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Uninsured Spells of the Poor: Prevalence and Duration

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Abstract

The number of persons in the United States without health insurance, particularly those lacking private health insurance, is increasing. Although there is a large body of research documenting the insurance status of people in poverty at a point in time, the duration of spells without health insurance, and the duration of poverty spells, much less attention has been paid to the dynamics of spells without health insurance among those in poverty. The results presented here, based on data from the 1990 Survey of Income and Program Participation (SIPP), conclude that the typical uninsured spell is longer for the uninsured poor (roughly 8.3 months) than for the uninsured nonpoor (roughly 6 months) and that the duration of spells has increased over time. The findings suggest that over 40 percent of the uninsured at a point in time are chronically uninsured and poor or near poor. The cost of obtaining health care is particularly prohibitive for this group, with serious implications for the reform of health care.

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I. INTRODUCTION

In 1994, several health reforms of the U.S. health care system were proposed. The goal of these reforms, including the broad-based Health Security Act proposed by the Clinton administration, was universal health insurance coverage. This goal was abandoned as the health reform debate progressed and, eventually, all major efforts to overhaul the system were abandoned. Yet incremental measures, like the Health Insurance Portability Act of 1996 (popularly known as the Kennedy-Kassebaum reforms), indicate concern for the future of health insurance.

Given the failure of the health reforms in 1994, the problem of the uninsured will remain for some time to come. The number of uninsured persons has continued to increase, from roughly 30.5 million in 1979 to 40.6 million in 1995 (McBride 1996; U.S. Census Bureau 1996a; Weinberg 1996). Some of this growth reflects increases in the U.S. population; and although comparisons of longitudinal data on the uninsured are clouded by recent changes in survey methodology, analysis indicates that roughly two-thirds of these recent increases are attributable to increases in the uninsured rate, after controlling for other factors (McBride 1996). Coverage rates under public insurance programs have increased significantly in recent years, masking a substantial drop in those with private insurance (Holahan, Winterbottom, and Rajan 1995; U.S. Census Bureau 1996b). The number of uninsured persons, particularly persons lacking private insurance, is increasing.

Roughly two-thirds of the uninsured live in families whose income is below 200 percent of the poverty line; roughly 27 percent live in poverty. The uninsured poor are of particular interest because they likely lack the resources to pay for health insurance or health care (Holahan and Zedlewski 1992) and because their lack of health insurance may increase the likelihood of delays in the utilization of health care, thus affecting their health status, raising health spending, and contributing to the problem of uncompensated care (*Green Book* 1996).

Considerable research has documented the insurance status of people in poverty at a point in time, the duration of spells without health insurance, and the duration of poverty spells. However, little attention has been paid to the dynamics of spells without health insurance for people in poverty. Longitudinal data from the Census Bureau's Survey of Income and Program Participation (SIPP) are used to explore this question.

II. PREVIOUS LITERATURE

Although it is important to know how many people are simultaneously uninsured and in poverty, little research exists on the coincidence of poverty and uninsured spells. Numerous studies have investigated the duration of poverty spells, just as studies have investigated the duration of uninsured spells, but no study has focused on simultaneous poverty and uninsured spells, nor on the relationship between uninsured spell durations and health status and health utilization.

Swartz and McBride (1990), in one of the first studies to look at the duration of uninsured spells, found that half of all uninsured spells end within 4 months, while only 15 percent last longer than 24 months. In addition, they found that people whose incomes were below the poverty line at the beginning of their spell were less likely to exit from the uninsured spell in the first few months. Over 80 percent of the individuals with incomes above 300 percent of the poverty line had spells that lasted 8 months or less, but this was the case for only 61 percent of those with incomes less than 50 percent of the poverty line.

Subsequent studies have explored the duration of uninsured spells using data from the 1984 SIPP panel. Swartz and McBride's 1990 study was restricted to spells that were observed to start during the 1984 SIPP panel, thus excluding spells in progress at the beginning of the panel (i.e., left-censored spells). Since it is likely that people with long uninsured spells are disproportionately represented among the population with spells in progress at the start of the panel, this restriction could lead to an underestimate of the number of people with long uninsured spells. Swartz, Marcotte, and McBride

(1993a) provide strong evidence that the distribution of durations of left-censored uninsured spells is not very different from the distributions of spells that began during the survey period. Two factors explain this somewhat surprising result. First, distributions of spell durations with an observed beginning demonstrate that "long" uninsured spells are represented even in the sample of spells with observed beginnings. Second, descriptive analysis of the left-censored spells found that the majority of these spells were, in fact, *short* uninsured spells. This study concluded that using a sample of spells with observed beginnings would not lead to biased estimates of overall spell durations.

