

Exhibit 12



How Many People Lack Health Insurance and For How Long?

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More than 240 million people in the United States have health insurance coverage today, through a variety of sources. The vast majority—about 63 percent—are covered through their, or a family member's, employer.¹ Government programs provide coverage to millions more people: about 14 percent have coverage through Medicare, 11 percent through Medicaid and the State Children's Health Insurance Program (SCHIP), and about 3 percent through military programs. Roughly 8 percent of people purchase coverage from private individual health insurers.²

Yet millions of people do not have health insurance coverage. For those people, extended periods without insurance could lead to insufficient access to medical care and exposure to significant financial risk. From a broader perspective, a lack of coverage could lead to less efficient use of health care services and facilities, including emergency rooms, and to higher public spending for health programs.

Policymakers have proposed alternatives for expanding health insurance coverage, including providing tax inducements to individuals or employers, expanding Med-

icaid and SCHIP, reforming rules regulating private insurance, and requiring employers to offer coverage.³ Designing cost-effective policies to expand health coverage requires information on the size and characteristics of the uninsured population. Because many people gain and lose coverage over time, an important feature of uninsured spells is their duration.

This paper presents estimates of the size, demographic characteristics, and dynamics of the uninsured population, using data from four federally sponsored national surveys: the Current Population Survey (CPS), the Survey of Income and Program Participation (SIPP), the Medical Expenditure Panel Survey (MEPS), and the National Health Interview Survey (NHIS). Both the CPS and SIPP are sponsored by the Census Bureau, MEPS by the Agency for Healthcare Research and Quality, and NHIS by the Centers for Disease Control and Prevention. Each survey's strengths and limitations are described in Appendix A.

The Congressional Budget Office's (CBO's) analysis focuses on the nonelderly population because nearly all Americans age 65 and older are covered by Medicare. It excludes people in institutions (such as nursing homes and prisons) because they are not counted in the surveys. Active-duty military personnel are not included in the CPS, MEPS, and NHIS and thus are excluded from CBO's analysis of the data in those surveys, but the analy-

1. The federal government exempts employment-based health insurance, among other noncash benefits, from taxation, providing an incentive for the provision of employment-based insurance.

2. See Bureau of the Census, *Health Insurance Coverage: 2001*, Current Population Reports, Series P60-220 (September 2002). The estimates, based on self-reported data from the civilian noninstitutionalized population, are not mutually exclusive; people can be covered by more than one type of insurance in a year.

3. For a discussion of policy options for expanding health insurance coverage, see Congressional Budget Office, *Budget Options* (February 2001), pp. 40-52.

sis of SIPP includes active-duty military personnel, who are counted unless they live in military barracks.

Size of the Uninsured Population

In recent years, the number of uninsured people in the United States has been pegged at approximately 40 million, or about 16 percent of the nonelderly population. By CBO's analysis, that estimate overstates the number of people who are uninsured all year and more closely approximates the number who are uninsured at a point in time during the year. A more accurate estimate of the number of people who were uninsured for all of 1998—the most recent year for which reliable comparative data are available—is 21 million to 31 million, or 9 percent to 13 percent of nonelderly Americans.

The CPS is the source of that widely cited estimate of about 40 million uninsured. By interviewing people in March about their insurance coverage the previous calendar year, the CPS is intended to yield an estimate of the number of people who are uninsured all year. However, comparisons with estimates from other surveys indicate that the CPS estimate overstates that number. Some analysts believe the overstatement stems from an underreporting of insurance coverage by CPS respondents, who are asked to recall their coverage over a longer period than other surveys require.⁴ Other analysts have concluded that the similarity of the CPS estimates to the point-in-time estimates from other surveys suggests that many CPS respondents report their insurance status as of the time of the interview rather than for the previous calendar year, as requested.⁵

In this paper, CBO uses three measures—the number of people who are continuously uninsured for an entire year,

the number who are uninsured at any time during the year, and the number who are uninsured at a point in time—to gauge the size of the uninsured population. Because estimates based on the first two measures use survey data in which people are asked to remember their insurance coverage over a specified period, those data are more prone to reporting error. Point-in-time estimates are subject to less error because people are asked to report their insurance coverage at the time of the interview; however, those estimates do not distinguish between people who are uninsured for a long time and other uninsured people, and they do not reveal how fluid the uninsured population is. Together, the three ways of measuring the uninsured population give a more complete picture than any single measure could.

