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Survey of Income and Program Participation

by Robert L. Bennefield

U.S. Department of Commerce
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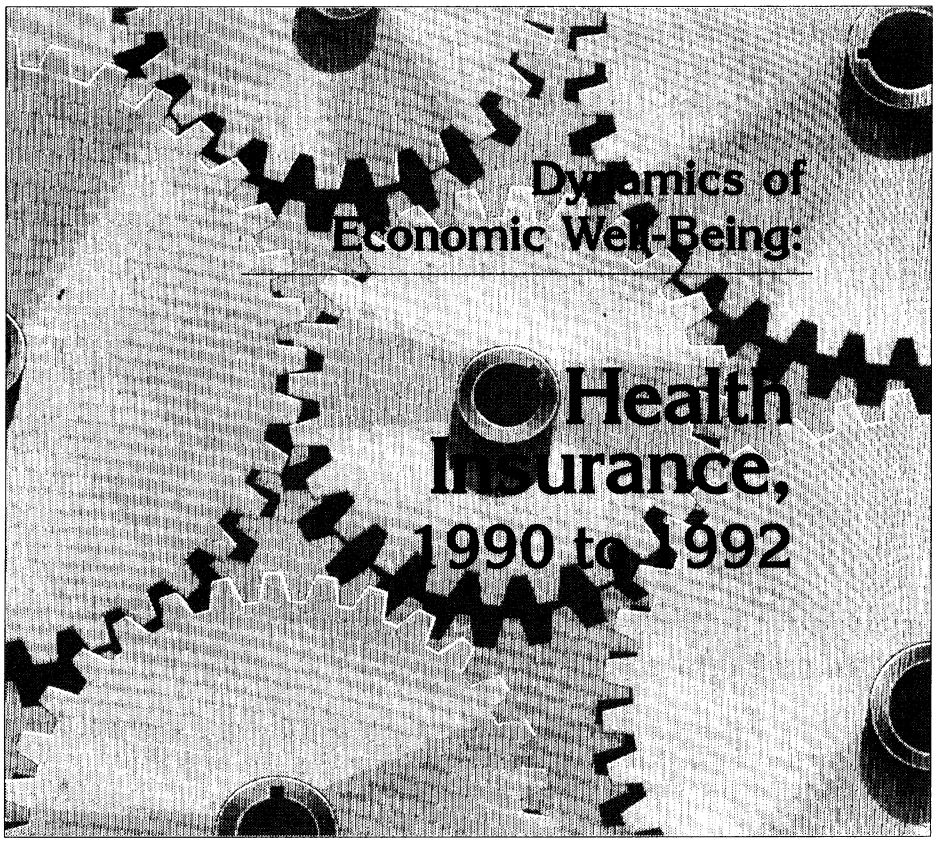

by Robert L. Bennefield

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Symbols Used in Tables

-	Represents zero or rounds to zero.
X	Not applicable.
B	Base is less than 200,000.

Dynamics of Economic Well-Being: Health Insurance, 1990 to 1992

INTRODUCTION

This report uses data from the Survey of Income and Program Participation (SIPP) to examine issues related to health insurance coverage. It focuses primarily on the extent to which people are covered by health insurance over a 32-month period beginning in early 1990. The source of this information is the 1990 panel of the SIPP, which contains records for each survey person for whom a reasonably complete set of data for a 32-month period was obtained. Efforts were made during the life of the panel to follow persons that moved to ensure that the sample remained representative of the noninstitutional population of the United States.

It should be noted that all longitudinal estimates presented here are based only on responses of persons who were interviewed in all eight waves of the 1990 panel. Insofar as persons who left the panel were differentially covered by health insurance, estimates on months covered across the panel may be biased. Additionally, there may be a time-in-sample bias present in the longitudinal estimates. (See appendix D for further discussion.)

All demographic surveys, including CPS and SIPP, suffer from undercoverage of the population. This undercoverage results from missed housing units and missed persons within sample households. Compared to the level of the 1980 Decennial Census, overall CPS and SIPP undercoverage is about 7 percent. Undercoverage varies with age, sex, and race. For some groups, such as 20 to 24 year old Black males, the undercoverage is as high as about 27 percent. The weighting procedures used by the Census Bureau partially correct for the bias due to undercoverage. However, its final impact on estimates is unknown. For details, see appendix C.

During each SIPP interview, information is collected on health insurance coverage (along with other information on income, labor force, and program participation) for each month in the 4-month reference period. It is therefore possible to classify persons by the number of months over the 32-month period that the person was covered by one or more types of health insurance.

Health insurance in this report refers to the following types of coverage: 1) employer- or union-provided insurance, 2) other privately purchased health insurance, 3) Medicare, 4) military health care, and 5) Medicaid.

Since 1980, the March Income Supplement to the Current Population Survey (CPS) has included questions on health insurance coverage. The technical note in this report contains comparisons between CPS estimates of those with health insurance coverage and comparable SIPP estimates for calendar year 1991.

HIGHLIGHTS

(The figures in parentheses denote the 90-percent confidence intervals.)

- Estimates for both the 1990 and 1991 calendar years show that about 17 (±1.0) million persons were uninsured for each 12-month period. Nine (±0.7) million were uninsured for the full 32-month period from early 1990 to mid-1992.
- Over calendar year 1990, 80 (±0.01) percent of all persons had continuous health insurance coverage over the year; thus, 20 (±0.01) percent, or 47 (±1.4) million persons, lacked insurance for at least 1 month. This percentage was slightly lower than the 21 (±0.1) percent who experienced a lapse in coverage over calendar year 1987.
- Over a 32-month period, 75 (±0.01) percent of all persons had continuous health insurance coverage; 25 (±0.01) percent, or 60 (±1.6) million persons, lacked insurance for at least 1 month.
- Young adults (those between the ages of 18 and 24 years old) were the most likely of any age group to lack insurance for at least 1 month. Less than one-half, or 47 percent(±0.03), of the persons of this age group were covered by insurance for the entire 32-month period.
- Work experience has a significant effect on health insurance coverage. Eighty-eight (±0.01) percent of persons who worked full-time for the entire period were covered continuously by health insurance, compared with 78 (±0.05) percent for full- period, part-time workers, and 62 (±0.01) percent for workers with one or more job interruptions.
- Of those who participated in a major public assistance program at some point over the 32-month period, 47 (±0.02) percent spent 1 or more months without health insurance. The comparable proportion for those who did not participate in any of these programs was 21 (±0.01) percent. However, as a result of their

increased likelihood of Medicaid coverage, persons with 32 months of assistance participation were about as likely to have continuous health insurance as those who did not participate at all in a major assistance program.

- The relationship between lack of health insurance coverage and months with low income is not a linear one. Sixty-eight (± 0.03) percent of those persons with 13 to 24 low income months experienced 1 or more months without health insurance coverage, which was significantly higher than any other group.
- Of all observed spells without health insurance (experienced by 25 percent of persons), half of them lasted for 6.0 months or longer. This estimate was significantly longer than the 4.2 months of non-coverage for the earlier 1987 panel, which covered a shorter survey time period of 28 months.

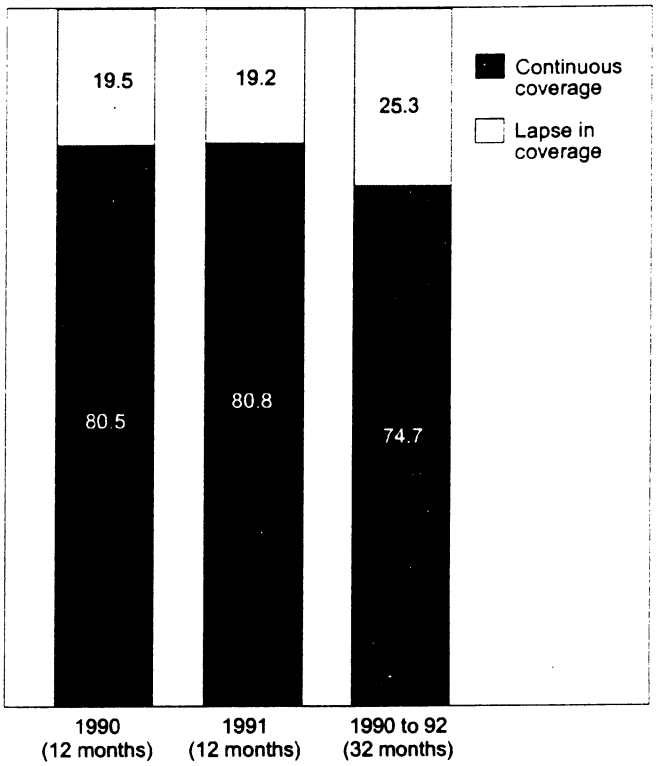
ESTIMATES OF HEALTH INSURANCE COVERAGE

Health insurance coverage is commonly associated with other life circumstances, such as employment, retirement, and program participation. As a result, there exists a strong likelihood that for some segments of the population health insurance status will change over time. Through the use of longitudinal estimates, it is possible to examine the dynamics of health insurance coverage, and the extent to which persons experience a lapse in coverage during a given time period.

The 1990 SIPP panel file was used to examine the number of months persons were covered by health insurance over time up to a 32-month period. Interviews from this panel were conducted between February 1990 and September 1992, allowing examination of health insurance coverage for two full calendar years, 1990 and 1991. During the 1990 calendar year, 80 percent of all persons had health insurance coverage for the entire year; 20 percent, or 47 million persons, lacked coverage for at least 1 month. Seven percent, or 17 million persons, were never covered in 1990. The 1991 calendar year estimates were similar, showing 81 percent, 19 percent, and 7 percent, respectively. (See table A and figure 1.)

Between 1990 and 1992, 75 percent of all persons had continuous health insurance coverage over the entire 32-month period; 25 percent lacked health insurance for at least 1 month. (See table B.) Six percent of all persons (or one-fourth of those who lacked health insurance for at least 1 month) were covered by insurance for 6 months or less (4 percent of all persons lacked coverage for the entire period, and another 2 percent were covered for 1 to 6 months). Eighty-six percent of those with continuous coverage over the 32-month period were covered by private health insurance; 6 percent were covered by Medicaid.

Figure 1.
Health Insurance Coverage: 1990 to 1992
Percent



Comparisons

The proportion of persons with lapses in coverage tends to fluctuate when measured over different time periods. For example, 81 percent were continuously covered over the 12-month period from January to December 1990, but only 75 percent had coverage for the entire 32 months of the survey.

An earlier report which examined patterns of health insurance coverage between 1987 and 1989 reported gaps in coverage over a 28-month period.[1] Since percentages vary with the time period over which they are measured, the appropriate comparison is a 28-month period beginning in 1990. Comparisons of estimates over a 28-month period from the 1990 panel with those from the 1987 panel reveal different patterns of health insurance coverage between the 1987-1989 period and the 1990-1992 period. (See table C.) A slightly higher proportion of persons had continuous coverage in the later period— the percent covered for the entire 28-month period rose from 74 percent in the 1987-1989 period to

[1]This report is essentially an update of a previous study, "Health Insurance Coverage: 1987-1990." That report contained quarterly estimates from the 1989 and 1990 panels and longitudinal estimates from the 1987 panel. No quarterly estimates are presented in this report, except in table O which includes estimates from the fourth quarter of 1991. Comparisons with the earlier estimates are presented in table A and C.