McBride and Swartz (1991) and Swartz, Marcotte, and McBride (1993b) looked at the relationship between personal characteristics and the duration of uninsured spells. Using hazard models, the studies found that monthly family income, education, and industry of employment had the biggest impact on the likelihood that a spell would end.

In a survey of research on the duration of uninsured spells, McBride (1996) found that several alternative longitudinal measures of the uninsured are available, including estimates of the uninsured flow, long-term uninsured stock, duration of new uninsured spells, and duration of uninsured spells at a point in time. In another study, McBride (1994) used the 1987 SIPP panel and a longitudinal measure of the duration of uninsured spells at a point in time. This study found that 75 percent of the uninsured were in spells that would last longer than one year, while only 3.5 percent were in spells that would last less than five months. In addition, Census Bureau findings conclude that, until recently, the average uninsured spell was becoming longer over time. For example, the median duration of an uninsured spell increased from roughly 4 months in the 1984–86 period to 7.1 months in 1991–93, but declined to 5.7 months in 1992–93 (U.S. Census Bureau 1990, 1995, 1996c). This fluctuation may reflect fluctuations in the economic business cycle as well as other trends, or it may reflect other changes in health insurance markets. The reasons for these changes in spell durations remain largely unexplored.

Uninsured flow. The Census Bureau has also estimated the "uninsured flow," that is, the number of persons experiencing at least one month without health insurance over a period of time such as a year.[1] The Census Bureau has measured the uninsured flow using data from calendar years 1987 and 1990–93 and in each of these years has found that roughly 20 percent of the population experienced at least one month without health insurance (see McBride 1996, for a summary of these studies). Although this suggests that there has not been an increase in the proportion of Americans who are experiencing a spell without health insurance in a given year, the detailed results do have some other implications. For instance, a slightly higher percentage of persons were experiencing an entire year without health insurance in 1992 (7.2 percent) as compared to 1987 (6.5 percent) and a slightly lower percentage of persons were experiencing from one to eleven months with insurance. The Census Bureau also uses SIPP data to present an estimate of the uninsured flow over a longer period of time: the entire duration of a SIPP panel. Using 28 months of SIPP data, it was found that 26.1 percent of the U.S. population experienced a spell without health insurance in the 1987–89 period and 27 percent experienced a spell during the 1992–93 period (U.S. Census Bureau 1992, 1996c). Using a slightly longer 32-month window, it was found that 25.3 percent of the U.S. population experienced an uninsured spell during 1990–92 and 26.5 percent experienced a spell during 1991–93 (U.S. Census Bureau 1994, 1995). These findings, converted to millions of persons, have been cited over the years as another estimate of the prevalence of the uninsured problem. For example, 60 million people experienced an uninsured spell during the 28-month period covering 1987–89 and 66.6 million experienced a spell during the 28-month period

[1]Other authors have constructed similar estimates using other methods or other data. For example, Katherine Swartz's often-cited study concluded that 58 million people were uninsured for some time during calendar year 1992 (Swartz 1994). This includes 21 million people who were uninsured throughout the entire year, a number which has been used to characterize the chronically uninsured. Pamela Farley Short (1990) used the National Medical Care Expenditure Survey to conclude that 10.2 percent of the population (about 24.5 million persons) lacked insurance for all of 1987. Although these studies attempt to measure the number of people uninsured for an entire year, the difference between the estimates results from the use of different survey instruments and measures made at different points in time.

spanning 1992–93. Some of these and other estimates of the uninsured flow were widely cited during the recent health reform debate.

Uninsured stock. In contrast to measures of the uninsured flow, estimates of the *uninsured stock* (the number of persons remaining uninsured over an entire period of time, such as one year) yield lower estimates of the uninsured because only those who are uninsured throughout the entire period are counted as uninsured. For example, only 6.5 percent of the population was uninsured for the entire year of 1987, while 7.2 percent of the population was uninsured for all of 1992 (U.S. Bureau of the Census 1992, 1994). These findings suggest that 15 million people went without insurance for all of 1987, while 18 million went without insurance for all of 1992. In addition, only about 4 percent of the population (8.8 million persons in 1987–89 and 9.4 million persons in 1992) was uninsured for as long as 28–32 months. These findings of a smaller incidence of long-term uninsurance, as measured over a 28–32-month fixed window of time, have been used as estimates of the "chronically uninsured" population.