The Number of People Who Are Uninsured All Year

CBO estimated the number of people who are uninsured all year using data from SIPP and MEPS, two surveys in which respondents are interviewed multiple times over the life of the survey. (Such longitudinal surveys allow researchers to repeatedly observe a set of subjects over time.) SIPP interviews people every four months about their insurance coverage during the preceding four months (called a “wave”), while MEPS interviews people every four to five months, on average. By asking people to remember their insurance status over a shorter period of time than the CPS requires, SIPP and MEPS should yield more accurate estimates of the number of people who are uninsured all year.⁶

According to the most recent SIPP data, 9.1 percent of the nonelderly population (or 21.1 million people) were continuously uninsured throughout 1998 (*see Table 1*).⁷ According to MEPS, the corresponding figures were 13.3 percent (or 31.1 million people). The discrepancy between those estimates could be due to various factors, including differences in the wording and sequencing of

4. Robert L. Bennefield, “A Comparative Analysis of Health Insurance Coverage Estimates: Data from CPS and SIPP” (paper presented at the Joint Statistical Meetings, American Statistical Association, Chicago, Ill., August 6, 1996).

5. Katherine Swartz, “Interpreting the Estimates from Four National Surveys of the Number of People Without Health Insurance,” *Journal of Economic and Social Measurement*, vol. 14 (1986), pp. 233-242.

6. SIPP and MEPS also have certain limitations, which are discussed in Appendix A.

7. These figures are based on analysis of data from the 1996 panel of the Survey of Income and Program Participation, which followed all respondents through July 1999. Because only a limited amount of data from the 2001 SIPP is now available, CBO's analysis does not rely on that version of the survey.

Table 1.

Percentage and Number of Nonelderly People Without Health Insurance in 1998 and 1999, Estimated from Four National Surveys

| | Uninsured Nonelderly People | | | |
|---------------------------------------|-----------------------------|------|-------------|------|
| | In percent | | In millions | |
| | 1998 | 1999 | 1998 | 1999 |
| Uninsured All Year | | | | |
| SIPP | 9.1 | n.a. | 21.1 | n.a. |
| MEPS | 13.3 | 12.2 | 31.1 | 28.9 |
| Uninsured at Any Time During the Year | | | | |
| SIPP | 24.5 | n.a. | 56.8 | n.a. |
| MEPS | 25.3 | 25.1 | 59.0 | 59.2 |
| Uninsured at a Point in Time | | | | |
| SIPP | 16.6 | 15.7 | 40.5 | 38.5 |
| MEPS | 18.3 | 17.4 | 42.6 | 41.0 |
| NHIS | 16.5 | 16.0 | 39.0 | 38.3 |
| CPS ^a | 18.4 | 16.2 | 43.9 | 39.0 |

Source: Congressional Budget Office based on data from the 1996 panel of the Survey of Income and Program Participation (SIPP), the 1998 and 1999 Medical Expenditure Panel Survey (MEPS), and the March 1999 and March 2000 Current Population Survey (CPS). Estimates from the National Health Interview Survey (NHIS) are from the Centers for Disease Control and Prevention, "Early Release of Selected Estimates Based on Data from the 2001 NHIS," available at www.cdc.gov/nchs.

Note: n.a. = not available.

a. The CPS estimate is intended to measure the number of people who are uninsured for the entire year. However, there is considerable evidence that the CPS estimate overstates the number of people who are uninsured all year and is closer to the number of people who are uninsured at a point in time. About two-thirds of the reduction in the CPS estimate of the number of uninsured from 1998 to 1999 was due to the inclusion of an additional question in the survey that was designed to yield more-accurate estimates.

questions on health insurance coverage, data editing procedures, interviewers' training and knowledge about health insurance, and the period of time over which people were asked to recall their coverage.