Table A. **All Persons, by Sex, Race, Hispanic Origin, and Health Insurance Coverage: Calendar Years 1987, 1990, and 1991**

Health insurance coverage	Both sexes	Male	Female	White		Black	Hispanic origin[1]	Not of Hispanic origin
				Total	Not of Hispanic origin			
1991								
All persons (in thousands)	244,658	118,795	125,862	205,468	187,679	30,342	20,756	223,901
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution								
Covered by private or government: health insurance:								
Less than 12 months	19.2	20.7	17.8	17.9	15.8	26.6	38.9	17.4
No months	7.0	7.8	6.2	6.5	5.5	9.3	16.8	6.1
1 to 4 months	3.7	4.0	3.3	3.4	2.9	5.3	7.5	3.3
5 to 8 months	4.8	5.0	4.6	4.3	3.8	8.0	9.7	4.3
9 to 11 months	3.8	3.9	3.7	3.7	3.6	4.0	4.9	3.7
12 months	80.8	79.3	82.2	82.1	84.2	73.4	61.1	82.6
1 to 12 months	93.0	92.2	93.8	93.5	94.5	90.7	83.2	93.9
Covered by private health insurance:								
Less than 12 months	29.7	29.3	30.0	26.0	23.0	51.2	56.8	27.1
No months	16.4	15.7	17.1	13.6	11.3	33.0	37.3	14.5
1 to 4 months	4.5	4.6	4.3	4.0	3.6	7.5	7.3	4.2
5 to 8 months	5.1	5.2	5.1	4.8	4.4	7.8	8.6	4.8
9 to 11 months	3.6	3.8	3.5	3.7	3.7	2.9	3.7	3.6
12 months	70.3	70.7	70.0	74.0	77.0	48.8	43.2	72.9
1 to 12 months	83.6	84.3	82.9	86.4	88.7	67.0	62.7	85.5
Covered by Medicaid:								
Less than 12 months	93.7	95.4	92.2	95.7	96.6	81.7	86.5	94.4
No months	89.2	91.4	87.1	92.0	93.4	71.7	76.4	90.4
1 to 4 months	2.2	2.0	2.3	1.8	1.6	4.5	5.1	1.9
5 to 8 months	1.4	1.1	1.7	1.1	1.0	3.3	3.0	1.3
9 to 11 months	0.9	0.8	1.0	0.8	0.6	2.1	2.1	0.8
12 months	6.3	4.6	7.8	4.3	3.4	18.3	13.5	5.6
1 to 12 months	10.8	8.6	12.9	8.0	6.6	28.3	23.6	9.6
1990								
All persons (in thousands)	241,534	117,064	124,470	203,507	186,770	29,672	19,565	221,969
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution								
Covered by private or government health insurance:								
Less than 12 months	19.5	20.8	18.3	18.1	15.8	28.2	41.5	17.6
No months	6.8	7.4	6.3	6.4	5.3	8.9	17.6	5.9
1 to 4 months	3.7	4.0	3.4	3.3	2.9	6.1	7.8	3.3
5 to 8 months	4.7	5.0	4.5	4.4	4.0	7.1	9.1	4.3
9 to 11 months	4.3	4.4	4.1	4.0	3.7	6.2	7.0	4.0
12 months	80.5	79.2	81.7	81.9	84.2	71.8	58.5	82.4
1 to 12 months	93.2	92.6	93.7	93.6	94.7	91.1	82.4	94.1
Covered by private health insurance:								
Less than 12 months	29.5	29.0	29.9	25.8	22.9	51.8	57.7	27.0
No months	15.4	14.4	16.4	12.7	10.7	31.5	35.1	13.7
1 to 4 months	4.4	4.7	4.2	3.8	3.5	8.2	8.2	4.1
5 to 8 months	5.3	5.5	5.1	5.0	4.8	7.4	8.6	5.0
9 to 11 months	4.3	4.4	4.2	4.2	4.0	4.8	5.7	4.2
12 months	70.5	71.0	70.1	74.2	77.1	48.2	42.3	73.0
1 to 12 months	84.6	85.6	83.6	87.3	89.3	68.5	64.9	86.3
Covered by Medicaid:								
Less than 12 months	94.3	95.9	92.9	96.3	96.9	82.3	88.0	94.9
No months	90.3	92.5	88.3	93.0	94.1	73.6	78.6	91.4
1 to 4 months	2.0	1.7	2.3	1.7	1.5	3.9	4.4	1.8
5 to 8 months	1.1	0.9	1.3	0.9	0.7	2.7	3.4	0.9
9 to 11 months	0.9	0.8	1.1	0.8	0.7	2.1	1.7	0.9
12 months	5.7	4.1	7.1	3.7	3.1	17.7	12.0	5.1
1 to 12 months	9.7	7.5	11.7	7.0	5.9	26.4	21.4	8.6

Table A. **All Persons, by Sex, Race, Hispanic Origin, and Health Insurance Coverage: Calendar Years 1987, 1990, and 1991**—Continued

Health insurance coverage	Both sexes	Male	Female	White		Black	Hispanic origin[1]	Not of Hispanic origin
				Total	Not of Hispanic origin			
1987 (Revised)								
All persons (in thousands)	234,841	113,523	121,318	198,719	182,985	28,413	17,871	216,970
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution								
Covered by private or government health insurance:								
Less than 12 months	20.8	21.8	19.9	18.9	17.1	31.8	39.2	19.3
No months	6.5	6.9	6.2	5.9	5.0	9.3	16.3	5.7
1 to 4 months	4.1	4.5	3.7	3.6	3.3	6.7	7.2	3.8
5 to 8 months	5.6	5.8	5.3	4.8	4.4	10.5	9.9	5.2
9 to 11 months	4.7	4.6	4.7	4.6	4.4	5.4	5.8	4.6
12 months	79.2	78.2	80.1	81.1	82.9	68.2	60.8	80.7
1 to 12 months	93.5	93.1	93.8	94.1	95.0	90.7	83.7	94.3
Covered by private health insurance:								
Less than 12 months	31.5	30.9	32.0	27.5	25.0	56.2	56.1	29.4
No months	15.3	14.8	15.8	12.5	10.6	32.0	34.3	13.7
1 to 4 months	5.5	5.6	5.5	4.9	4.5	9.7	9.5	5.2
5 to 8 months	6.1	6.1	6.1	5.4	5.3	10.4	7.8	5.9
9 to 11 months	4.6	4.4	4.7	4.6	4.6	4.1	4.5	4.6
12 months	68.5	69.1	68.0	72.5	75.0	43.8	43.9	70.6
1 to 12 months	84.7	85.2	84.2	87.5	89.4	68.0	65.7	86.3
Covered by Medicaid:								
Less than 12 months	94.7	95.8	93.6	96.4	97.1	83.6	88.7	95.1
No months	90.7	92.3	89.3	93.3	94.5	74.5	79.4	91.7
1 to 4 months	1.7	1.6	1.8	1.4	1.2	3.7	4.2	1.5
5 to 8 months	1.3	1.1	1.5	1.1	0.8	3.0	3.4	1.1
9 to 11 months	0.9	0.7	1.1	0.7	0.6	2.3	1.7	0.8
12 months	5.3	4.2	6.4	3.6	2.9	16.4	11.3	4.9
1 to 12 months	9.3	7.7	10.7	6.7	5.5	25.5	20.6	8.3

[1]Persons of Hispanic origin may be of any race.

Note: Health insurance estimates from the 1987 panel were revised to include members of the Armed Forces among those with health insurance coverage. They were counted as not having health insurance in the previous SIPP health insurance report (Series P-70,No.29). Note: Government health insurance includes Medicare, Medicaid, CHAMPUS, and CHAMPVA. Persons in the Armed Forces living off post or with their families on post are also covered by government insurance.

Table B. **All Persons, by Sex, Race, Hispanic Origin, and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	Both sexes	Male	Female	White		Black	Hispanic origin[1]	Not of Hispanic origin
				Total	Not of Hispanic origin			
All persons (in thousands)	235,811 (100.0)	113,681 (100.0)	122,131 (100.0)	198,579 (100.0)	182,646 (100.0)	28,982 (100.0)	18,565 (100.0)	217,246 (100.0)
Percent Distribution								
Covered by private or government health insurance:								
Less than 32 months	25.3	26.6	24.0	23.5	21.2	36.0	48.0	23.3
No months	3.8	4.3	3.3	3.5	2.9	5.1	10.1	3.3
1 to 6 months	2.4	2.7	2.2	2.2	1.9	3.4	6.0	2.1
7 to 12 months	3.0	3.1	2.9	2.7	2.4	5.2	5.9	2.8
13 to 18 months	2.7	2.8	2.6	2.5	2.3	3.9	5.0	2.5
19 to 24 months	4.8	4.7	4.8	4.3	3.9	7.6	9.0	4.4
25 to 30 months	7.5	7.8	7.1	7.1	6.7	9.9	10.8	7.2
31 months	1.1	1.1	1.1	1.2	1.2	0.9	1.1	1.1
32 months	74.7	73.4	76.0	76.5	78.8	64.0	52.0	76.7
Covered by private health insurance:								
Less than 32 months	35.4	34.8	35.9	31.6	28.7	58.5	63.9	33.0
No months	11.6	10.7	12.4	9.3	7.6	25.3	28.5	10.2
1 to 6 months	3.6	3.7	3.6	3.1	2.8	6.8	7.3	3.3
7 to 12 months	3.7	3.7	3.7	3.2	2.9	7.4	6.7	3.5
13 to 18 months	2.7	2.8	2.6	2.5	2.3	3.6	4.7	2.5
19 to 24 months	4.9	4.9	4.9	4.6	4.4	6.9	7.1	4.7
25 to 30 months	7.9	8.0	7.7	7.8	7.6	8.2	9.0	7.8
31 months	1.0	1.0	0.9	1.1	1.1	-	0.7	1.0
32 months	64.6	65.2	64.1	68.4	71.3	41.5	36.1	67.0
Covered by Medicaid:								
Less than 32 months	95.3	96.7	94.1	97.0	97.6	85.1	89.5	95.8
No months	87.7	90.3	85.3	90.7	92.1	68.8	72.2	89.0
1 to 6 months	2.5	2.2	2.8	2.2	1.9	4.4	5.7	2.2
7 to 12 months	1.8	1.4	2.1	1.5	1.3	3.6	4.1	1.6
13 to 18 months	0.9	0.7	1.1	0.8	0.6	2.0	2.2	0.8
19 to 24 months	1.1	1.0	1.3	0.8	0.7	3.2	2.8	1.0
25 to 30 months	1.1	1.0	1.2	0.9	0.8	2.6	2.1	1.0
31 months	-	-	-	-	-	-	-	-
32 months	4.7	3.3	5.9	3.0	2.4	14.9	10.5	4.2

[1]Persons of Hispanic origin may be of any race.

76 percent from 1990-1992. This increase was primarily due to an increase in continuous private health insurance coverage, which rose from 64 to 66 percent.

Results from comparing 1990 calendar year estimates with previous 1987 calendar year estimates show a slight decline in the proportion of persons with a lapse in coverage for 1990 (20 percent versus 21 percent). (See table A.) The remainder of this report will focus primarily on the 32-month period from February 1990 to September 1992.

Sex, Race, and Hispanic Origin

Over the 32-month period beginning in February 1990, women were more likely than men to have continuous health insurance coverage. (See table B.) Twenty-seven percent of all men lacked health insurance for at least 1 month; the comparable figure for women was 24 percent. The difference between the percentages of men and women with continuous private health insurance coverage was not significant. The difference between men and women in overall health insurance coverage is partially attributable to differences in economic status. Women are more likely than men to live in families with incomes below poverty,[2] and are more likely to participate in means-tested assistance programs.[3] Thus, women were more likely than men to take part in Medicaid, both in terms of continuous coverage (6 percent) and coverage for at least 1 month (15 percent). The comparable figures for men were 3 percent and 10 percent, respectively.

A second factor contributing to the difference in health insurance coverage between men and women is

[2]In 1992 the official poverty rate was 12.7 percent for males and 16.3 percent for females. See Current Population Reports, Series P60-185, "Poverty in the United States: 1992."

[3]From the 1990 SIPP panel file, 20.7 percent of all females participated in means-tested public assistance programs, compared with 15.9 percent of all males.