Literature on Spells of Poverty

Policymakers are concerned about the duration of poverty spells for many reasons. One is the long-standing national goal to alleviate poverty. Another reason is the more recent debate that the federal programs designed to alleviate poverty may have the opposite effect, causing recipients to remain in poverty for long periods, due to perverse incentives (e.g., in the AFDC program). This concern led to an explosion of research into estimating the duration of poverty spells since the early 1970s.

Levy (1977) and Coe (1978), using data from the Panel Study of Income Dynamics (PSID) were the first to provide some estimates of the persistently poor, that is, people with incomes below the poverty line for an extended period of time. Levy, who defined the persistently poor as people with incomes below the poverty line for at least five years between 1967 and 1973, found that between 10 and 11 million persons, or 40–45 percent of the poor at a given point in time, were persistently poor. Using a longer time frame of eight years (1967–75), Coe (1978) found that 3 million persons or 12 percent of the

poor at a point in time were persistently poor. Subsequent studies using PSID data confirmed the general scope of these results (Bane and Ellwood 1986; Duncan, Coe, and Hill 1984; Hill 1981; Rainwater 1981). Bane and Ellwood (1986), whose techniques were similar to those of Swartz and McBride (1990), found that only 12 percent of the nonelderly beginning spells of poverty would remain in poverty for nine or more years. However, they also found that 51.5 percent of the nonelderly poor at a point in time are in the midst of a spell lasting nine years or more, a much larger proportion than found in previous studies.

Ruggles (1990), using data from the 1984 panel of the SIPP and conventional definitions of poverty, found that 58 percent of poverty spells ended in the first 4 months of the spell and 81 percent were completed in this first 8 months of the spell. She found only 5.3 percent of spells lasted 28 months or more. Ruggles also investigated alternative definitions of poverty which might account for changes in the economic well-being of the overall population over time. Using a higher poverty threshold, she found that 59 percent of spells lasted 8 months or less, but that 14 percent of spells lasted 28 months or more. A comparison of the Ruggles (1990) results to the Swartz and McBride (1990) results suggests that a spell of poverty might typically be shorter than a spell without health insurance, although not appreciably so. As Ruggles explains (1990: 115–77), none of the previous studies accounted for the problems of left-censoring of spells.

Limitations of Previous Studies

Although these findings provide some evidence that people in poverty are more likely to experience long uninsured spells, the findings for the most part do not provide leads into the problem of uninsured spells for the poor. There are several reasons for this.

First, none of studies cited above looked *specifically* at coincident uninsured and poverty spells. Thus, no estimates of the duration of these types of spells exist. Moreover, we know little about the characteristics of these individuals and how they obtain health insurance coverage, if they are able to.

Swartz, Marcotte, and McBride (1993b) produced preliminary estimates of a competing risks model of exits from a spell of uninsurance only for a subsample of poor persons and these results are limited.

Second, the Swartz and McBride (1990) study provides stratifications of the estimates of the duration of uninsured spells only by *poverty status at the beginning of the uninsured spell*. This means that many of the people who were in poverty at the beginning of their uninsured spell may have exited from poverty before—or at the same time as—they exited from an uninsured spell. Thus, the estimates of uninsured spell durations do not provide evidence about the durations of spells for the chronically poor, nor do they provide leads into the dynamics of poverty and uninsurance.

Finally, the relevance of Swartz and McBride (1990) to the current health care reform debate is limited because of its use of data collected between 1984 and 1986. Although these data are not seriously outdated (in comparison to other available data), legislation that went into effect after the SIPP 1984 panel could possibly affect the findings of many short spells without health insurance. The Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985 implemented a requirement that employers offer health insurance coverage to employees beyond the date of termination from their present job. Since the evidence suggests that many of the uninsured spells that started during the 1984 panel were very short (50 percent lasting less than 5 months), the COBRA legislation has the potential to eliminate many short uninsured spells.