Data from MEPS also indicate that the number of people who were uninsured all year fell from 31.1 million in 1998 to 28.9 million in 1999 (estimates from MEPS of the full-year uninsured are not available for more recent years). But recent trends in the CPS estimates—which are similar to the point-in-time estimates from SIPP, MEPS, and NHIS—suggest that the number of people who were uninsured all year probably remained relatively stable from 1999 to 2000 and then increased somewhat in

2001.⁸ That conclusion is based on the fact that the full-year and point-in-time estimates of the uninsured are likely to move in a similar manner over time. More recently, the number who are uninsured all year probably has not changed substantially, given historical trends.

The Number of People Who Are Uninsured at Any Time During the Year

CBO's analysis of data from SIPP and MEPS indicates that about a quarter of the nonelderly population (or

8. According to the CPS, the number of nonelderly people who lacked health insurance rose from 39.6 million in 2000 to 40.9 million in 2001, after falling slightly the previous year.

about 57 million to 59 million Americans) was uninsured at any time during 1998 (see *Table 1*). According to MEPS, that measure remained essentially unchanged from 1998 to 1999. If the elderly were included in the analysis, the percentage of the population that was uninsured at any time during the year would have fallen to 22 percent.⁹

Analysis of SIPP and MEPS data also shows that the uninsured population is very fluid. According to data from SIPP, roughly 63 percent of the people who were uninsured at any time in 1998 lost coverage or gained coverage (or did both) at some point during the year.¹⁰ The corresponding figure from MEPS was 47 percent, increasing to 51 percent in 1999.

The Number of People Who Are Uninsured at a Point in Time

Data from SIPP, MEPS, and NHIS yield similar estimates of the number of people who are uninsured at a given point in time.¹¹ The point-in-time estimates from those surveys, which are very similar to the CPS estimates, ranged from 39.0 million to 42.6 million uninsured in 1998, or from 16.5 percent to 18.3 percent of the nonelderly population (see *Table 1*). That range of

estimates fell slightly in 1999, according to all four surveys. Taken altogether, the point-in-time estimates from SIPP, MEPS, and NHIS provide compelling evidence that the CPS overstates the number of people who are uninsured all year.

Although analyses of the uninsured typically focus on individual-level data, analyses at the family level provide a measure of the total number of families that are potential targets of policymakers' efforts to expand coverage. According to data from SIPP, approximately 26 million families had at least one person who was uninsured at a given point in time in 1998.¹² In 27 percent of those families, however, at least one person was insured. Such families represent a variety of circumstances, including those in which children are covered under Medicaid or SCHIP but parents are not or only some members are covered by an employment-based (or private nongroup) policy.

The relationship between the number of people who are uninsured at a particular point in time and the number who are uninsured all year appears to have not changed significantly—at least since 1992—although the evidence supporting that conclusion is limited. The most direct comparison of the two measures comes from a study of SIPP data that found that 14.8 percent of Americans (including the elderly) were uninsured at a point in time in 1992, while 7.6 percent were uninsured all year.¹³ That nearly two-to-one ratio is echoed in the 1998 figures from SIPP, 16.6 percent versus 9.1 percent. Indirect evidence that a similar relationship probably held in earlier years comes from studies (discussed below) showing that the duration of uninsured spells among the nonelderly population had a distribution similar to that found in this analysis.

9. Including military personnel and the institutionalized—all of whom are either insured or have access to medical care—would also reduce the percentage of the population that was uninsured at any time during the year, but by a much smaller amount than would be obtained by including the elderly. The magnitude of the reduction cannot be determined from available data; information is not available on the insurance status of people who spend part of a year in the military or an institution. However, such an analysis is possible when measuring insurance coverage at a point in time. Using data from SIPP, CBO estimates that including the military and the institutionalized in the analysis would reduce the percentage of nonelderly who were uninsured at a point in time in 1999 by about 0.1 percentage point.

10. Some 15.4 percent of the nonelderly population was uninsured for part, but not all, of 1998. Such people constitute 62.9 percent of the total nonelderly population that was uninsured at any time in 1998.

11. NHIS estimates are from Centers for Disease Control and Prevention, National Center for Health Statistics, "Early Release of Selected Estimates Based on Data from the 2001 NHIS" (released July 15, 2002).