Table C. **All Persons, by Sex, Race, Hispanic Origin, and Health Insurance Coverage: 1987 to 1992**

Health insurance coverage	Both sexes	Male	Female	White	Black	Hispanic origin[1]
1990 to 1992						
All persons (in thousands)	235,811	113,681	122,131	198,579	28,982	18,565
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution						
Covered by private or government health insurance:						
Less than 28 months	24.0	25.2	22.9	22.2	34.7	46.4
No months	4.2	4.7	3.8	4.0	5.5	11.0
1 to 6 months	2.6	2.9	2.3	2.3	3.9	6.2
7 to 12 months	3.5	3.4	3.6	3.1	6.0	7.0
13 to 18 months	3.2	3.5	3.0	3.0	4.3	6.3
19 to 24 months	7.5	7.7	7.3	6.7	12.4	13.0
25 to 27 months	3.0	3.0	2.9	3.1	2.7	2.9
28 months	76.0	74.8	77.1	77.8	65.3	53.6
Covered by private health insurance:						
Less than 28 months	34.0	33.3	34.6	30.2	57.2	62.7
No months	12.2	11.2	13.0	9.9	25.9	29.5
1 to 6 months	3.7	3.8	3.7	3.1	7.4	7.1
7 to 12 months	4.1	3.9	4.2	3.5	7.6	7.4
13 to 18 months	3.1	3.3	2.8	2.9	3.9	5.2
19 to 24 months	8.3	8.3	8.4	7.9	10.8	11.4
25 to 27 months	2.6	2.7	2.5	2.8	1.6	2.2
28 months	66.0	66.7	65.4	69.8	42.8	37.3
Covered by Medicaid:						
Less than 28 months	95.2	96.6	93.9	96.9	84.7	89.1
No months	88.3	90.8	86.0	91.2	70.1	74.1
1 to 6 months	2.4	2.1	2.6	2.2	4.0	4.9
7 to 12 months	1.7	1.3	2.1	1.5	3.6	4.4
13 to 18 months	0.9	0.7	1.1	0.8	2.1	2.2
19 to 24 months	1.4	1.2	1.5	1.0	4.0	3.0
25 to 27 months	0.5	-	0.5	-	0.8	0.7
28 months	4.8	3.4	6.1	3.1	15.3	10.9
1987 to 1989 (Revised)						
All persons (in thousands)	230,989	111,506	119,484	195,633	27,807	17,443
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution						
Covered by private or government health insurance:						
Less than 28 months	26.1	27.3	24.9	23.9	39.1	45.9
No months	3.8	4.0	3.6	3.6	4.8	10.6
1 to 6 months	2.9	3.2	2.6	2.5	5.0	6.3
7 to 12 months	3.6	3.8	3.4	3.1	6.1	6.0
13 to 18 months	3.3	3.4	3.2	2.9	6.1	5.6
19 to 24 months	8.9	9.3	8.5	8.1	13.3	14.9
25 to 27 months	3.6	3.5	3.6	3.6	3.9	2.6
28 months	73.9	72.7	75.1	76.1	60.9	54.1
Covered by private health insurance:						
Less than 28 months	36.4	36.3	36.5	32.2	62.2	59.8
No months	11.1	10.8	11.5	8.8	25.4	26.2
1 to 6 months	4.6	4.7	4.6	3.9	9.4	8.9
7 to 12 months	4.6	4.6	4.6	4.0	7.6	6.6
13 to 18 months	3.5	3.5	3.4	3.1	5.9	4.5
19 to 24 months	9.4	9.5	9.4	9.0	12.2	12.2
25 to 27 months	3.1	3.3	3.0	3.4	1.8	1.5
28 months	63.6	63.7	63.5	67.8	37.8	40.2
Covered by Medicaid:						
Less than 28 months	95.6	96.4	94.7	97.2	85.4	91.2
No months	89.2	90.9	87.6	92.1	70.8	76.2
1 to 6 months	2.2	2.0	2.3	1.9	3.9	5.4
7 to 12 months	1.7	1.5	1.9	1.3	4.4	4.7
13 to 18 months	0.8	0.7	0.9	0.7	1.8	1.6
19 to 24 months	1.3	1.1	1.5	1.0	2.9	2.4
25 to 27 months	-	-	0.5	-	1.5	1.0
28 months	4.4	3.6	5.3	2.8	14.6	8.8

[1]Persons of Hispanic origin may be of any race.

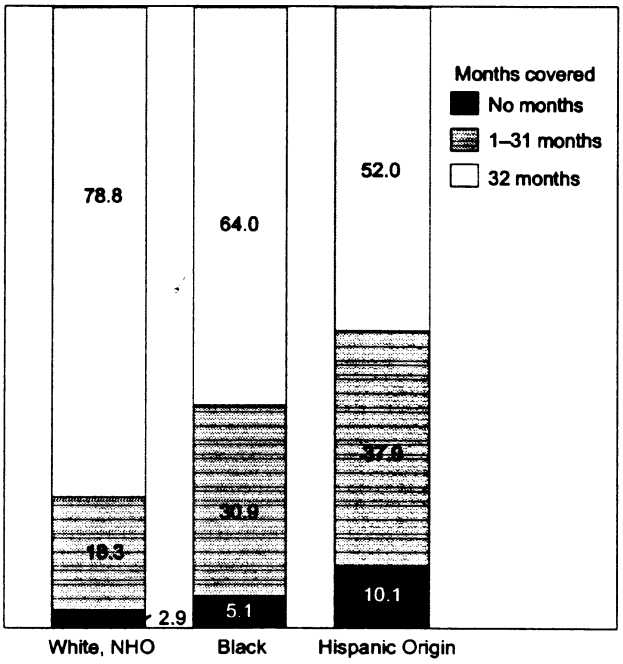
Note: Health insurance estimates from the 1987 panel were revised to include members of the Armed Forces among those with health insurance coverage. They were counted as not having health insurance in the previous SIPP health insurance report (Series P-70, No.29).

age. More women than men are 65 years old and over, and virtually everyone in that age group is covered by Medicare.

The relationship between race or Hispanic origin and health insurance was a strong one. The percentages of persons who spent at least 1 month without health insurance were 21 percent for Whites (not of Hispanic origin), 36 percent for Blacks, and 48 percent for persons of Hispanic origin. (See table A and figure 2.) Whites were also much more likely than Blacks or those of Hispanic origin to be covered by private health insurance. Ninety-two percent of all Whites (not of Hispanic origin) were covered by private health insurance for at least 1 month. The comparable figures for Blacks and persons of Hispanic origin were about 75 percent and 72 percent, respectively.

Blacks were more likely to be covered by Medicaid than Whites or those of Hispanic origin. The percentages of Whites (not of Hispanic origin), Blacks, and Hispanic-origin persons with at least 1 month of Medicaid coverage were 8 percent, 31 percent, and 28 percent, respectively. Fifteen percent of all Black persons had continuous Medicaid coverage over the time period covered by the panel. The comparable percentages for Whites (not of Hispanic origin) and Hispanic-origin persons were 2 percent and 11 percent, respectively.

Figure 2.
Health Insurance Coverage, by Race and Hispanic Origin: 1990 to 1992
Percent



Age

Young adults (those between the ages of 18 and 24) were the most likely of any age group to spend at least 1 month without health insurance coverage. (See table D.) Almost one-half (47 percent) of all persons between the ages of 18 and 24 lacked health insurance for at least 1 month; 11 percent were covered for less than 7 months.

Generally, for persons 18 years old and over, there was a positive relationship between age and continuous health insurance coverage. Continuous health insurance coverage rates for persons by age group from 18 to 24 to 65 years old and over monotonically increased from 53 percent to 99 percent, respectively. (See figure 3.)

Young children (those under 6 years old) were the most likely to have been covered by Medicaid at some time during the period covered by the 1990 panel. Twenty-nine percent of all young children were covered by Medicaid for at least 1 month. The least likely persons to be covered by Medicaid were those who were 35 to 44 years old. Persons 65 years old and over who were covered by Medicaid were much more likely to have been covered for the entire 32-month period than non-elderly adults (18 to 64 years old) with Medicaid coverage. Nearly three-fifths (59 percent) of all persons 65 years old and over with at least 1 month of Medicaid coverage were covered for the entire 32-month period. The comparable percentage for persons under 18 years old was 34 percent.

Years of School Completed

Persons completing at least 1 year of college were less likely to spend at least 1 month without health insurance coverage than those who attained lower levels of education. (See table E and figure 4.) For example, about 19 percent of those (18 years old and over) completing at least 1 year of college were without health insurance coverage for at least 1 month, compared to 26 percent for those who completed high school (no college) and 31 percent for those with less than a high school education.

As for continuous health insurance coverage rates, those completing high school (no college) and those with less than a high school education also differed in their private health insurance and Medicaid coverage rates. Two-thirds (66 percent) of the high school graduates (no college) were covered by private health insurance for each of the 32 months, and 90 percent were covered by private health insurance for at least 1 month. The comparable percentages for non-high school graduates were 44 and 76 percent, respectively.

Those who had not completed high school were more likely to have been covered by Medicaid. Twenty percent of persons without a high school education

Table D. **All Persons, by Age and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	Under 18 years		18 to 24 years			25 to 34 years	35 to 44 years	45 to 64 years	65 years and over
	Total	Under 6 years	Total	18 to 21 years	22 to 24 years				
All persons (in thousands)	63,995	23,047	23,579	13,204	10,376	41,868	36,094	45,014	25,261
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance:									
Less than 32 months	29.0	30.7	47.4	47.5	47.1	31.7	21.9	19.0	0.6
No months	3.8	2.6	5.6	5.2	6.2	4.4	4.1	4.0	-
1 to 6 months	2.6	2.2	5.2	5.1	5.4	3.0	2.1	1.7	-
7 to 12 months	3.3	3.4	6.2	6.3	6.0	3.8	2.8	2.1	-
13 to 18 months	3.2	3.5	6.2	5.7	6.9	3.2	2.3	1.5	-
19 to 24 months	5.9	6.2	8.8	9.8	7.5	5.8	3.9	3.3	-
25 to 30 months	9.0	11.2	13.2	13.4	12.9	9.6	5.7	5.8	-
31 months	1.2	1.6	2.1	1.9	2.3	1.7	0.9	0.6	-
32 months	71.0	69.3	52.6	52.5	52.9	68.3	78.1	81.0	99.4
Covered by private health insurance:									
Less than 32 months	39.0	43.9	53.8	53.2	54.6	37.0	25.2	26.5	36.9
No months	15.3	17.3	12.1	11.0	13.5	10.6	7.9	9.6	12.3
1 to 6 months	4.3	5.0	6.5	6.5	6.6	3.8	2.6	2.2	2.9
7 to 12 months	4.1	5.0	6.9	6.9	7.0	3.8	2.8	2.3	3.5
13 to 18 months	2.6	3.1	5.8	5.5	6.1	2.9	2.3	1.7	2.0
19 to 24 months	4.7	4.9	8.1	9.0	6.9	5.3	3.5	3.6	6.3
25 to 30 months	7.1	7.7	12.7	12.6	12.8	9.0	5.3	6.5	9.6
31 months	0.9	1.0	1.7	1.7	1.8	1.6	0.8	0.6	-
32 months	61.0	56.1	46.2	46.8	45.4	63.0	74.8	73.5	63.1
Covered by Medicaid:									
Less than 32 months	92.4	89.5	95.2	95.7	94.7	96.4	97.9	97.2	94.2
No months	77.7	70.9	86.3	86.0	86.7	90.0	94.7	93.6	90.1
1 to 6 months	5.2	5.9	2.7	3.2	2.1	2.1	0.9	1.1	1.1
7 to 12 months	3.1	4.3	2.2	2.5	1.9	1.5	0.9	1.0	1.0
13 to 18 months	1.7	2.1	1.4	1.4	1.3	0.8	-	-	-
19 to 24 months	2.2	3.1	1.4	1.4	1.5	0.9	-	0.5	0.6
25 to 30 months	2.2	2.9	1.0	1.0	0.9	0.9	-	0.6	0.9
31 months	-	-	-	-	-	-	-	-	-
32 months	7.6	10.5	4.8	4.3	5.3	3.6	2.1	2.8	5.8