In conclusion, knowing the length of uninsured spells of people who are also in poverty is important for the proper targeting of proposals that provide access to health care for the poor.

III. DATA

This project uses data primarily from the 1990 panel of the SIPP, a multipanel, longitudinal survey conducted since 1984 by the Bureau of the Census. Participants in the 1990 panel were initially interviewed in February 1990 and were then interviewed every four months until April 1992. Data from

the 1987 SIPP panel are also shown here in a few places for longitudinal comparisons. The SIPP is a nationally representative sample of adults that provides detailed sociodemographic information as well as information on month-by-month fluctuations in household and individual income, health insurance status, labor force status, and participation in government-sponsored programs such as WIC, Medicare, and Medicaid. The information is collected for the individual and the individual's household (including children under the age of 15) for the four months preceding each interview. The full 1990 panel consists of eight interviews, covering a period of 32 months. The initial 1990 panel sample includes approximately 23,600 households (or about 54,000 persons), but additional households and persons were added to the sample if they entered or exited from the original SIPP household.[2]

This study is based on a large file that was created by merging data from three sources:

- Extract from the 1990 Full Panel Research File. The Census Bureau produces a full-panel research file (FPRF) by merging data from all eight interviews for every respondent. The FPRF includes data on basic demographic and economic variables, as well as longitudinal information on health insurance status. Since the 1990 FPRF contains only a subset of the data collected through the "core" questionnaire on each wave, relevant information on health insurance coverage, health status, and health utilization was not attached to the FPRF. Thus two additional extracts were created and attached to the FPRF.

- Extracts from 1990 Topical Module Files. Waves 3 and 6 of the 1990 panel included "Topical Modules" that included questions on health status and health utilization. These data were extracted from the 1990 wave files and merged with the FPRF extract.

[2]As of this writing, the 1990 panel is the latest *full* panel file available, although data from later SIPP panels are also available. The "full panel research file" links data from all the waves of each panel.

- Extracts from Core Wave Files. Since the FPRF does not include all of the information collected on health insurance coverage in each wave interview, additional variables were extracted from each wave file and merged with the other data. This extract included data on the exact source of employer-provided insurance coverage (e.g., present or former employer), the depth of insurance coverage (e.g., family or individual coverage), and the employer's contribution to insurance coverage.

The resulting large panel file includes extensive detail on the health insurance coverage, health status, and health utilization of a representative sample of persons in the United States.

IV. METHODS

Although the various studies cited above have produced estimates of uninsured spell durations for the entire population of uninsured persons, estimates of uninsured spell durations for the poor are of inherent interest, especially to test the hypotheses that these spells are likely to occur at the same time and that uninsured spells for the poor will be longer than uninsured spells for people who are not in poverty.

The variable of interest in this research is spells. Here, the length of an uninsured spell is defined as: $T_u=T_{ue}-T_{ub}$, where T_{ub} is the month when a person makes a transition from insured to uninsured and T_{ue} is the month when they make the transition back to insured status. Insurance coverage is defined here to include any type of public insurance (e.g., Medicaid, Medicare, CHAMPUS, or public employer insurance), or private insurance (employer-provided or other private coverage). Thus, only those who have *no* source of insurance will be defined as "uninsured." The length of a poverty spell is defined as: $T_p=T_{pe}-T_{pb}$, where T_{pb} is the month when income drops below the poverty line and T_{pe} is the month when income rises above the poverty line. Initially, the official poverty line (Social Security Administration

1996: Table 3.E8) will be used for identifying persons in poverty. But, to test the sensitivity of this definition on the results and to broaden the scope of the research, alternative definitions of poverty will also be applied.

Here, a coincident poverty and uninsured spell will be defined as starting in month T_{cb}, the first month when a person is observed as *both* uninsured and in poverty, and ending in month T_{ce}, the month when the person either exits from poverty or obtains insurance: $T_c=T_{ce}-T_{cb}$.

Estimates of the duration of new spells. We use conventional nonparametric methods to estimate the duration of new uninsured spells, particularly life-table estimates produced by the SAS program to estimate spell duration and to control for the problem of right-censoring of spell lengths (Allison 1995: 41–49). (Left-censored spells are not considered in this analysis because the Swartz, Marcotte, and McBride (1993a) findings suggest that including them did not materially alter the results.)

