri	3.80	5.23	0.00	0.13
Montana	5.40	4.56	-0.20	-0.04
Nebraska	2.80	3.84	0.10	0.49
Nevada	4.35	4.79	-0.40	-0.61
New Hampshire	2.80	4.14	0.10	0.04
New Jersey	4.60	5.57	-0.90	0.57
New Mexico	5.90	6.18	-0.60	1.08
New York	5.40	6.35	-0.60	0.85
North Carolina	3.35	6.06	0.40	-0.04
North Dakota	3.30	3.43	-0.40	-0.02
Ohio	4.30	5.97	-0.30	1.02
Oklahoma	3.95	5.44	-0.30	1.29
Oregon	5.65	7.72	-0.80	0.82
Pennsylvania	4.50	5.31	-0.30	0.11
Rhode Island	4.50	5.28	0.00	0.38
South Carolina	4.15	6.77	-0.70	1.12
South Dakota	2.90	3.42	-0.60	0.17
Tennessee	4.10	5.52	-0.10	0.77
Texas	4.70	6.48	-0.40	0.93
Utah	3.75	5.05	-0.40	-0.20
Vermont	3.20	4.22	-0.10	0.57
Virginia	2.85	3.77	-0.60	0.02
Washington	4.75	6.90	0.50	0.05
West Virginia	6.65	5.62	-1.10	0.17
Wisconsin	3.20	5.21	0.60	0.21
Wyoming	4.85	3.94	-1.00	-0.11

Explanatory variables were generally only kept in the modeling equations if they were significant at the 0.05 level. For example, in the children's equations, employment status at the end of the two-year period was a significant predictor of 1+ months but not of 6+ months of uninsuredness. The resulting coefficients for the eight equations are displayed in Technical Appendix Tables 7 and 8.

Technical Appendix Table 7

SIPP Logistic Regression Equation Results for Children

	Children 1+ Months Uninsured		Children 6+ Months Uninsured	
	1999-1999 SIPP Sample	2001-2002 SIPP Sample	1998-1999 SIPP Sample	2001-2002 SIPP Sample
Intercept	-2.2464*	-1.9073*	-2.6709*	-3.5273*
Age 0-5	Base Category**	Base Category**	Base Category**	-0.0573
Age 6-16	Base Category**	-0.1113*	Base Category**	Base Category**
Age 17	-0.5177*	-0.7773*	-0.3774	Base Category**
Poverty 0-99	1.0049*	0.8598*	0.9974*	0.6209*
Poverty 100-200	0.9275*	0.7264*	0.7877*	0.5580*
White, Non-Hispanic	Base Category**	Base Category**	Base Category**	Base Category**
Black, Non-Hispanic	0.4290*	0.3732*	0.3468*	0.3402*
Hispanic	0.3450*	0.4676*	0.5475*	0.4738*
Other Race	0.4182*	0.6049*	0.3894*	0.5847*
< High School	0.7358*	0.9174*	0.7090*	1.2920*
High School	0.6381*	0.5947*	0.5488*	0.8098*
Children's State Medicaid Enrollment	-0.2553*	-0.2291	-0.8135*	-0.3695*
Unemployed (month 24)	0.3874*	0.6008*	<Not Used>	<Not Used>
Change in Unemployment	<Not Used>	0.2469*	<Not Used>	0.4865*
Uninsured (month 24)	<Not Used>	<Not Used>	3.5790*	3.1430*

* Significant at the 0.05 level.

** In a logistic equation, the base category is used as the comparison variable. The larger and most representative group is usually used as the base category. The coefficients in the regression outputs can be described as the log of the odds for a given category of a variable over the odds for the base category of the same variable.