12. Families are defined in this analysis as health insurance eligibility units, on the basis of eligibility rules of most private insurance plans. In households with two or more people, those rules were applied to identify all individuals who would be eligible for coverage under a family policy. This definition of families also includes single adults.

13. Bennefield, "A Comparative Analysis of Health Insurance Coverage Estimates."

The Implications of the Medicaid Undercount

The number of people who report that they have Medicaid coverage in population surveys is smaller than the number indicated by the program's administrative data. Less clear than the fact of the undercount itself, however, are its size and its implications for estimates of the uninsured.

Underreporting of Medicaid coverage could occur for various reasons. Some people might not report their coverage in a survey because of the stigma associated with participating in a public assistance program. Also, some people covered by Medicaid may mistakenly believe that they have another type of coverage, such as private insurance. That confusion may be most common among people enrolled in Medicaid managed care because such programs often use names designated by private plans or by a state's Medicaid agency that do not include the term "Medicaid."

According to one study, SIPP undercounts Medicaid enrollment relative to the administrative data maintained by the Centers for Medicare and Medicaid Services by about 12 percent to 15 percent.¹⁴ CBO's analysis of data from MEPS indicates that that survey undercounts Medicaid enrollment by a similar amount. Those findings may imply that the number of nonelderly people who are enrolled in Medicaid at any time during the year could be undercounted in population surveys by about 4 million to 5 million.

Estimates of the size of the Medicaid undercount must be viewed with caution, however, because of limitations of the administrative data that are used as the benchmark.¹⁵ Even if those estimates are correct, they do not

necessarily imply a corresponding error in the count of the uninsured, because some Medicaid enrollees who do not report having Medicaid coverage may report another type of coverage. One study that matched Medicaid administrative records in Minnesota with a population survey conducted in that state found that the vast majority of Medicaid enrollees who did not report being covered by Medicaid reported another source of insurance.¹⁶ As a result, the measured uninsurance rate was overstated by only about 0.3 percentage points. It is not known how those findings may be generalized to other states or other surveys.

Because of uncertainties about the size of the Medicaid undercount and its implications for estimates of the uninsured, CBO did not adjust its analysis to compensate for the undercount.

The Implications of Less-Than-Full Participation in Medicaid

Many people who are eligible for Medicaid do not participate in the program. Research estimates that about half of eligible nonparticipants have private coverage and half are uninsured.¹⁷ For uninsured people who are eligible but not enrolled, Medicaid provides a form of conditional coverage. Such people can apply for Medicaid at the time they obtain care and receive retroactive coverage for their expenses.¹⁸ Because of that provision, some policymakers view those people as insured. Others view them as uninsured because they may not realize that they are eligible for Medicaid and therefore may delay or avoid seeking medical care.

An estimated 2.9 million children were uninsured but eligible for Medicaid at a given point in time in 1994 (the most recent year for which estimates are available). That figure represents about one-third of uninsured children

14. John L. Czajka, *Analysis of Children's Health Insurance Patterns: Findings from the SIPP* (report submitted by Mathematica Policy Research, Inc., to the Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, May 1999).

15. The administrative data maintained by the Centers for Medicare and Medicaid Services are reported separately by each state and are subject to reporting errors. The "ever enrolled" estimates are intended to represent an unduplicated count of the number of people enrolled in Medicaid at any time during the fiscal year.

16. Kathleen Thiede Call and others, "Uncovering the Missing Medicaid Cases and Assessing Their Bias for Estimates of the Uninsured," *Inquiry*, vol. 38, no. 4 (Winter 2001/2002), pp. 396-408.

17. All estimates reported in this section are from Czajka, *Analysis of Children's Health Insurance Patterns*.

18. Jonathan Gruber, *Medicaid*, Working Paper No. 7829 (Cambridge, Mass: National Bureau of Economic Research, August 2000).

and about 17 percent of all children who were eligible for Medicaid. For many children, being eligible for Medicaid while uninsured is a short-term phenomenon. Many such children are in transition from one source of coverage to another (for example, from private insurance to Medicaid), and others are eligible for Medicaid for a short period because of a temporary decline in family income. Even so, an estimated 1 million children remained uninsured all year in 1994 even though they were eligible for Medicaid.