Estimates of the total duration of uninsured spells at a point in time. The procedures developed by McBride (1994) were used to compute an estimate of the distribution of spell durations for the population of uninsured at a point in time. First, a cross-sectional, point-in-time sample of the uninsured was drawn from the data file. The sample was chosen as of the last calendar month of the last year for which the SIPP panels respondents were interviewed (in the 1987 panel, December of 1988; in the 1990 panel, December of 1991). This provides a statistical sample representative of the population of uninsured persons in the specified month. The second step requires computing the uninsured spell duration for each person up to the time when the sample was drawn. A good estimate of these durations can be computed from the SIPP data because each of these persons would have been followed for at least 24 months up to that month. This variable provides a distribution of spell durations up to that month, but it does not provide an estimate of total spell durations because, by definition, all of the uninsured spells in the sample are still in progress. Thus, it is necessary to find a method for predicting the total spell length, given the information provided by the spell length to that point.

An estimate of total spell duration for this sample was computed by multiplying the SIPP sample weight by an estimate from a within-sample survival regression model. To compute these estimates, the following methods were used. First the probability that the spell would last a given number of months, given the certain information of its spell length to December, was calculated. A simple survival model, with no covariates, was used to compute this probability.[3] The model was then used to calculate the survival probability, that is, the probability that a spell that has lasted t months will last t+k months, S(t+k|t). This probability can then be multiplied by the SIPP full panel sample weight (PW) to calculate an estimate of the number of persons with similar characteristics as the sample person whose uninsured spells would last the specified number of months: W_{t+k}=PW*S(t+k|t). For example, the revised weight in the 13th month for a person whose spell had been in progress for 13 months by December would be equal to PW. But the weight used in the 14th month would be equal to the panel weight times the probability that the spell would last from the 13th to the 14th month (for example .916). Thus, if the person's sample weight equaled 5,000, we would then conclude that 4,580 (5,000*.916) persons with similar characteristics would have spells that lasted 14 or more months, and so on. These new weights were used to calculate the distributions in the paper.

Fortunately, this process of estimating the total duration of uninsured spells at a point in time yields a more precise estimate of very long spells (that is, spells that have already lasted at least 24 months) here because the SIPP sample includes spells that have lasted at least that long.

Ruggles (1990) has pointed out that month-by-month estimates of poverty spells seem short because of the volatility of income flows. If a person's income stream is not consistent, it is quite likely that that person could experience one or two months of poverty according to the monthly definition. To counter this problem, Ruggles used alternative definitions of poverty spells which required the drop in

[3]The regression was completed in SAS, using a log-logistic specification. This functional form was chosen because it fit the data more closely. In particular, the log-logistic function allows the hazard rate to increase, and then to decrease, as the length of the spell increases. This is a pattern which fits the observed phenomenon.

income to be larger and more permanent. This procedure was considered here, but applying a different method eliminates some of the volatility in the poverty spell estimates: A "poverty spell" will include the near poor up to 150 percent of the poverty line, which is attractive for three reasons. First, it eliminates spell exits and entrances that occur when a person's income falls only *slightly* above or below the poverty line. Second, it includes people who might still be at risk of financial difficulty from a health care expenditure, even though their income is above the poverty line. (Note that a $10,000 medical bill still represents seven months of gross income for a family of three with an income equal to 150 percent of the poverty line.) Making this inclusion is important because the official poverty line has been criticized for being too low (Ruggles 1990). Applying a higher poverty threshold avoids this pitfall. Finally, the estimates presented above suggest that the size of the population with incomes below 150 percent of poverty measured on an annual basis is very close to the size of the population with incomes below 150 percent of poverty measured on a monthly basis.

V. RESULTS

How Many Are Uninsured and Poor?

At a point in time in 1991, roughly 27 percent of the uninsured were poor—that is, their family income was below the official poverty line (Table 1).[4] In addition, another 21.9 percent of the uninsured had incomes placing them close to poverty—between 100 and 150 percent of the poverty line. Thus, almost 50 percent of the uninsured were poor or near poor. As seen in Table 1, only 9.3 percent of the insured population was in poverty and only 17.3 percent of the insured population had family incomes below 150 percent of poverty. The comparisons in Table 1 indicate little change in the distribution of uninsured by poverty status between 1988 and 1991.

[4]This corresponds to the findings recently reported from the 1996 Current Population Survey concluding that 27 percent of persons were uninsured at a point in time in 1995.