Technical Appendix Table 8

SIPP Logistic Regression Equation Results for Adults

	Adults 1+ Months Uninsured		Adults 6+ Months Uninsured	
	1999-1999 SIPP Sample	2001-2002 SIPP Sample	1998-1999 SIPP Sample	2001-2002 SIPP Sample
Intercept	-2.8962*	-2.7340*	-3.0472*	-3.7189*
Age 18-20	0.2133	0.1321	Base Category**	-0.3157*
Age 21-24	1.0820*	1.2150*	Base Category**	0.8260*
Age 25-34	0.9869*	0.7846*	0.2106	0.6001*
Age 35-60	Base Category**	Base Category**	-0.4798*	Base Category**
Age 61-64	-0.5216*	Base Category**	-0.8466*	Base Category**
Male	<Not Used>	<Not Used>	0.1557	0.1424*
Married	-0.5481*	-0.4599*		
Poverty 0-99	0.8359*	1.0206*	0.8232*	0.8676*
Poverty 100-200	0.8188*	0.8484*	0.8445*	0.7717*
White, Non-Hispanic	Base Category**	Base Category**	-0.1959	Base Category**
Black, Non-Hispanic	0.2476*	0.4689*	0.2363	Base Category**
Hispanic	0.4641*	0.8468*	0.4662*	0.8596*
Other Race	0.1416	0.4026*	Base Category**	0.3315*
State Unemployment	0.0575*	<Not Used>	<Not Used>	<Not Used>
Change in State Unemployment	<Not Used>	0.1265*	<Not Used>	<Not Used>
< High School	0.7975*	1.0187*	0.7482*	1.2468*
High School	0.5331*	0.5688*	0.5966*	0.7544*
Uninsured 24	<Not Used>	<Not Used>	4.3227*	3.8951*

* Significant at the 0.05 level.

** In a logistic equation, the base category is used as the comparison variable. The larger and most representative group is usually used as the base category. The coefficients in the regression outputs can be described as the log of the odds for a given category of a variable over the odds for the base category of the same variable.

Applying Equations to the CPS Data

Before applying the equations to the CPS data, the CPS was augmented with more recent state-level data on Medicaid enrollment. The added variables reflect changes through the end of the two-year prediction period (i.e., 1999-2000 or 2003-2004) (Technical Appendix Tables 4 through 6 above). Applying these equations to the CPS therefore produces state-level estimates that reflect coverage conditions through the end of the two-year period. Weights were further adjusted to reflect age-specific population growth through the end of the period.

Applying the equation to the augmented March 2003 CPS produces the probability that each individual would not have health insurance at some point during a two-year period.⁷ Summing the product of individuals' probabilities and their weights then produces the total number of people without coverage. For the 1+ month estimates, individuals are added who reported no coverage directly in the CPS (because individuals already known to lack insurance at a point in time were excluded from the equation). The sum of the individuals estimated to currently have health insurance but who were predicted not to have health insurance for at least one of the other 23 months and those who reported no health insurance in the CPS equals the total number of people reported to be uninsured at some point over a two-year period.

For the 6+ month estimate, the 6+ month equations were applied to produce the probability of lacking insurance for six months or more, which were in turn multiplied by the weights.

The state-level estimates that resulted from applying the national SIPP equations to the state-level CPS data were scaled to be consistent with the direct national estimates from the SIPP once the SIPP estimates were trended forward to reflect population trends. The SIPP was judged to be a more reliable source for national uninsuredness trends than the sum of *modeled* state-level estimates, because it provides *direct* measures of monthly uninsuredness from before and after the economic downturn of 2001.

C. Definitions of Output Table Variables

The variables used to report the results by individuals' characteristics are described below:

- **Health Insurance:** Individuals were defined as uninsured if they did not report having private health insurance, Medicaid, Medicare, CHAMPUS, CHAMPVA, or military health insurance in a given month of the two-year period. The duration without insurance was counted as the total number of months during the two years observed from the data that an individual

lacked insurance. Months without insurance needed not be consecutive. This distribution by number of months was truncated for those whose spell began before the observed period and those whose spell continued beyond the end of the 24-month period. Therefore, the distribution should not be interpreted as *total* spell duration. The distribution likely over-represents shorter stays.

- **Race/Ethnicity:** Individuals were divided into four mutually exclusive racial/ethnic categories: White, non-Hispanic; Black, non-Hispanic; Hispanic; and Other. People were classified as Hispanic if they reported their ethnic origin as Mexican, Chicano, Puerto Rican, Cuban, Central or South American, or other Spanish.
- **Family Employment:** Family employment was constructed by using the highest employment status between the reference person and his/her spouse. For example, if the reference person worked part-time but his/her spouse worked full-time, the family would be categorized as full-time.
- **Family Employment Status at the End of 24-Month Period:** This represents family employment status (as defined above) for the last month of the 24-month period. The variable is composed of the following categories: employed full-time, employed part-time, unemployed, and not in labor force.