Demographic Characteristics of the Uninsured Population

Education and income level are closely tied to the likelihood of being uninsured. According to data from SIPP, 25 percent of people in families in which no one had a high school diploma were uninsured all year in 1998, and 50 percent were uninsured at any time during the year (see Table 2). Similar percentages of people in families with income below 200 percent of the poverty level were uninsured in 1998. Hispanics had a higher rate of being uninsured all year in 1998 than other racial and ethnic groups (23 percent), and young adults ages 19 to 24 were more likely than people in other age groups to be uninsured all year (14 percent).

The likelihood of being uninsured does not vary greatly by self-reported health status. According to SIPP data, about 10 percent of people who said they were in poor health were uninsured all year in 1998; that figure is similar to the percentages of people in excellent or very good health who lacked insurance coverage all year.¹⁹ Because individuals in poor health constitute a relatively small proportion of the total nonelderly population, they accounted for only 5 percent of the full-year uninsured in 1998. As a group, however, they may be of particular concern to policymakers because they are likely to be the greatest users of health care services.

Nearly 90 percent of the people who were uninsured all year in 1998 were in families in which at least one person

worked, either part time or full time (see Table 2, column 3). Research has found that about 75 percent of the uninsured in working families do not have access to insurance through their employer, the dominant form of coverage among the nonelderly, while the other 25 percent have access to employment-based insurance but do not accept it.²⁰ Lower-wage workers are less likely than higher earners to have access to employment-based insurance and are less likely to accept it where it is offered.²¹

Dynamics of the Uninsured Population

CBO's analysis of SIPP data reveals that although many uninsured spells are relatively short, some are quite long. Many people who become uninsured are in transition from one source of coverage to another (for example, because of a waiting period for coverage at a new job), so their uninsured spells are relatively brief.

The Duration of Uninsured Spells

CBO measured the duration of uninsured spells in two ways. First, it estimated the duration of spells that began during the 12-month period from July 1996 through June 1997.²² Because new spells closely approximate a representative sample of all uninsured spells, they provide the most reliable basis for estimating durations.²³ Second, because policy discussions often refer to the uninsured

19. Information on health status was collected in interviews between August 1997 and November 1997. Survey respondents were at least 15 years of age.

20. Sherry Glied, "Challenges and Options for Increasing the Number of Americans with Health Insurance," *Inquiry*, vol. 38, no. 2 (Summer 2001), pp. 90-105.

21. Philip F. Cooper and Barbara Steinberg Schone, "More Offers, Fewer Takers for Employment-Based Health Insurance: 1987 and 1996," *Health Affairs*, vol. 16, no. 6 (November/December 1997), pp. 142-149.

22. CBO also estimated the duration of uninsured spells that began during other periods—for example, during each month within the July 1996-June 1997 period and during the 24-month span from July 1996 through June 1998. Similar results were obtained for all of those periods.

23. Katherine Swartz, John Marcotte, and Timothy D. McBride, "Spells Without Health Insurance: The Distribution of Durations When Left-Censored Spells Are Included," *Inquiry*, vol. 30 (Spring 1993), pp. 77-83.

Table 2.

Nonelderly People Without Health Insurance in 1998, by Selected Characteristics

(In percent)