TABLE 1

Distribution of Uninsured by Poverty Status, 1988 and 1991

	Annual Definition				
	December 1988		December 1991		
Poverty Ratio[a]	All Uninsured (%)	Uninsured Adults (%)	All Uninsured (%)	Uninsured Adults (%)	All Insured (%)
Less than 1.0	26.0	22.7	27.0	24.9	9.3
Less than 0.5	8.3	6.9	8.1	7.7	3.3
0.5–1.0	17.7	15.7	18.9	17.1	6.0
1–1.5	21.8	19.0	21.9	19.9	8.0
1.5–2	15.8	15.6	16.7	16.5	9.5
2–3	17.5	19.5	18.9	20.3	21.8
3 or more	18.9	23.3	15.5	18.5	51.4
Total	100.0	100.0	100.0	100.0	100.0
Exhibit: Less than 1.5	47.8	41.7	48.9	44.7	17.3
Total persons (1,000s)	29,238	20,409	31,308	23,219	192,621

	Monthly Definition			
	December 1988		December 1991	
Poverty Ratio	All Uninsured (%)	Uninsured Adults (%)	All Uninsured (%)	Uninsured Adults (%)
Less than 1.0	32.9	28.7	34.4	32.0
Less than 0.5	15.3	13.1	15.0	14.6
0.5–1.0	17.6	15.6	19.4	17.4
1–1.5	18.3	17.0	21.5	20.2
1.5–2	16.3	16.5	13.3	13.4
2–3	16.1	17.5	17.4	18.5
3 or more	16.4	20.3	13.4	15.9
Total	100.0	100.0	100.0	100.0
Exhibit: Less than 1.5	51.2	45.7	55.9	52.2
Total persons (1,000s)	29,238	20,409	31,808	23,219

Source: 1987 and 1990 SIPP panels.

[a]Ratio of family income to poverty line defined as follows: *Monthly definition:* monthly definition/(poverty line/12); *Annual definition:* annual income/poverty line.

Children (under age 18) are overrepresented in the poverty and uninsured populations, whereas the elderly are underrepresented in both groups. Nevertheless, the findings suggest that a lower proportion of uninsured adults age 18–64 are poor (24.9 percent) or near poor (19.9 percent) than either children or the elderly.

Table 1 also presents the distribution of the uninsured using two alternative definitions of poverty: an annual definition and a monthly definition. The annual definition compares a family's annual income to the annual poverty threshold; the monthly definition compares the monthly income to the monthly average of the annual threshold.[5] There will be a difference between these methods if a person's income receipt is not regular throughout the year, if, for example, they experience a spell of unemployment, are self-employed, or work seasonally.

The percentage of the uninsured who are poor is lower when measured by the annual definition (27 percent) than when measured by the monthly definition (roughly 34 percent). However, the proportion of uninsured persons whose income places them just above the poverty line (between 100 and 150 percent of the poverty line) is quite similar regardless of the definition used. Table 2 shows that a persons who falls in one poverty category under one definition is likely to fall in the same category using the other definition. But a significant proportion (6 percent) of uninsured persons who are poor by the monthly definition were not counted as poor by the annual definition.

These estimates of the uninsured poor show that close to half of the uninsured are poor or near poor and might have difficulty financing large health care expenditures. For example, the poverty line for a family of three was $11,140 in 1991. It is easy to see how a relatively small medical bill could cause serious financial hardship for a family whose monthly income is less than this amount or less than 150

[5]Hence, a person is considered poor if their poverty ratio is $MY_i/(PL_i/12)<1$, where MY_i is the monthly family income for person I and PL_i is the annual official poverty line for that family (which varies with family size and type). In contrast, under the annual definition, a person is considered poor only if $AY_i/PL_i<1$, where AY_i is the annual family income for person I and PL_i is the annual official poverty line for that family.