Figure 3.
Health Insurance Coverage, by Age: 1990 to 1992

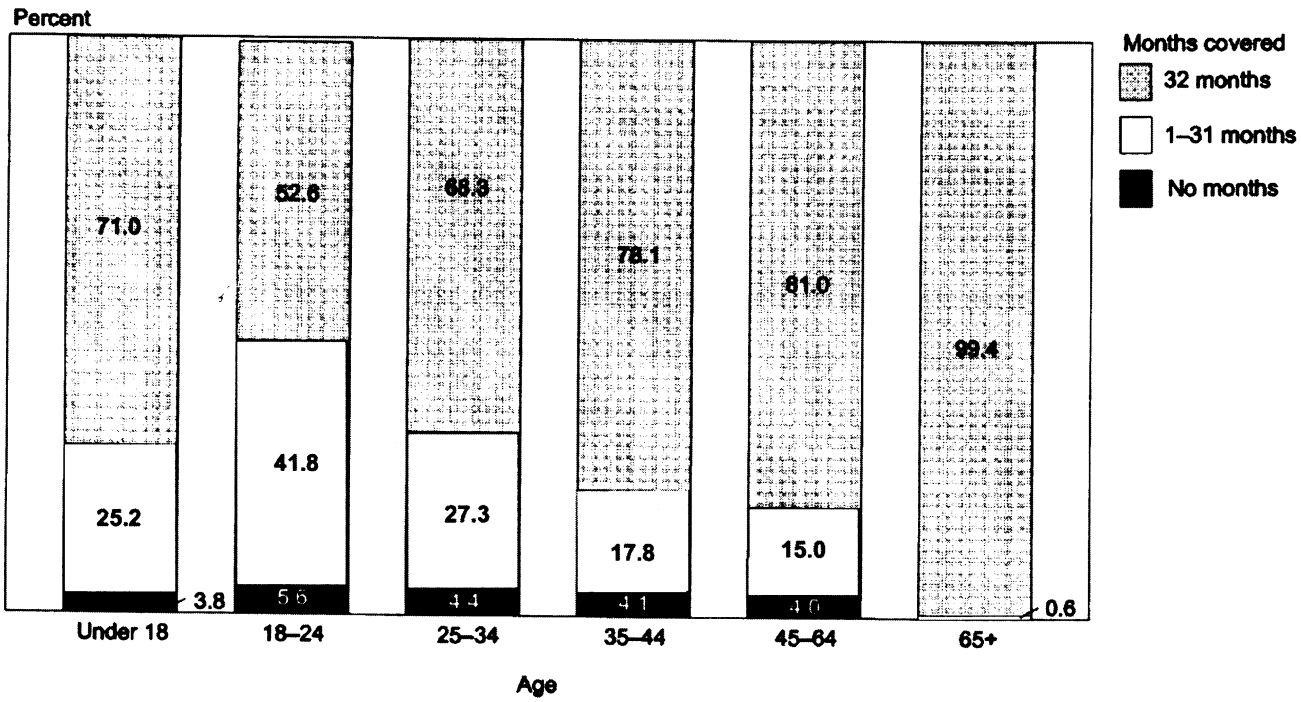
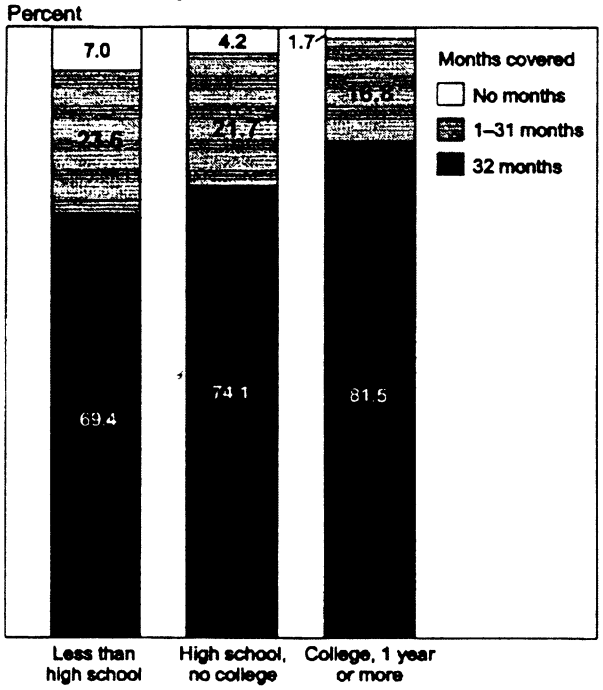


Table E. **All Persons, by Years of School Completed and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	Persons 18 years and over	Years of school completed		
		Less than high school	High school, no college	College, 1 year or more
All persons (in thousands)	171,816	35,816	66,284	69,716
	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution				
Covered by private or government health insurance:				
Less than 32 months	23.9	30.6	25.9	18.5
No months	3.8	7.0	4.2	1.7
1 to 6 months	2.3	4.2	2.4	1.4
7 to 12 months	2.9	4.4	3.4	1.7
13 to 18 months	2.5	2.8	2.9	2.0
19 to 24 months	4.3	5.3	4.5	3.6
25 to 30 months	6.9	6.5	7.2	6.8
31 months	1.1	0.5	1.2	1.3
32 months	76.1	69.4	74.1	81.5
Covered by private health insurance:				
Less than 32 months	34.1	56.4	34.2	22.4
No months	10.2	24.2	9.8	3.5
1 to 6 months	3.4	6.9	3.3	1.6
7 to 12 months	3.6	5.9	4.0	2.1
13 to 18 months	2.7	3.3	3.0	2.1
19 to 24 months	5.0	6.7	5.0	4.1
25 to 30 months	8.2	9.0	8.2	7.7
31 months	1.0	-	1.0	1.3
32 months	65.9	43.6	65.8	77.6
Covered by Medicaid:				
Less than 32 months	96.4	90.1	97.0	99.1
No months	91.4	79.8	91.7	97.1
1 to 6 months	1.5	2.7	1.6	0.8
7 to 12 months	1.3	2.7	1.4	-
13 to 18 months	0.6	1.2	0.6	-
19 to 24 months	0.7	1.6	0.9	-
25 to 30 months	0.7	1.9	0.7	-
31 months	-	-	-	-
32 months	3.6	9.9	3.0	0.9

Figure 4.
Health Insurance Coverage, by Years of School Completed: 1990 to 1992



spent at least 1 month with Medicaid coverage, compared to 8 percent of those who were high school graduates (no college). Non-high school graduates (10 percent) were also more likely to have had continuous Medicaid coverage than high school graduates, no college (3 percent). Persons who had not completed high school constituted 21 percent of the population 18 years old and over, yet they accounted for almost one-half (49 percent) of those with at least 1 month of Medicaid coverage.

Type of Residence and Region

Persons living in suburban areas[4] were more likely to have continuous health insurance coverage over the 32-month period than persons living in central cities or outside of metropolitan areas. (See table F.) About one-fifth (22 percent) of persons living in suburban areas experienced 1 or more months without health insurance coverage, compared with 28 percent for both those living in central cities and those living outside metropolitan areas. Medicaid coverage was more prevalent in central cities. Eighteen percent of central city

[4]The term "suburban areas" refers to portions of metropolitan areas outside of central cities.

Table F. **All Persons, by Residence, Region and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	Central city	Suburbs	Outside of metro-politan areas	Northeast	Midwest	South	West
All persons (in thousands)	68,170	111,198	56,444	47,959	62,050	79,006	46,795
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance:							
Less than 32 months	28.1	21.9	28.3	18.4	20.8	31.8	27.2
No months	4.4	2.9	4.9	2.0	2.8	5.5	4.1
1 to 6 months	2.6	2.1	2.9	1.5	1.4	3.6	2.7
7 to 12 months	3.2	2.6	3.6	1.6	2.4	4.3	3.1
13 to 18 months	3.0	2.2	3.3	1.8	2.6	3.1	3.1
19 to 24 months	5.4	4.2	5.1	3.9	3.5	6.0	5.1
25 to 30 months	8.4	6.9	7.6	6.8	6.7	8.3	7.8
31 months	1.2	1.1	1.0	0.8	1.4	1.0	1.3
32 months	71.9	78.1	71.7	81.6	79.2	68.2	72.8
Covered by private health insurance:							
Less than 32 months	42.6	28.9	39.6	28.6	29.5	42.8	37.9
No months	15.9	7.7	14.1	9.1	9.9	14.2	12.1
1 to 6 months	4.4	2.8	4.4	2.6	2.6	4.9	3.9
7 to 12 months	4.4	2.9	4.5	2.4	3.1	4.7	4.2
13 to 18 months	3.1	2.2	3.0	2.0	2.4	2.9	3.5
19 to 24 months	5.5	4.6	4.8	4.5	3.5	6.1	5.1
25 to 30 months	8.4	7.6	7.7	7.2	6.7	9.1	7.9
31 months	0.9	1.0	0.9	0.7	1.2	0.8	1.2
32 months	57.4	71.1	60.4	71.4	70.5	57.2	62.1
Covered by Medicaid:							
Less than 32 months	91.9	97.4	95.2	95.1	95.9	95.3	94.8
No months	82.3	92.0	85.9	88.8	88.5	86.9	86.7
1 to 6 months	2.9	2.1	2.8	2.0	1.9	3.0	3.0
7 to 12 months	2.1	1.3	2.4	1.4	1.8	2.0	1.7
13 to 18 months	1.2	0.6	1.1	0.7	1.0	1.0	1.0
19 to 24 months	1.6	0.6	1.6	1.0	1.2	1.2	1.1
25 to 30 months	1.5	0.7	1.4	1.0	1.2	1.1	1.2
31 months	-	-	-	-	-	-	-
32 months	8.1	2.6	4.8	4.9	4.1	4.7	5.2

residents spent at least 1 month with Medicaid coverage, compared with 14 percent for those not living in metropolitan areas and 8 percent for those living in suburban areas.

Persons residing in the South and West were more likely to experience 1 or more months without health insurance coverage than those living in the Northeast or Midwest. The percentages of persons with 1 or more months without health insurance coverage were 32 percent in the South, 27 percent in the West, 21 percent in the Midwest, and 18 percent in the Northeast. Perhaps the higher non-coverage rates in the South and West can be attributed to higher concentrations of Blacks in the South and persons of Hispanic origin in the West. These groups had higher non-coverage rates than Whites (not of Hispanic origin).