| Characteristic | Nonelderly People | | Distribution of the Population Uninsured All Year |
|--|---|-----------------------|---|
| | Uninsured at Any Time During the Year | Uninsured All Year | |
| Age | | | |
| Less than 19 | 26.8 | 7.3 | 24.9 |
| 19 to 24 | 41.9 | 14.4 | 13.7 |
| 25 to 34 | 31.1 | 12.3 | 21.9 |
| 35 to 44 | 20.2 | 9.3 | 19.7 |
| 45 to 54 | 15.1 | 7.6 | 12.6 |
| 55 to 64 | 14.0 | 6.7 | 7.2 |
| Race/Ethnicity | | | |
| White, Non-Hispanic | 18.4 | 6.3 | 48.4 |
| Black, Non-Hispanic | 33.4 | 10.7 | 15.3 |
| Hispanic | 47.4 | 22.5 | 30.8 |
| Other | 31.1 | 10.9 | 5.5 |
| Family Income Relative to the Poverty Level^a | | | |
| Less than 200 percent | 47.9 | 19.5 | 74.9 |
| 200 percent to 399 percent | 17.4 | 5.3 | 19.8 |
| 400 percent or more | 6.0 | 1.6 | 5.3 |
| Education^{a,b} | | | |
| No high school diploma | 50.4 | 24.6 | 28.4 |
| High school graduate | 33.1 | 12.7 | 36.4 |
| Some college coursework | 22.1 | 7.3 | 26.6 |
| Bachelor's degree or higher | 9.9 | 2.6 | 8.7 |
| Family Employment Status^a | | | |
| At least one full-time worker all year | 15.0 | 5.9 | 42.9 |
| Part-time or part-year work only | 46.1 | 16.1 | 46.6 |
| No work | 32.8 | 13.1 | 10.6 |
| Health Status^c | | | |
| Excellent | 23.7 | 8.9 | 28.8 |
| Very good | 25.1 | 9.3 | 32.8 |
| Good | 24.6 | 9.1 | 24.5 |
| Fair | 25.1 | 8.7 | 8.9 |
| Poor | 25.3 | 10.3 | 5.1 |
| Memorandum: | | | |
| Total Nonelderly Population | 24.5 | 9.1 | 100.0 |

Source: Congressional Budget Office based on data from the 1996 panel of the Survey of Income and Program Participation.

- a. For family-level variables, families are defined as health insurance eligibility units, which are composed of individuals who could be covered as a family under most private health insurance plans.
- b. Education is defined as the highest education level among all adults in the family.
- c. Information on health status was collected only for survey respondents who were at least 15 years of age.

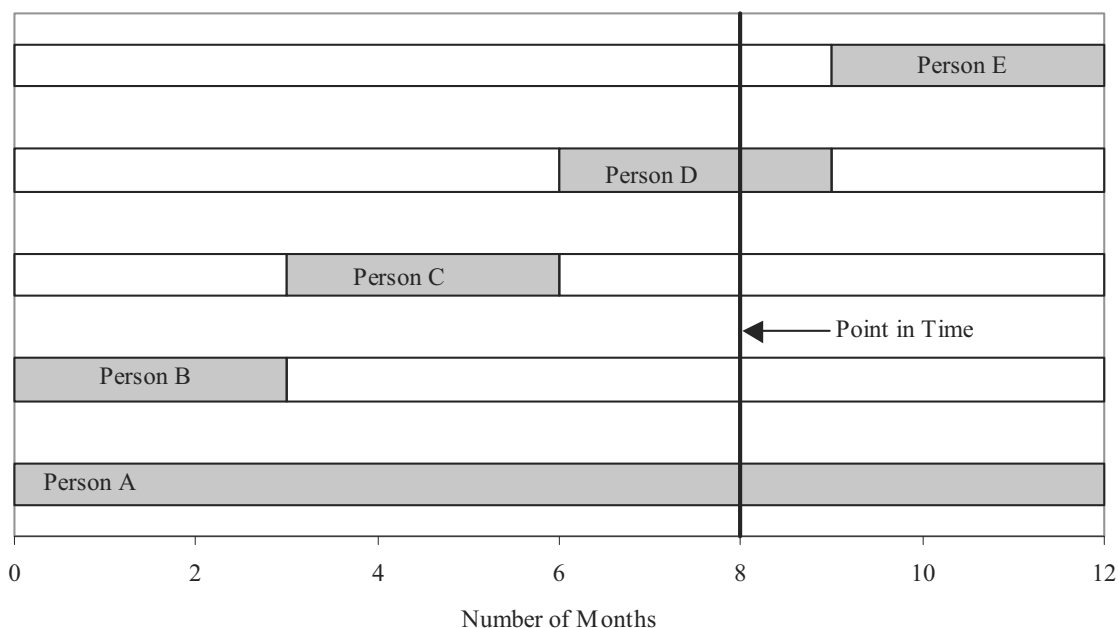
Box 1.