TABLE 2

Percent Distribution of Uninsured Persons by Poverty Ratio, 1991

		Annual Definition[b]				
Monthly Definition[a]	*Total*	<1.0	1–1.5	1.5–2	2–3	>3
Less than 1.0	28.7%	17.3%	7.3%	2.3%	1.1%	0.7%
1–1.5	22.9%	3.3%	11.9%	5.1%	2.4%	0.3%
1.5–2	14.3%	0.6%	2.6%	6.4%	3.6%	1.1%
2–3	19.4%	0.1%	0.8%	3.8%	11.4%	3.3%
3 or more	14.7%	0.0%	0.1%	0.5%	2.1%	2.0%
Total	100.0%	21.2%	22.7%	18.0%	20.6%	17.4%
Exhibit: Less than 1.5	51.6%	20.5%	19.2%	7.4%	3.5%	1.0%

[a]Monthly definition: monthly income/(poverty line/12).
[b]Annual definition: annual income/poverty line.

percent of this amount (roughly $18,500). High health care expenditures may not be a problem for a person who is only temporarily poor, however. Either a person could delay a health care intervention until they have the money or they could pay their health bills when they are no longer poor.

Duration of Uninsured Spells

People who are uninsured and poor for a long period of time may face a higher risk of financial problems associated with health care, as compared to those who are not chronically uninsured and poor. Survival analysis techniques were used to estimate spell durations for the sample of people who experience uninsured spells. Table 3 shows the distribution of uninsured spell length found in the 1990 SIPP panels. To see if the duration of spells is changing over time, the results from the 1990 panel are compared to results found using the 1987 panel. The results show that, for 1990, roughly 45 percent of new uninsured spells were completed within four months, and 60 percent were completed in the first eight months. The median duration for a spell was 7.1 months. Close to 20 percent of spells lasted more than two years and roughly one-third (31.6 percent) lasted more than one year.

The finding that most uninsured spells are very short has led to considerable confusion about the uninsured (McBride 1994; Swartz 1994). In particular, the distribution of spell durations for *new* uninsured spells is considerably different from the distribution of durations of *spells in progress.* The long-term or chronically uninsured are more likely to be represented in the point-in-time population of uninsured (McBride 1994). To see how much difference this effect makes, estimates of the duration of uninsured spells were obtained for the "stock" of uninsured at a point in time using the SIPP sample; the results are presented in Table 3. As in McBride 1994, the findings indicate that most of the uninsured at a point in time are experiencing long uninsured spells: 62.2 percent of the uninsured are in spells that will last more than two years and 81.9 percent in spells that will last more than one year.

The evidence suggests that uninsured spells may be getting longer over time, at least until recently (see above). The median spell length found in the 1990 panel was 7.1 months as compared to 6.3

TABLE 3

Distribution of Uninsured Spell Lengths: 1987–1989 and 1990–1992

	Duration of New Uninsured Spells				Uninsured at Point in Time Total Spell Duration[a]	
	1987 Panel		1990 Panel			
Spell Length	Actual	95% Conf. Interval	Actual	95% Conf. Interval	1987 Panel	1990 Panel
<5 months	47.0%	(45.6%–48.3%)	44.9%	(44.0%–45.9%)	3.5%	2.6%
5–8 months	15.5%	(15.4%–15.5%)	15.1%	(15.0%–15.1%)	11.6%	8.4%
9–12 months	8.1%	(8.1%–8.2%)	8.4%	(8.3%–8.4%)	9.8%	7.2%
13–16 months	5.2%	(5.1%–5.2%)	5.4%	(5.4%–5.4%)	8.1%	7.3%
17–20 months	3.4%	(3.3%–3.5%)	4.4%	(4.3%–4.4%)	6.9%	6.6%
21–24 months	0.8%	(0.7%–0.9%)	2.6%	(2.6%–2.7%)	6.1%	5.8%
>24 months	20.1%	(18.4%–21.8%)	19.2%	(18.0%–20.3%)	53.9%	62.2%
TOTAL	100.0%		100.0%		100.0%	100.0%
Exhibit: > 1 year	29.4%		31.6%		75.1%	81.9%
Median spell length (months)	6.29	(5.72–6.87)	7.14	(6.67–7.61)		
Total spells	5,786		11,971			
Spells with observed ending	3,403		7,053			
Censored spells	2,383		4,918			
Percent censored spells	41.2%		41.1%			

Sources: 1987 and 1990 SIPP panels.