Burden of Health Care Spending

As a measure of the financial burden of health care spending, The Lewin Group produced national and state-level estimates of the percentage of people whose out-of-pocket health expenses reach or exceed 25 percent of their income. In this analysis, health expenses include both direct health spending and spending on health insurance premiums. Direct out-of-pocket spending includes health services for which the provider bills the patient but which are not covered by public or private insurance. This includes bills for services that are not covered, as well as deductible and copayment amounts for people with insurance. Premiums include the amount of employee contributions for coverage under employer health plans, premiums for individual insurance, and any premiums paid under public health insurance programs, such as the Medicare Part B premium.

These estimates of high financial burden of health care were developed using The Lewin Group's Health Benefits Simulation Model (HBSM). HBSM is a micro-simulation model of the U.S. health care system. The model is based upon the Medicaid Expenditure Panel Survey (MEPS) data for 1996, which we have updated to reflect detailed spending level data reported in the 2000 MEPS. The MEPS provides data on the distribution of health spending by type of service and source of payment across families of various demographic and economic groups. These data allow for the identification of people in families with spending in excess of various percent-

ages of family income under alternative definitions of family health spending by demographic group.

These data were updated to 2004 based upon health spending projections developed by the Office of the Actuary of the Centers for Medicare and Medicaid Services (CMS). These data provide estimates of the levels of health spending by source of payment, including out-of-pocket expenditures and premium payments for several years (including 2000 through 2004). Other sources were used to estimate the level of charity care, including published hospital data. In addition, the model uses CMS projections of population and income growth. Age-specific population counts were controlled to population estimates generated as part of the analysis of uninsuredness described above.

Unfortunately, the MEPS are not designed to be disaggregated by state of residence. The HBSM was therefore enhanced with additional data on the demographic and income composition of the population in each state and CMS data on health spending by state. This was accomplished by “re-weighting” the MEPS results based on the distribution of people by demographic characteristic, source of insurance, and income level in each state as reported in the CPS data. Health spending levels were also adjusted to reflect CMS data on differences in health spending levels by state. The re-weighted estimates of health care burden reflect differences in the economic and demographic characteristics of each state’s population and insurance coverage levels and health spending levels across states.

Cost of Employer-Based Coverage

A set of national and state-level estimates were produced highlighting the change in the cost of employer-based coverage from 2000 to 2004. Estimates include the average total premium for employer-based coverage, the average share of the employer premium paid by the employee, and average total out-of-pocket spending by individuals with employer health coverage, including premiums and cost-sharing. Like the estimates of health spending burden, these estimates were generated from the HBSM. Trends in employer premiums and cost-sharing reflect growth estimates and assumptions developed by CMS. These estimates are generally more conservative (i.e., show less growth) than other sources.

Growth in average annual health premiums paid by employees was compared to the growth in the average annual U.S. earnings from 2000 to 2004. Average annual earnings were derived from Occupational Employment Statistics (OES) Survey data from the Bureau of Labor Statistics (BLS). BLS is the best source of data for wage growth by state. OES reports annual average earnings estimates by state for 2000 through 2002 and projections for 2003 based on data through May 2003. State-level earnings were trended forward uniformly to 2004 using a national growth rate of 2.1

percent, based on real monthly wage growth through June 2004 (– 0.2 percent) and adjusted for inflation using growth in the Consumer Price Index for wages (CPI-W) through June 2004, annualized.

Caveats and Limitations

The reader should be aware of the following caveats regarding the approach described in this document.

A. Uninsured

As explained above, the approach used to produce national estimates of uninsuredness in 1999-2000 and 2003-2004 relies principally on direct SIPP estimates for 1998-1999 and 2001-2002, trended forward largely by population growth. This approach produces conservative (i.e., potentially understated) estimates of growth in uninsuredness nationwide between 2000 and 2004. Health insurance coverage is strongly correlated with employment, and employment and other economic indicators were stronger in 1999-2000 than in 1998-1999. However, these trends were only reflected explicitly at the state level and not in the national estimates to which the state numbers were calibrated. Similarly, national unemployment figures increased from 2002 to 2004 while SCHIP enrollment flattened, but these trends were again not reflected in the national control totals, potentially understating uninsuredness in 2003-2004. To the extent that uninsuredness estimates are overstated for 1999-2000 and understated for 2003-2004, estimated growth in uninsuredness will be understated.