Months With Low Income

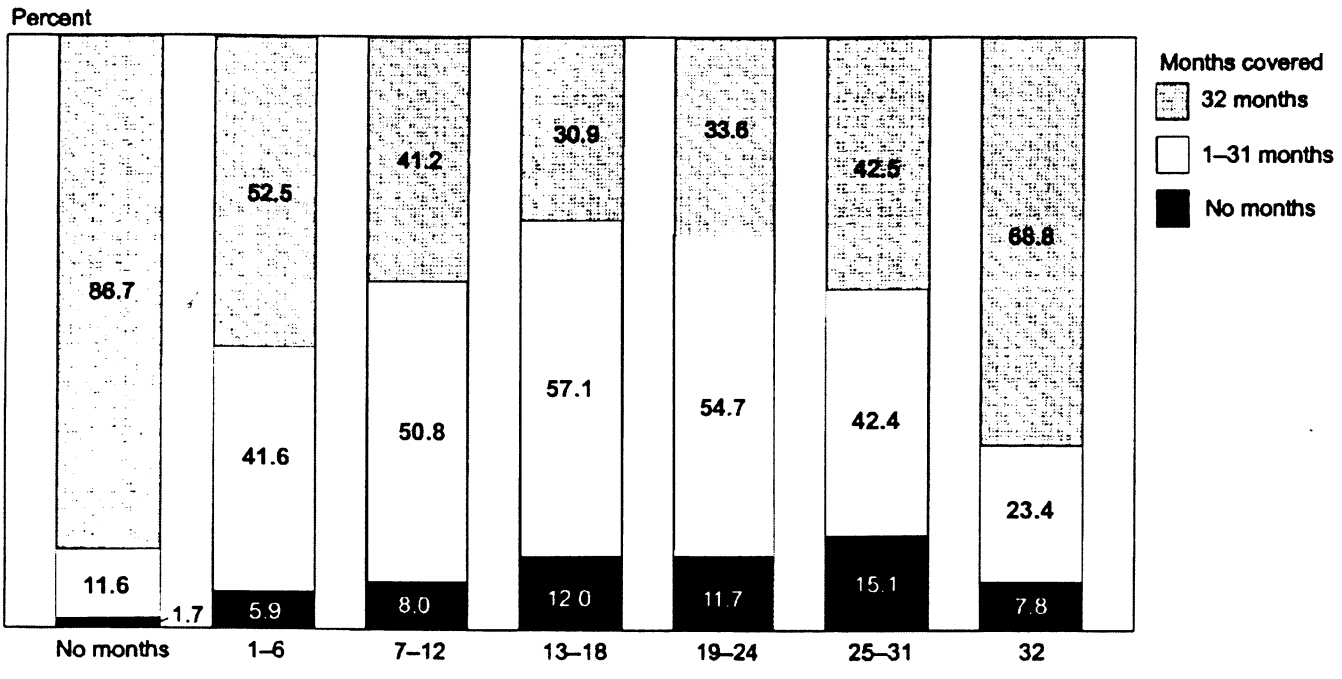
One way to examine differences in economic status between individuals over time is to characterize those persons by the number of months in which the person or family income was below their monthly poverty threshold. As would be expected, persons living above the poverty line (no low-income months) were much more likely to have continuous health insurance coverage than persons who experienced 1 or more low-income months. Only 13 percent of those above the poverty line spent 1 or more months without health insurance, compared with over one-half (52 percent) of those with 1 or more low-income months. (See table G.)

However, the relationship between lack of health insurance coverage and months with low income is not a linear one. Those with 13 to 24 low-income months were more likely to experience 1 or more months without health insurance coverage (68 percent) than any other group, and persons with 32 low-income months were less likely to lack health insurance for at least 1 month (31 percent) than those with 1 to 6 low-income months (48 percent). (See figure 5.) The higher health insurance coverage rates of those with more low-income months is attributable to their level of Medicaid coverage. Seventy-eight percent of those with 32 low-income months were covered by Medicaid for at least 1 month; 56 percent were covered every month. The comparable figures for those with 25 to 31 low-income months were 58 and 25 percent, respectively.

Table G. **All Persons, by Months With Low Income and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	No months	1 low-income month or more								
		Total	1 to 12 months			13 to 24 months			25 to 31 months	32 months
			Total	1 to 6 months	7 to 12 months	Total	13 to 18 months	19 to 24 months		
All persons (in thousands)	162,586	73,225	43,993	32,057	11,936	12,667	6,975	5,692	7,249	9,317
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution										
Covered by private or government health insurance:										
Less than 32 months	13.3	51.8	50.6	47.5	58.8	67.9	69.1	66.4	57.5	31.2
No months	1.7	8.4	6.5	5.9	8.0	11.9	12.0	11.7	15.1	7.8
1 to 6 months	0.9	5.8	5.0	4.4	6.6	8.6	8.9	8.2	9.2	3.1
7 to 12 months	1.3	6.9	6.2	4.9	9.7	11.0	11.1	10.9	7.1	4.2
13 to 18 months	1.0	6.4	6.7	5.9	8.7	9.1	9.4	8.8	5.4	2.1
19 to 24 months	2.3	10.1	10.4	9.9	12.0	13.3	13.7	12.7	8.2	6.0
25 to 30 months	5.3	12.4	13.9	14.3	12.8	12.0	12.7	11.3	11.3	6.8
31 months	0.8	1.8	1.9	2.2	1.1	2.0	1.3	2.9	1.2	1.3
32 months	86.7	48.2	49.4	52.5	41.2	32.1	30.9	33.6	42.5	68.8
Covered by private health insurance:										
Less than 32 months	19.4	70.9	58.2	54.1	69.1	85.9	83.3	88.9	90.6	94.9
No months	4.1	28.4	12.3	10.7	16.6	32.5	27.1	39.0	56.8	76.3
1 to 6 months	1.3	8.8	6.2	5.0	9.5	13.1	11.9	14.7	16.3	9.0
7 to 12 months	1.8	8.0	7.4	5.7	11.9	13.8	13.6	14.0	7.1	3.8
13 to 18 months	1.3	5.6	6.3	5.4	8.7	8.3	10.0	6.2	3.0	0.9
19 to 24 months	3.2	8.8	10.7	10.3	11.6	8.8	9.7	7.7	4.2	3.2
25 to 30 months	6.9	10.1	13.5	14.8	10.2	8.3	10.4	5.8	3.2	1.7
31 months	0.8	1.2	1.7	2.2	0.5	1.1	0.7	1.6	-	-
32 months	80.6	29.1	41.8	45.9	30.9	14.1	16.7	11.1	9.4	5.1
Covered by Medicaid:										
Less than 32 months	98.9	87.3	97.6	98.1	96.2	90.7	94.7	85.7	74.7	44.4
No months	96.6	67.9	84.8	88.6	74.4	57.9	65.3	48.8	42.0	21.9
1 to 6 months	1.2	5.4	5.1	4.2	7.5	8.4	8.7	7.9	5.8	2.8
7 to 12 months	0.5	4.6	3.7	2.6	6.7	7.4	7.1	7.7	5.2	4.6
13 to 18 months	-	2.6	1.3	0.8	2.6	6.7	6.0	7.5	3.8	2.1
19 to 24 months	-	3.2	1.5	0.9	3.3	5.8	4.5	7.4	6.5	5.3
25 to 30 months	-	3.1	1.0	0.8	1.5	4.0	2.8	5.5	10.5	6.4
31 months	-	0.5	-	-	-	0.6	-	0.9	0.8	1.4
32 months	1.1	12.7	2.4	1.9	3.8	9.3	5.3	14.3	25.3	55.6

Figure 5.
Health Insurance Coverage, by Months With Low Income: 1990 to 1992



Income-to-Poverty Ratios

Income-to-poverty ratios represent another way of characterizing individuals by their relative economic status. These ratios are computed by summing the person or family income over the entire 32-month period, and dividing this total by the summed monthly poverty thresholds. Thus, a ratio of under 1.0 indicates that an individual's family income over the 32-month period was less than the sum of that family's poverty threshold over that time. In the 32-month period covered here, 9 percent of persons had an income-to-poverty ratio less than 1.0. About one-half (49 percent) of these persons lacked continuous health insurance, and 11 percent were not covered at all during the 32-month period, compared to 23 and 3 percent, respectively, for all others. (See table H.)

Those with lower income-to-poverty ratios were slightly more likely to be covered by Medicaid. Seventy-seven percent of all persons with ratios less than 0.5 were covered by Medicaid for at least 1 month. The comparable proportion for those with income-to-poverty ratios between 0.5 and 0.99 was 60 percent.

As would be expected, there is a strong correlation between income-to-poverty ratios and the likelihood of continuous health insurance. The percentage of persons with health insurance for the entire 32 months rose from about 53 percent for those with ratios under 2.0 to 93 percent for those with ratios of 6.0 and over. Differences in continuous private health insurance coverage by income-to-poverty ratio are even more dramatic, from 8 percent for persons with ratios under 1.0 to 91 percent for those with ratios of 6.0 or more. (See figure 6.)

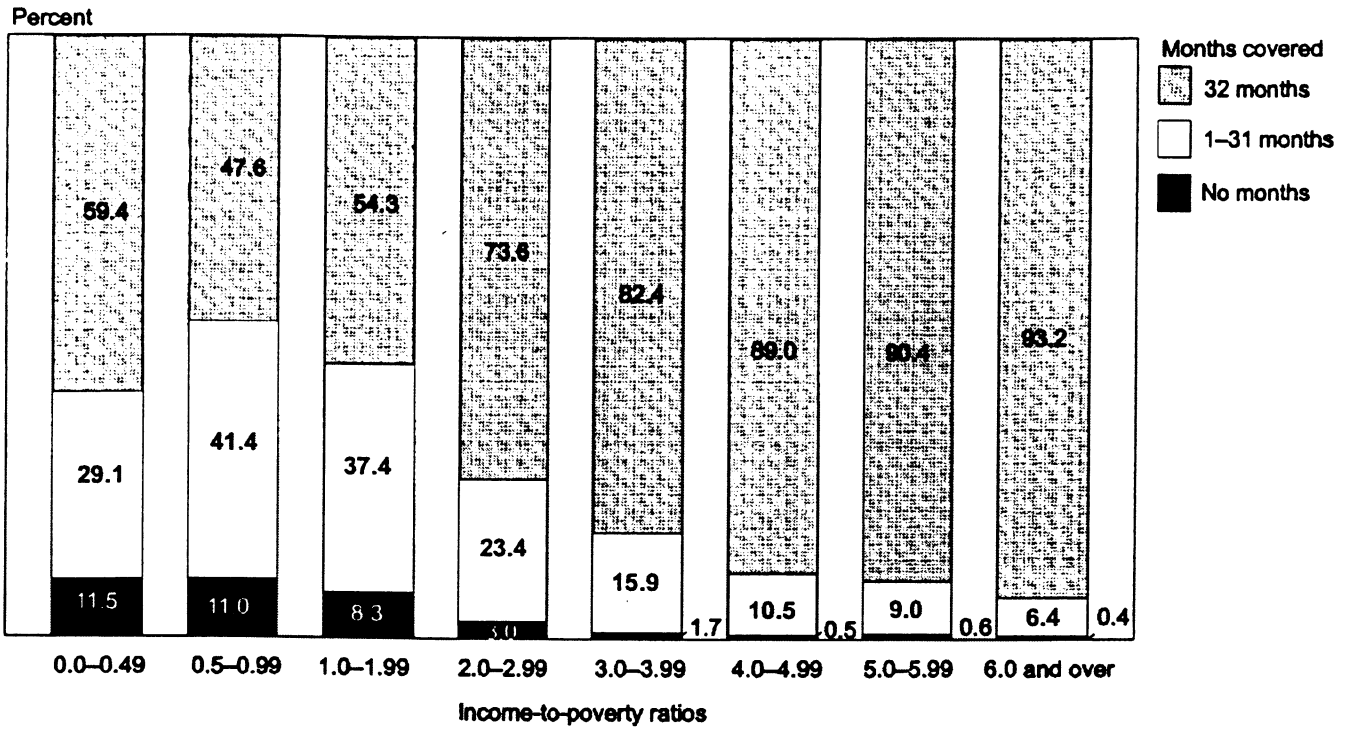
Type of Family

Persons who were members of married-couple families the entire 32-month period were less likely to spend 1 or more months without health insurance than persons who did not spend any time in this type of family.