Two Approaches to Measuring Uninsured Spells

Consider five people who become uninsured at some time during a year. Person A becomes uninsured in January and is uninsured for the entire year. The other four people are each uninsured for three months, the first from January through March, the second from April through June, and so on (*see figure, below*). If the duration of uninsured spells is measured by including all spells that begin during the year, 20 percent (one of

five) last 12 months and 80 percent (four of five) last three months. If, instead, durations are measured by including only spells that are in progress at a particular point in time, 50 percent (one of two) last 12 months and 50 percent last three months. The first approach measures the duration of all uninsured spells that begin during the year, while the second approach characterizes spells at a given point in time.

Duration of Uninsured Spells



population at a given point in time, CBO estimated the duration of spells among people who were uninsured in a given month. The first measure captures the *flow* of uninsured spells over time, while the second captures the *stock* of uninsured spells at a point in time. The two measures yield very different estimates of durations (*see Box 1*).

New Spells. Forty-five percent of the uninsured spells that began between July 1996 and June 1997 lasted four months or less, whereas about 16 percent lasted more than 24 months (*see the top panel of Table 3*). Those

figures correspond to estimates obtained by other researchers using SIPP data from 1983 to 1986 and 1992 to 1994.²⁴ Children under 19 were more likely than

24. Katherine Swartz and Timothy D. McBride, "Spells Without Health Insurance: Distributions of Durations and Their Link to Point-in-Time Estimates of the Uninsured," *Inquiry*, vol. 27 (Fall 1990), pp. 281-288; and Czajka, *Analysis of Children's Health Insurance Patterns*. The unemployment rate was much higher during the years covered by those studies, indicating that the duration of uninsured spells has not varied much with changes in economic conditions.

Table 3.**Distribution of Uninsured Spells by Duration and Age**

(In percent)

| Duration of Uninsured Spell | Total Nonelderly Population | Children | Adults |
|--|-----------------------------|----------|--------|
| Spells That Began Between July 1996 and June 1997 | | | |
| Four Months or Less | 44.5 | 49.3 | 41.0 |
| Five to 12 Months | 26.2 | 25.2 | 26.9 |
| 13 to 24 Months | 13.4 | 11.8 | 14.5 |
| More Than 24 Months | 15.9 | 13.7 | 17.6 |
| Spells in Progress in March 1998^a | | | |
| Four Months or Less | 7.9 | 12.9 | 5.6 |
| Five to 12 Months | 14.4 | 19.3 | 12.3 |
| More Than 12 Months | 77.8 | 67.8 | 82.0 |

Source: Congressional Budget Office based on data from the 1996 panel of the Survey of Income and Program Participation.

Notes: Children are defined as people under 19 years of age, adults as people ages 19 through 64.

Appendix B explains the consistency of the two sets of estimates given in this table.

- a. The estimates for spells in progress in March 1998 measure the total duration of such spells, looking backward and forward in time (the observation period extended through July 1999). Similar estimates were obtained for other months.

adults to have short uninsured spells. Forty-nine percent of the spells experienced by children lasted four months or less, compared with 41 percent for adults.

A potential limitation of measuring durations from a sample of new spells is that people who are uninsured for a long time may be underrepresented. By definition, analyses of new spells focus on spells for which a starting point can be observed. Spells that were in progress at the start of SIPP's observation period (so-called left-censored spells) are excluded, so individuals who were uninsured throughout the entire period are excluded from the calculation of durations.²⁵ Previous research suggests, however, that excluding left-censored spells does not dramatically alter the results of the analysis.²⁶

25. Four percent of the people in SIPP's sample were uninsured throughout the entire 41-month observation period.

26. See Swartz, Marcotte, and McBride, "Spells Without Health Insurance." Using sophisticated econometric methods in an analysis of data from the 1984 SIPP panel, the authors estimated that including left-censored spells reduced the share of spells that lasted five months or less from 50 percent to 48 percent and increased the share of spells that lasted more than 24 months from 15 percent

Spells in Progress at a Point in Time. Compared with the duration of new spells, the duration of those in progress at a given point in time is much more likely to be relatively long. More than three-quarters of the uninsured spells in progress in March 1998 exceeded 12 months, whereas only about 8 percent lasted four months or less (see the bottom panel of Table 3). Those estimates measure the total length of the spells in progress in March 1998, looking backward and forward in time. Similar estimates were obtained for other months.