Because direct estimates of individuals without health insurance over a period of time do not exist by state, the state-level estimates were modeled using econometric techniques similar to those developed for small area analyses by the Census Bureau. Such estimates are subject to greater variability than the estimates based directly on survey data. In addition, the model we specified assumed that the reported percent of uninsured children from the CPS was similar to the point-in-time estimate of the SIPP. As indicated earlier, researchers have differing opinions on this matter.

Finally, even though the CPS sample was enhanced beginning in 2001, bias in the state estimates introduced by the sampling frame within a state still exists. For example, if all the households interviewed in a small state come from the same metropolitan statistical area in the state, they may not accurately represent the characteristics of residents of the entire state.

The estimates of uninsuredness described here should not be directly compared to previous estimates produced by The Lewin Group for Families USA. The most recent set of estimates The Lewin Group produced prior to these were published in June 2004. Since the completion of that analysis, the Census Bureau released additional file weights that allowed for more precise estimates of insuredness over a two-year period. Reanalysis

using the new weights suggests that Lewin's previous uninsuredness estimates, which were for 2002-2003, were conservative. Similarly, Lewin estimates for 2001-2002, published in March 2003, were produced prior to the release of the 2001 SIPP panel and were therefore based on data collected prior to the unemployment increases of 2001 and 2002. These estimates also proved to be conservative compared to the reanalysis based directly on 2001-2002 data.

Unlike previous Lewin estimates, the approach described in this report was designed to produce estimates that allow for direct comparison of estimates for two different time periods. This is achieved principally by relying on changes over time that were directly observed in the same survey data sources.

B. Burden and Employer Estimates from HBSM

All estimates of premium and out-of-pocket health spending used for the analysis of health care burden and employer health costs described in this report are based on The Lewin Group's Health Benefits Simulation Model (HBSM). The assumptions for premium and cost growth used in the HBSM are based on CMS estimates and projections. Recently published estimates from the Kaiser Family Foundation/Health Research and Education Trust (KFF/HRET) Employer Health Benefits Survey indicate greater growth in employer health premiums than that reflected in the CMS estimates. In the interest of producing solid, conservative estimates of premium and spending growth, the estimates used for this report were not updated to reflect the trends reported by the KFF/HRET.

¹ This approach produces conservative (i.e., potentially understated) estimates of growth in uninsuredness nationwide between 2000 and 2004. Health insurance coverage is strongly correlated with employment, and employment and other economic indicators were stronger in 1999-2000 than in 1998-1999. However, these trends were only reflected explicitly at the state level and not in the national estimates to which the state numbers were calibrated. Similarly, national unemployment figures increased from 2002 to 2004 while SCHIP enrollment flattened, but these trends were again not reflected in the national control totals, potentially understating uninsuredness in 2003-2004. To the extent that uninsuredness estimates are overstated for 1999-2000 and understated for 2003-2004, estimated growth in uninsuredness will be understated.

² The overall decline in insurance coverage was driven by erosion of drug coverage among adults. In contrast, coverage among children rose from 2000 to 2002, reflecting continued expansions of State Children's Health Insurance Program enrollment (John Holahan and Marie Wang, "Changes in Health Insurance Coverage During the Economic Downturn: 2000-2002," *Health Affairs Web Exclusive*, January 28, 2004, W4: 31-42).

³ In 2001, a verification question that asks specifically whether someone was uninsured all of last year was added.

⁴ The exclusion of individuals with fewer than two years of data necessarily excludes children younger than age two. Analysis of monthly samples indicated that insurance coverage rates for children under two were similar to rates for children ages two to five. We therefore assigned coverage to the under-two group at the same rate as the two-to-five group.

⁵ It was beyond the scope of this project to quantify the extent to which those who dropped out of the survey might have had different health insurance coverage patterns even after controlling for age, sex, race, and income.

⁶ For the 1998-1999 sample, the March 2000 CPS was used as a proxy for the end of 1999. For the 2001-2002 sample, the March 2003 CPS was used as a proxy for the end of 2002.

⁷ More specifically, the probability that an individual lacks health insurance (for 1+ or 6+ months) during the target two-year period equals $eY/(1+eY)$, where Y is the result of applying the SIPP equation to the CPS record.

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