Table H. **All Persons, by Income-to-Poverty Ratios and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	Total	Income-to-poverty ratio								
		Less than 1.0			1.0 to 1.99	2.0 to 2.99	3.0 to 3.99	4.0 to 4.99	5.0 to 5.99	6.0 and over
		Total	Less than .5	.5 to .99						
All persons (in thousands)	235,811	22,252	5,971	16,281	45,988	52,132	40,534	28,553	16,406	29,947
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance:										
Less than 32 months	25.3	49.2	40.6	52.4	45.7	26.4	17.6	11.0	9.6	6.8
No months	3.8	11.1	11.5	11.0	8.3	3.0	1.7	0.5	0.6	-
1 to 6 months	2.4	6.5	4.4	7.3	5.3	2.2	0.9	-	-	-
7 to 12 months	3.0	6.5	5.1	7.0	6.5	3.2	1.4	0.8	0.7	-
13 to 18 months	2.7	4.8	2.8	5.6	5.8	2.8	1.6	1.0	0.7	-
19 to 24 months	4.8	9.4	6.8	10.3	8.3	4.9	3.9	2.1	1.4	0.9
25 to 30 months	7.5	9.5	8.6	9.9	10.5	8.9	6.6	5.3	4.6	3.8
31 months	1.1	1.4	1.4	1.4	1.0	1.2	1.5	0.8	1.2	0.6
32 months	74.7	50.8	59.4	47.6	54.3	73.6	82.4	89.0	90.4	93.2
Covered by private health insurance:										
Less than 32 months	35.4	92.0	94.7	90.9	61.8	33.5	21.6	13.1	12.3	8.8
No months	11.6	60.7	77.1	54.6	19.4	5.8	2.8	1.2	1.4	0.8
1 to 6 months	3.6	12.3	9.3	13.5	7.5	2.8	1.2	0.8	0.5	-
7 to 12 months	3.7	6.7	4.1	7.6	8.4	4.1	1.8	1.0	0.9	-
13 to 18 months	2.7	3.0	0.7	3.8	6.0	3.3	1.6	0.9	0.8	-
19 to 24 months	4.9	5.2	2.2	6.3	8.9	6.1	4.5	2.4	1.9	1.2
25 to 30 months	7.9	3.6	1.3	4.5	10.9	10.1	8.1	6.1	5.7	5.0
31 months	1.0	-	-	0.6	0.6	1.3	1.5	0.8	1.2	0.6
32 months	64.6	8.0	5.3	9.1	38.2	66.5	78.4	86.9	87.7	91.2
Covered by Medicaid:										
Less than 32 months	95.3	65.0	47.6	71.4	95.1	98.6	99.6	99.7	99.9	99.9
No months	87.7	35.5	22.7	40.3	79.4	94.1	97.2	97.8	99.0	99.3
1 to 6 months	2.5	5.5	3.3	6.3	5.4	2.3	1.2	1.1	0.5	0.5
7 to 12 months	1.8	5.6	4.4	6.0	4.2	1.3	-	-	-	-
13 to 18 months	0.9	4.2	2.7	4.7	1.9	-	-	-	-	-
19 to 24 months	1.1	6.3	5.9	6.4	2.1	-	-	-	-	-
25 to 30 months	1.1	7.0	7.0	7.1	1.7	-	-	-	-	-
31 months	-	0.9	1.5	0.6	-	-	-	-	-	-
32 months	4.7	35.0	52.4	28.6	4.9	1.4	-	-	-	-

Figure 6.
Health Insurance Coverage, by Income-to-Poverty Ratios: 1990 to 1992



(See table I.) However, persons spending part (but not all) of the 32-month period in a married-couple family were more likely to lack insurance coverage for 1 or more months than those who spent no time in a married-couple family or those who spent all 32 months in such a family. The proportions of persons without continuous health insurance coverage were 20 percent for those who spent the entire period in a married-couple family, 31 percent for those who spent no time in a married-couple family, and 44 percent for those who spent some (but not all) months in this type of family.

The reliance on Medicaid of families with a female householder, no husband present, with related children, is evident in table J. Forty-one percent of persons who spent the entire 32 months in this type of family were covered by Medicaid for at least 1 month; 24 percent were covered for the entire period. In contrast, only 7 percent of those that spent none of the period in this type of family were covered by Medicaid for at least 1 month.

Only 65 percent of persons that spent the entire period in a family with a female householder, no husband present, with related children, were covered by private health insurance for at least 1 month, compared with 92 percent for those that spent none of the 32-month period in this type of family. For those who spent all 32 months in a married-couple family, private health insurance coverage for at least 1 month was 93 percent.

Employment Status

The relationship between health insurance coverage and employment is an important one, given the fact that such a large proportion of total health insurance is derived through an employer (either as a primary policyholder or as a dependent). In order to examine the relationship between health insurance coverage and employment status, wage and salary workers 18 to 64 years old were separated into three groups: 1) those who worked full-time for the entire period, 2) those who worked part-time for the entire period, and 3) those with one or more job interruptions. Workers were characterized by their private or government health coverage, their private coverage, and their own employer-provided coverage. This latter type of coverage is a subset of private health insurance coverage.

Eighty-eight percent of all full-period, full-time workers were covered by health insurance for the entire period and 67 percent were covered through their own employer-provided plans (table K). There was no difference between the proportion of male and female full-period, full-time workers who were continuously covered by health insurance. However, there was a significant difference in the continuous health insurance coverage rates of White and Black full-period, full-time workers. Hispanic-origin workers in this category were less likely than Whites (not of Hispanic origin) or Blacks to have continuous coverage; the comparable rates for these groups are 70, 90, and 78 percent, respectively.

Table I. **All Persons, by Number of Months in a Married-Couple Family With Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	No months	Member of married-couple family				
		1 to 30 months			31 to 32 months	
		Total	1 to 18 months	19 to 30 months	Total	32 months
All persons (in thousands)	58,903	23,125	11,857	11,268	153,783	153,032
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution						
Covered by private or government health insurance:						
Less than 32 months	31.1	43.5	43.1	43.9	20.3	20.2
No months	5.2	2.9	3.1	2.7	3.4	3.4
1 to 6 months	3.4	4.0	2.9	5.1	1.8	1.8
7 to 12 months	4.1	5.1	4.7	5.6	2.3	2.3
13 to 18 months	3.1	5.7	5.9	5.5	2.1	2.1
19 to 24 months	5.7	9.6	9.6	9.7	3.6	3.6
25 to 30 months	8.4	13.6	13.9	13.2	6.2	6.1
31 months	1.1	2.5	2.9	2.0	0.9	0.9
32 months	68.9	56.5	56.9	56.1	79.7	79.8
Covered by private health insurance:						
Less than 32 months	53.3	53.7	54.5	53.0	25.8	25.6
No months	23.5	10.6	11.8	9.4	7.2	7.2
1 to 6 months	5.7	6.4	5.7	7.2	2.4	2.4
7 to 12 months	5.4	6.8	7.3	6.3	2.6	2.6
13 to 18 months	3.4	5.6	6.0	5.2	2.0	2.0
19 to 24 months	6.1	8.5	8.4	8.6	3.9	3.9
25 to 30 months	8.5	13.7	13.3	14.1	6.7	6.7
31 months	0.7	2.1	2.0	2.2	0.9	0.9
32 months	46.7	46.3	45.5	47.0	74.2	74.4
Covered by Medicaid:						
Less than 32 months	86.7	96.1	94.5	97.8	98.5	98.5
No months	75.9	80.2	79.6	80.8	93.3	93.4
1 to 6 months	2.4	5.0	3.9	6.2	2.2	2.2
7 to 12 months	2.3	3.6	2.8	4.5	1.3	1.3
13 to 18 months	1.4	2.3	2.4	2.1	0.5	0.5
19 to 24 months	2.0	2.5	2.5	2.5	0.6	0.5
25 to 30 months	2.2	2.3	2.9	1.6	0.6	0.6
31 months	-	-	-	-	-	-
32 months	13.3	3.9	5.5	2.2	1.5	1.5

Full-period, part-time workers were less likely than their full-time counterparts to have continuous health insurance coverage. Twenty-two percent of these workers lacked continuous coverage, compared with 13 percent of full-period, full-time workers.

There was a major difference between full- and part-time workers in their levels of own employer-provided coverage. Of part-time workers with continuous coverage, only 19 percent were covered through their own employer-provided plans. The comparable figure for full-time workers was 67 percent. The difference between the private and employer-provided health insurance rates for this group implies that many of these workers are covered as dependents (78 percent of full-period, part-time workers were women).

Less than one-half (38 percent) of workers with one or more job interruptions experienced 1 or more months without health insurance coverage. Men in this category were more likely than women to lack health coverage for at least 1 month (46 to 33 percent), and men in this category were more likely than women to be covered continuously by their own employer-provided plan (22 to 11 percent).

Younger full-period, full-time workers were less likely than their older counterparts to have been covered by health insurance continuously. Forty-two percent of full-period, full-time workers 18 to 21 years old spent 1 or more months without health insurance. (See table L.) For workers 22 years old and over, comparable percentages ranged from 10 percent (workers 35 to 44 years old) to 23 percent (workers 22 to 24 years old).

Fifty-three percent of younger workers (those 18 to 24 years old) with job interruptions spent 1 or more months without health insurance coverage. For workers 25 years old and over, comparable percentages ranged from 24 percent (workers 45 to 64 years old) to 45 percent (workers 25 to 34 years old).

Table J. **All Persons, by Number of Months in a Family With a Female Householder, No Husband Present, With Related Children Under 18 Years, and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	No months	Member of family with female householder				
		1 to 30 months			31 to 32 months	
		Total	1 to 18 months	19 to 30 months	Total	32 months
All persons (in thousands)	195,499	15,060	9,984	5,076	25,252	25,052
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution						
Covered by private or government health insurance:						
Less than 32 months	22.3	47.1	49.5	42.2	35.0	34.9
No months	3.5	3.8	4.2	3.0	5.8	5.8
1 to 6 months	2.1	4.5	4.5	4.4	3.5	3.5
7 to 12 months	2.6	6.0	6.1	5.9	4.7	4.7
13 to 18 months	2.4	5.4	5.9	4.4	3.5	3.4
19 to 24 months	4.1	10.9	11.6	9.5	6.4	6.4
25 to 30 months	6.7	14.2	14.7	13.3	9.8	9.9
31 months	1.0	2.2	2.5	1.7	1.3	1.3
32 months	77.7	52.9	50.5	57.8	65.0	65.1
Covered by private health insurance:						
Less than 32 months	29.8	61.4	63.0	58.2	63.4	63.5
No months	8.2	16.5	15.4	18.8	34.9	35.1
1 to 6 months	2.9	8.0	8.0	8.1	6.8	6.8
7 to 12 months	3.1	8.2	7.8	8.9	6.1	6.0
13 to 18 months	2.4	5.5	6.3	4.0	3.0	2.9
19 to 24 months	4.6	8.7	9.7	6.7	5.1	5.2
25 to 30 months	7.6	12.7	13.4	11.2	6.9	6.9
31 months	1.0	1.7	2.3	-	0.5	0.5
32 months	70.2	38.6	37.0	41.8	36.6	36.5
Covered by Medicaid:						
Less than 32 months	97.9	93.1	94.7	89.8	76.5	76.3
No months	92.6	70.5	71.2	69.0	59.6	59.5
1 to 6 months	2.1	6.6	7.3	5.1	3.2	3.2
7 to 12 months	1.3	5.0	6.0	3.1	3.4	3.3
13 to 18 months	0.5	3.4	4.0	2.4	2.6	2.6
19 to 24 months	0.7	3.9	3.4	5.0	3.1	3.1
25 to 30 months	0.6	3.2	2.7	4.2	3.8	3.8
31 months	-	-	-	1.0	0.7	0.7
32 months	2.1	6.9	5.3	10.2	23.5	23.7

Participation in Major Assistance Programs

As defined here, the term "major assistance programs" refers to the following types of means-tested assistance: Aid to Families with Dependent Children (AFDC), General Assistance, Supplemental Security Income (SSI), Food Stamps, and public or rental housing assistance. About one-half (47 percent) of those who participated in a major assistance program at some point over the 32-month period lacked continuous health insurance, and 6 percent were not covered by any type of health insurance for the entire 32 months. (See table M.) The comparable proportions for those who did not participate in these programs were 21 and 3 percent, respectively.