Although estimates of the duration of new spells and spells in progress in a particular month differ dramatically, they simply represent alternative ways of looking at the uninsured population. Nearly half of all new spells end within four months; over time, as those shorter spells end and longer spells remain in effect, the stock of uninsured spells at a given point in time has a relatively high proportion of long spells. Looked at another way, a par-

to 19 percent. The median duration increased from six months to seven months. Those findings indicate that long-term uninsured people are underrepresented among new spells, but not by enough to invalidate the basic conclusions of analyses that focus solely on new spells.

ticular long spell is more likely to be in progress at a given point in time than a particular short spell. (Appendix B demonstrates the consistency of the two sets of estimates in Table 3.) The analysis in the rest of this paper focuses on new spells, because they more accurately represent all uninsured spells.

Characteristics Associated with the Duration of Uninsured Spells

The duration of spells varies with education level, race/ethnicity, and income of the uninsured. People with less education are more likely than higher-educated people to experience long uninsured spells. Some 23 percent of spells among people in families in which no one graduated from high school last more than two years, compared with a figure of only 8 percent among people in families in which at least one person has a bachelor's degree (see Table 4). That relationship probably reflects, at least in part, the fact that college-educated people are more likely than those with less education to have access to employment-based insurance.²⁷ Long uninsured spells are also more common among Hispanics and people with low income.²⁸ For example, 23 percent of uninsured spells among Hispanics last more than two years, compared with 14 percent of spells among non-Hispanic

whites and 15 percent among non-Hispanic blacks. Eighteen percent of uninsured spells among people with annual income of less than 200 percent of the federal poverty level exceed two years, about two-thirds higher than the figure for people whose income is 400 percent or more of the poverty level.

The duration of uninsured spells does not vary much with self-reported health status. For instance, 14 percent of uninsured spells among people in poor health last more than two years, nearly the same percentage of spells as among people reporting very good health. By keeping some people from working full time, however, poor health may contribute to long uninsured spells. Those spells may be of particular concern from a policy perspective because such people are likely to be intensive users of health care services.

As noted previously, adults are more likely than children to experience long uninsured spells. The availability of Medicaid coverage may explain some of that discrepancy: coverage is available to many children in low-income families, but the great majority of low-income adults are not eligible for the program. In addition, single adults without children may be less inclined to seek insurance, on average, than other adults are, which may lead them to experience long spells without insurance.²⁹

Multiple Spells and Total Uninsured Months

While the preceding analysis looked only at people who had one uninsured spell, to obtain a more complete picture of the uninsured this section looks at whether many uninsured people have multiple spells. The subsequent experience of people whose initial uninsured spell was relatively short is of particular interest. Did most of those people have a single uninsured spell? Or did many of them have additional spells, perhaps experiencing substantial periods without coverage?

To investigate those issues, CBO analyzed data from the 1996 SIPP panel, following people who had one unin-

27. Higher-wage workers are more likely to be offered employment-based insurance, and wages are highly correlated with education. For evidence of the relationship between wages and the likelihood of being offered employment-based insurance, see Cooper and Schone, "More Offers, Fewer Takers for Employment-Based Health Insurance."

28. For this analysis, family income relative to the poverty level was defined as the mean value during the four months before the uninsured spell began. The intent was to classify families on the basis of their income before they experienced any reduction in income that may have accompanied the uninsured spell. Such an income reduction may have been temporary for many families but longer-lasting for others. The income measure was intended to reflect, for many families, their longer-term economic circumstances. The analysis was also conducted using a second income measure, defined as the mean family income relative to the poverty level during the first four months of the uninsured spell (or during the entire spell if it ended within four months). The second measure captures any changes in families' economic circumstances that occurred around the time the uninsured spell began. Estimates using the second measure (which this paper does not present) are similar to the estimates in Table 4.

29. That conclusion is supported by analysis conducted for this study (but not reported in detail here), which found that after controlling for differences in age, race/ethnicity, education, and income relative to the poverty level, single adults without children were much more likely than other adults to experience long uninsured spells.