As a result of their higher level of Medicaid coverage, persons spending 25 to 32 months as a major assistance program participant were about twice as likely to have continuous health insurance coverage than persons with 13 to 24 months of participation. Sixty-nine percent of persons participating in assistance programs for 25 to 32 months were continually covered by health insurance, compared with 34 percent for persons with between 13 and 24 months of participation. Persons with 32 months of assistance participation were only slightly less likely to have continuous health insurance as those who did not participate at all in these programs. Sixty-three percent of the persons who participated in a major assistance program in each of the 32 months were covered by Medicaid for this entire period.

SPELLS OF NON-COVERAGE

Using longitudinal data, it is possible to estimate the distribution of lengths of spells without health insurance coverage for individuals by various characteristics.

Technical note. A technique known as survival analysis was used to derive distributions of spell duration, as well as the resulting estimates of

Table K. **Wage and Salary Workers With 32 Months of Continuous Health Insurance Coverage, by Sex, Race, Hispanic Origin, and Labor Force Status: 1990 to 1992**

[Based on workers 18 to 64 years old. Numbers in thousands]

Health insurance coverage	Both sexes	Male	Female	White		Black	Hispanic origin[1]	Not of Hispanic origin
				Total	Not of Hispanic origin			
Worked Full-Period, Full-Time								
All persons	53,372	32,435	20,937	46,172	43,437	5,406	3,228	50,144
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance	87.5	87.6	87.4	88.7	90.0	78.3	70.4	88.6
Covered by private health insurance	86.9	86.8	87.1	88.2	89.5	77.0	69.3	88.1
Covered by employer-provided health insurance	67.2	71.0	61.3	68.3	69.3	59.9	55.5	68.0
Worked Full-Period, Part-Time								
All persons	4,803	1,080	3,723	4,186	3,941	479	259	4,544
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance	77.9	67.3	81.0	81.5	83.7	53.6	45.4	79.7
Covered by private health insurance	74.3	60.3	78.4	78.6	81.0	44.2	39.9	76.3
Covered by employer-provided health insurance	19.3	20.3	19.1	20.3	20.6	14.5	14.5	19.6
Workers With One or More Work Interruptions								
All persons	75,635	29,861	45,773	62,887	57,214	10,052	6,662	68,973
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance	62.0	54.1	67.2	63.6	65.9	53.2	41.3	64.0
Covered by private health insurance	52.4	46.6	56.2	56.2	59.0	31.2	27.5	54.8
Covered by employer-provided health insurance	14.9	21.6	10.6	15.6	16.1	12.3	9.9	15.4

[1]Persons of Hispanic origin may be of any race.

median spell duration without health insurance. These analyses are based on data for persons observed over a 32-month period of the 1990 panel and a 28-month period of the 1987 panel. Only those persons who were present during the entire period were considered. A spell is defined as a period without health insurance coverage, which was preceded by at least 1 month or more with coverage. The spell is observed either until it ends or until it is right-censored. Since an individual must have completed interviews for all months of the panel in order to be included in the sample, right censoring occurs only if an individual is still participating the last month of the panel.

The probability of non-coverage in month t given that the person was covered in the beginning of that month, is defined as

$$h(t) = \frac{\text{exits}(t)}{\text{prog}(t) - (\text{rcens}(t)/2)}$$

where exits (t) denotes the number of spell exits in month t, prog (t) is the number of spells that were in progress in the beginning of month t, and rcens (t) is the number of spells which were right-censored in month t.[5]

The survival rate in month t, which is the probability that a spell lasts longer than t months, can then be written as

$$S(t) = \prod_{k=1}^{t} (1 - h(k)).$$

The survival function evaluated at t gives the probability that a non-covered entrant is still not covered t time periods later. The median survival time or spell duration M can be estimated by linear

[5]It is assumed that a spell exit occurs in month t if no coverage was observed in month t and coverage was observed in month t+1. Also, it is assumed that a spell is exposed to the risk of exiting for an average of one-half of a month before right-censoring occurs.

Table L. **Wage and Salary Workers With 32 Months of Continuous Health Insurance Coverage, by Age, and Labor Force Status: 1990 to 1992**

[Based on workers 18 to 64 years old. Numbers in thousands]

Health insurance coverage	18 to 21 years	22 to 24 years	25 to 34 years	35 to 44 years	45 to 64 years
Worked Full-Period, Full-Time					
All persons	1,875	3,286	18,251	18,521	16,153
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance	58.5	77.1	83.8	90.0	89.4
Covered by private health insurance	57.8	76.6	83.0	89.5	89.0
Covered by employer-provided health insurance	39.5	60.3	61.9	64.6	64.4
Worked Full-Period, Part-Time					
All persons	644	362	1,196	1,519	1,948
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance	67.6	44.4	76.7	80.3	82.8
Covered by private health insurance	65.1	42.8	73.6	76.5	78.6
Covered by employer-provided health insurance	4.9	12.2	18.5	17.9	19.9
Workers With One or More Work Interruptions					
All persons	10,684	6,727	22,420	16,055	26,912
Percent Distribution	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Covered by private or government health insurance	50.5	41.5	55.3	64.3	75.8
Covered by private health insurance	43.8	30.3	46.2	57.7	63.8
Covered by employer-provided health insurance	2.8	9.3	13.0	16.3	19.4

Note: A person was employed part-time in a given month if he/she worked at least 1 week during that month and less than 35 hours during a usual week of employment.

interpolation.[6] [7] Let [t,t+1) be the interval such that $S(t) >= .5$ and $S(t+1) < .5$, therefore,

$$\hat{M} = t + \frac{S(t) - 1/2}{S(t) - S(t+1)}$$

Since a spell must be preceded by at least 1 month of health insurance coverage, left-censored spells of non-coverage are not included in this analysis. Observations are left-censored when the beginning of a spell of interest is not observed, that is, a spell began at some time before the reference period.

While dynamic estimates may be unbiased for spells observed at the beginning of a reference period, there remains concern about the deletion of left-censored spells from such analyses. There may be particular characteristics of persons, associated with the experience of very long spells, that precludes their inclusion in the sample. For example, in our analysis, which is restricted to persons in the sample the entire period, selecting spells with observed beginnings leads to a sample without those persons who were without health insurance from the beginning of the panel. Persons with chronically long spells without coverage, or persons who were never covered (e.g. those working in an industrial sector that has traditionally not had health insurance benefits) may not be proportionately represented in a sample restricted to spells with observed beginnings. Studies of spells with observed beginnings might result in reasonable estimates of spell distribution and median duration *for such spells with observed beginnings*, but it might result in downward biased estimates of median duration of *all spells*.

Median Spell Duration

A median spell duration of 6.0 months without health insurance was observed for persons (losing health insurance after February 1990) over the 32-month period of the 1990 panel. (See table N.) In other words, of all spells without health insurance (experienced by 25 percent of persons), half of them lasted for 6.0 months or longer. This estimate was significantly longer than the median spell duration of 4.2 months of non-coverage for

[6] Resulting median spell durations are shorter than those based on a sample of spells at a given point in time. Cross-sectional estimates of median spell durations can be upwardly biased since longer spells are more likely to be included in a sample at a point in time than shorter spells.

[7] LEE, E.T. (1980) Statistical Methods for Survival Data Analysis, Wadsworth, Inc., Belmont, CA.

Table M. **All Persons, by Receipt of Major Assistance Programs and Health Insurance Coverage: 1990 to 1992**

Health insurance coverage	No months in program	Months participating in an assistance program					
		Total	1 to 12 months		13 to 24 months	25 to 32 months	
			Total	1 to 6 months		Total	32 months
All persons (in thousands)	197,527	38,284	13,116	7,938	5,898	19,270	15,484
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
Percent Distribution							
Covered by private or government health insurance:							
Less than 32 months	21.1	46.6	61.1	57.8	66.3	30.6	23.9
No months	3.3	6.4	8.2	7.3	7.4	4.9	4.5
1 to 6 months	1.9	5.2	8.8	9.9	5.3	2.8	2.2
7 to 12 months	2.3	6.5	9.7	8.3	9.9	3.3	2.8
13 to 18 months	2.1	5.7	7.8	7.5	9.8	3.0	2.2
19 to 24 months	3.9	9.2	11.5	9.0	16.5	5.3	4.5
25 to 30 months	6.7	11.7	14.1	14.8	14.8	9.2	6.4
31 months	1.0	1.8	1.0	1.0	2.6	2.2	1.2
32 months	78.9	53.4	38.9	42.2	33.7	69.4	76.1
Covered by private health insurance:							
Less than 32 months	26.3	82.5	69.5	64.7	83.1	91.3	91.5
No months	5.1	45.0	21.1	17.1	31.5	65.4	69.8
1 to 6 months	2.2	11.2	10.0	8.7	14.7	11.0	8.7
7 to 12 months	2.8	8.6	9.0	8.4	14.0	6.6	5.6
13 to 18 months	2.3	4.4	6.9	6.9	7.3	1.8	1.6
19 to 24 months	4.6	6.5	9.8	8.6	9.2	3.4	3.1
25 to 30 months	8.2	6.2	11.4	13.5	5.8	2.7	2.5
31 months	1.0	0.7	1.3	1.6	0.6	-	-
32 months	73.7	17.5	30.5	35.3	16.9	8.7	8.5
Covered by Medicaid:							
Less than 32 months	99.8	72.2	99.2	99.4	95.7	46.6	37.4
No months	97.4	37.5	62.3	69.8	40.6	19.6	18.5
1 to 6 months	1.4	8.0	16.5	18.6	7.5	2.4	2.0
7 to 12 months	0.5	8.3	13.3	6.1	10.3	4.3	3.2
13 to 18 months	-	4.8	3.3	2.4	13.7	3.2	2.5
19 to 24 months	-	6.3	2.8	1.7	18.0	5.1	4.2
25 to 30 months	-	6.3	1.1	0.7	5.4	10.1	5.9
31 months	-	1.0	-	-	-	1.9	1.0
32 months	-	27.8	0.8	0.6	4.3	53.4	62.6

Note: Major assistance programs refer to the following: Aid to Families with Dependent Children (AFDC), General Assistance, Supplemental Security Income (SSI), food stamps and public or subsidized rental housing.

the 1987 panel.[8] Figure 7 shows the distribution of spells without health insurance by spell length. The sharp increase in the final category represents all spells that had not ended within 2 years.

Education. Attaining a high level of education appears to have a major impact on how long someone goes without health insurance. For example, the median spell duration of 7.6 months without health insurance coverage for those without a high school diploma was longer than the 4.0 months of non-coverage for those with at least 1 year of college. High school (but not college) graduates also had a longer median spell duration of non-coverage (7.1 months) than those with at least 1 year of college. No statistical difference was observed between median spells for high school graduates and non-graduates.

Age and Employment Status. Generally, comparisons of median spell durations of non-coverage between age groups are not statistically different. It was observed, however, that the median spell duration of 7.4 months without coverage for those between the ages of 35 and 44 was much longer than the 4.8-month spell duration for children less than 18 years of age and the 5.4-month spell duration for those 25 to 34 years old. The difference between children less than 18 and persons 25 to 34 was not significant.

As expected, full-time workers had a shorter median spell duration without health insurance than those unemployed or not in the labor force. Their median spell

[8]Estimates from the 1987 panel are based on a 28-month interview period. Estimating median spell durations over a similar time period of 28 months yields a 5.8-month spell duration for the 1990 panel, which was not significantly different from the 6.0-month spell duration.

Table N. **Spells Without Health Insurance Coverage, by Selected Characteristics: 1987 and 1990 Panels**

Characteristic	Median spell duration	
	1990 panel	1987 panel
All spells	6.0	4.2
Race and Hispanic Origin		
White	5.4	4.2
Not of Hispanic origin	4.9	4.1
Black	7.3	4.0
Hispanic[1]	7.2	4.5
Not of Hispanic origin	5.7	4.2
Age		
Under 18 years	4.8	4.0
18 to 24 years	6.4	4.0
25 to 34 years	5.4	5.0
35 to 44 years	7.4	4.0
45 to 64 years	6.4	7.1
65 years and over	(B)	(B)
Sex		
Male	6.6	4.7
Female	5.5	4.0
Educational Attainment (persons 18 years and over)		
Less than 4 years of high school	7.6	7.1
High school graduate, no college	7.1	5.3
1 or more years of college	4.0	3.8
Residence		
Metropolitan	5.8	4.0
Central city	6.2	3.9
Suburbs	5.4	4.5
Nonmetropolitan	6.7	5.5
Region		
Northeast	5.1	3.8
Midwest	4.7	3.9
South	7.2	5.8
West	5.3	4.8
Employment Status (persons 18 years and over)		
Employed full-time	4.6	4.0
Employed part-time	6.8	5.5
Unemployed	7.8	6.3
Not in labor force	7.2	5.6
Receipt of Public Assistance		
Received public assistance	7.4	4.5
Did not receive public assistance	5.7	4.1
Poverty Status		
Below poverty	7.2	4.8
Above poverty	4.9	4.0

[1]Persons of Hispanic origin may be of any race.

Note: These estimates represent those persons observed during the 32-month period of the 1990 panel and 28-month period of the 1987 panel.

durations were 4.6 months, 7.8 months, and 7.2 months, respectively. When comparing median spell durations for full-time and part-time workers, no significant difference was observed.[9]

Race and Hispanic Origin. The median spell duration without health insurance of 7.3 months for Blacks was longer than the 5.4 months for Whites. Persons of Hispanic origin had a spell duration of 7.2 months, which was longer than the 4.9-month spell duration for Whites (not of Hispanic origin) or all persons not of Hispanic origin (5.7-month median spell duration). The difference between the median spell durations of Blacks and persons of Hispanic origin was not significant.[10]

Region. Persons living in the South experienced longer spells of non-coverage than those living in the Northeast or Midwest. The median spell duration of non-coverage for Southerners was 7.2 months compared to 5.1 months for those in the Northeast and 4.7 months for those residing in the Midwest.[11]

Economic Status. Individuals living below the poverty line or receiving public assistance spent longer periods without health insurance than those living above poverty or not on public assistance. Their median spell durations of non-coverage were 7.2 months for those below poverty compared to 4.9 months for those above poverty and 7.4 months for those receiving public assistance compared to 5.7 months for those not on public assistance.[12] [13]

TECHNICAL NOTE: COMPARISON OF HEALTH INSURANCE ESTIMATES BETWEEN SIPP AND CPS

In 1980 the Census Bureau began asking questions about health insurance on the March Income Supplement to the Current Population Survey (CPS). Health insurance questions are asked each March, and refer to coverage at any time during the previous year. Though

[9]Other comparisons not significantly different are; unemployed versus not in the labor force, part-time versus unemployed, and part-time versus not in the labor force.

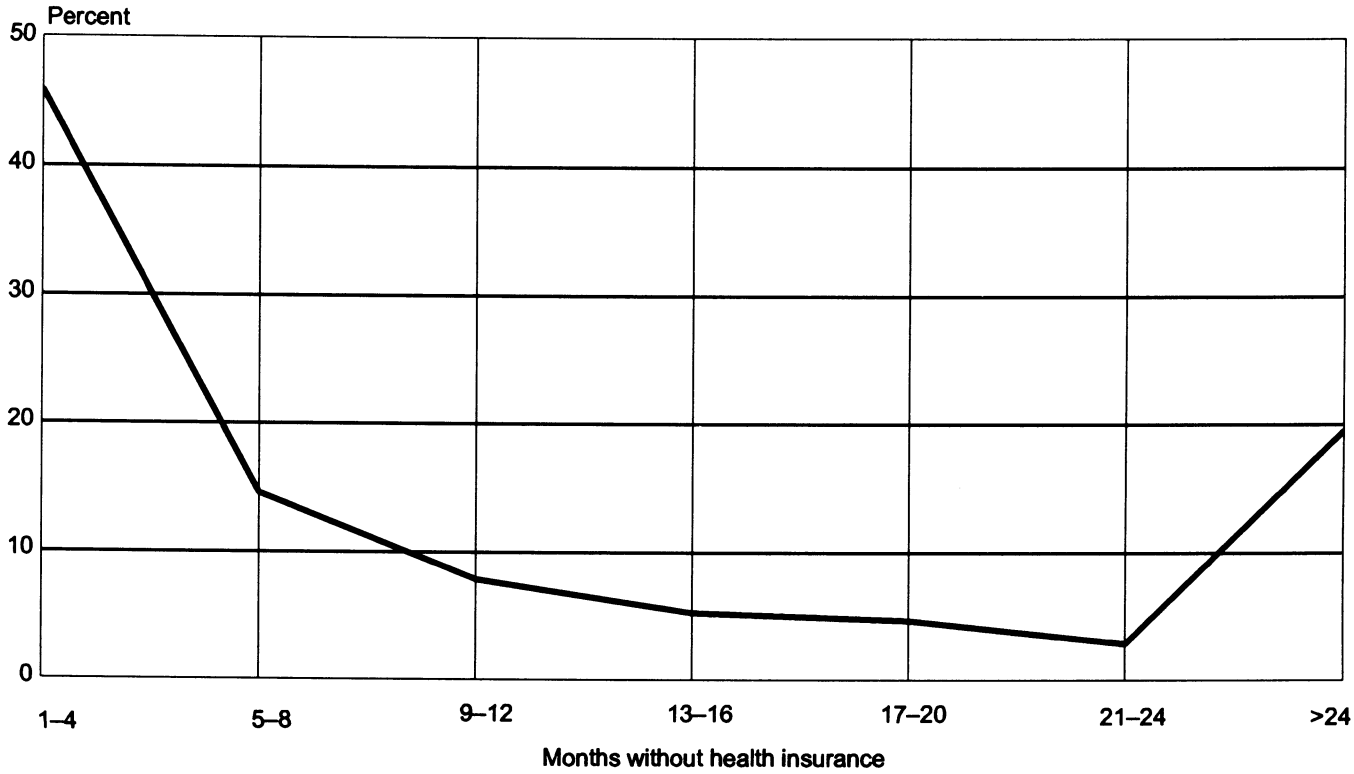
[10]No significant difference was observed between median spell durations of Whites (not of Hispanic origin) and all persons not of Hispanic origin or between other comparisons by race or Hispanic origin.

[11]No significant difference was observed between median spell durations of those residing in the Northeast and Midwest or between those residing in other regions.

[12]Comparisons between status of poverty and receipt of public assistance are not significantly different.

[13]For an examination of the dynamics of health insurance for cohorts of privately insured and uninsured persons, see A. C. Monheit and C. L. Schur, "The Dynamics of Health Insurance Loss: A Tale of Two Cohorts," *Inquiry* 25 (Fall 1988): 315-327 and K. Swartz and T.D. McBride, "Spells Without Health Insurance: Distribution of Durations and Their Link to Point-in-Time Estimates of the Uninsured," *Inquiry* 27 (Fall 1990): 281-288.

Figure 7.
Distribution of Spells Without Health Insurance, by Spell Length: 1990 to 1992



the Census Bureau has published annual estimates of participants in specific health insurance programs (Medicare, Medicaid, employer-provided health insurance, etc.) for quite some time from the CPS, only recently did the Census Bureau begin publishing comprehensive estimates of health insurance coverage from the CPS.[14] However, even prior to their publication, the information has been widely available to private and government researchers through CPS microdata files, and the CPS has been a major source of information on the extent of health insurance coverage in the United States. Table O contains comparisons between CPS health insurance estimates and SIPP estimates from the 1990 panel.

The way in which health insurance questions are asked on CPS and SIPP differ considerably. CPS respondents are asked each March about their coverage during the previous calendar year. A "Yes" to any of the health insurance questions denotes at least some coverage of that type during the previous calendar year. In the SIPP, respondents are asked about health insurance coverage in each month of the 4-month reference period. Each person is asked if they are covered as well as whether or not their policies cover other persons in the household. Health insurance coverage indicators are set either by self-reported coverage or by reported coverage from others in the household. This process may result in an overestimate of health insurance coverage in the SIPP. Either survey method may result in misestimation of health insurance coverage.

In order to compare CPS and SIPP estimates of health insurance coverage, SIPP respondents were classified by whether or not they reported 1 or more months of health insurance coverage during the months corresponding to calendar year 1991 (the latest full calendar year included in the 1990 SIPP panel). Table O compares these estimates with March 1992 CPS figures, which should also refer to calendar year 1991. The table also includes quarterly SIPP cross-section estimates from the fourth quarter of 1991.

According to the March 1992 CPS, 14 percent of all persons were not covered by health insurance at any time during the previous year. According to the 1990 SIPP panel file, 7 percent of all persons were not covered by health insurance at any time during calendar year 1991. CPS and SIPP estimated percentages of persons covered by Medicaid were not significantly different. However, the CPS estimate of the proportion of persons with private health insurance coverage was 12 percentage points less than the SIPP estimate of 84 percent. CPS estimates of private health insurance coverage were uniformly lower than comparable SIPP estimates by sex, age, and race and Hispanic origin.

[14]See Current Population Reports, Series P60-185, "Poverty in the United States: 1992," and Series P60-184, "Money Income of Households, Families, and Persons in the United States: 1992."

Table O. **Comparison of CPS and SIPP Estimates of Health Insurance Coverage, by Selected Characteristics: Calendar Year 1991**

Characteristic	Percent covered by:									Percent not covered by health insurance		
	Private or government health insurance			Private health insurance			Medicaid					
	CPS	SIPP/L*	SIPP/Q*	CPS	SIPP/L	SIPP/Q	CPS	SIPP/L	SIPP/Q	CPS	SIPP/L	SIPP/Q
All persons	85.9	93.0	86.8	72.2	83.6	75.5	10.6	10.8	8.9	14.1	7.0	13.2
Sex												
Male	84.2	92.2	85.3	72.2	84.3	75.6	8.8	8.6	7.0	15.8	7.8	14.7
Female	87.6	93.8	88.2	72.2	82.9	75.4	12.4	12.9	10.7	12.4	6.2	11.8
Age												
Under 25 years	83.5	91.5	83.7	67.8	79.2	69.5	17.5	17.1	14.6	16.5	8.5	16.3
25 to 44 years	82.7	92.0	84.4	74.2	86.3	77.4	6.8	6.7	5.8	17.3	8.0	15.6
45 to 64 years	87.6	93.7	88.7	79.8	87.5	82.0	5.0	5.5	4.3	12.4	6.3	11.3
65 years and over	99.1	99.9	99.7	67.7	84.6	77.9	9.5	8.9	7.6	0.9	0.1	0.3
Race and Hispanic Origin[1]												
White	87.1	93.5	87.8	76.0	86.4	79.0	8.1	8.0	6.5	12.9	6.5	12.2
Black	79.4	90.7	81.4	49.4	67.0	55.0	26.4	28.3	23.6	20.6	9.3	18.6
Hispanic origin[1]	68.5	83.2	72.2	46.8	62.7	51.5	20.7	23.6	18.5	31.5	16.8	27.8

[1]Persons of Hispanic origin may be of any race. SIPP/L are longitudinal estimates, SIPP/Q are point-in-time quarterly estimates from the SIPP (1991, fourth quarter).

It is revealing to note that the CPS annual proportion of persons without insurance coverage is quite similar to SIPP monthly average estimates of the uninsured. For instance, the SIPP monthly average proportion of persons without health insurance in the fourth quarter of 1991 was 13 percent, comparable to the 14 percent estimate from the CPS for calendar year 1991. This lends credence to the argument that there is a tendency for CPS respondents to answer health insurance questions based on their current status, even though the questions refer to coverage at any time during the previous calendar year. New questions are planned for introduction in the March 1994 CPS and the February 1996 SIPP in an attempt to improve measurement.[15]

USER COMMENTS

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[15]Katherine Swartz makes this argument in "How Different are Four Surveys' Estimates of the Number of Americans Without Health Insurance?" Project Report, Urban Institute, 1984.