[a]To compute an estimate of the distribution of spell durations for the population of uninsured at a point-in-time, samples of respondents were drawn from points in time—December 1988 and December 1991—from the 1987 and 1990 SIPP panels. Total spell durations to the end of a person's spell were then estimated for each person. The methods for obtaining these estimates are described in detail in McBride 1994. This process yields a good estimate of the chronically uninsured because the sample is drawn after observing people for over two years. Thus, people whose spells last for more than one year or two (and people who are always uninsured during the panel) can be observed in this state.

months in the 1987 panel. In addition, a slightly larger proportion of the point in time uninsured population in 1987 were in spells that would last more than two years (compare 81.9 to 75.1 percent). On the other hand, the difference in median spell durations was not statistically significant and new spells in 1987 were slightly more likely to last more than two years (although again this difference is not statistically significant).

Duration of Uninsured Spells among the Poor

The evidence presented in Table 4 implies that the poor are more likely to have longer uninsured spells than the nonpoor. For instance, the median uninsured spell duration among the poor is roughly 8.3 months, as compared to only 6.0 months for the nonpoor uninsured, a statistically significant difference. In addition, among the population that was poor in the first month of their uninsured spell, 21.8 percent were starting spells that lasted more than two years, compared to only 17.7 percent of the nonpoor uninsured. Most of the uninsured poor (81.3 percent) at a point in time were in uninsured spells that would last more than one year.

Table 5 presents further evidence on the duration of uninsured spells in the uninsured population at a point in time. Table 1 reported that roughly 27 percent of the uninsured are poor at a given point in time and that 49 percent had incomes below 150 percent of poverty. As seen in Table 5, 23.7 percent of the uninsured at a point in time were both in poverty and in uninsured spells that would last more than one year, and 42 percent were in uninsured spells that would last more than one year and had incomes below 150 percent of poverty. Thus, at a point in time, almost half of the uninsured are chronically uninsured persons with low incomes.

Table 6 presents a snapshot of one year of time and measures: (a) how many months the person was without health insurance during the year, and (b) how many months the person was without health insurance *and* poor during the year (i.e., in a coincident uninsured and poverty spell).

TABLE 4

Distribution of Uninsured Spell Lengths, by Poverty Status

Spell Length	Duration of New Uninsured Spells			Confidence Intervals		Uninsured at Point in Time Total Spell Duration	
	Poor	Nonpoor	All Persons	Poor	Nonpoor	Poor	Nonpoor
<5 months	40.6%	47.2%	44.9%	(38.7%–42.4%)	(46.1%–48.4%)	1.5%	3.0%
5–8 months	15.4%	14.7%	15.1%	(15.3%–15.6%)	(14.6%–14.7%)	4.9%	9.6%
9–12 months	7.8%	8.6%	8.4%	(7.7%–7.8%)	(8.6%–8.6%)	5.2%	7.9%
13–16 months	5.3%	5.4%	5.4%	(5.2%–5.4%)	(5.4%–5.4%)	7.1%	7.4%
17–20 months	5.2%	4.0%	4.4%	(5.1%–5.3%)	(4.0%–4.1%)	6.5%	6.6%
21–24 months	4.0%	2.3%	2.6%	(3.7%–4.3%)	(2.2%–2.4%)	5.9%	5.7%
>24 months	21.8%	17.7%	19.2%	(19.2%–24.3%)	(16.4%–19.0%)	68.8%	59.8%
Total	100.0%	100.0%	100.0%			100.0%	100.0%
Exhibit: > 1 year	36.3%	29.5%	31.6%			88.4%	79.5%
Median spell length (months)	8.25	6.01	7.14	(8.05–8.46)	(5.41–6.61)		
Total spells	2,941	8,365	11,971				
Failed spells	1,626	5,124	7,053				
Censored spells	1,315	3,241	4,918				
Percent censored spells	44.7%	38.7%	41.1%				

Source: 1990 SIPP panel.

TABLE 5

Distribution of Uninsured Spell Lengths at a Point in Time, by Poverty Status

	Percentage of All Uninsured Persons				
Total spell duration	All Persons	Poor	Nonpoor	Poverty Ratio<1.5	Poverty Ratio>1.5
<5 months	2.6%	0.4%	2.2%	0.9%	1.7%
5–8 months	8.4%	1.3%	7.0%	2.8%	5.6%
9–12 months	7.2%	1.4%	5.8%	3.5%	3.7%
13–16 months	7.3%	1.9%	5.4%	3.3%	4.0%
17–20 months	6.6%	1.8%	4.8%	3.0%	3.6%
21–24 months	5.8%	1.6%	4.2%	2.9%	2.9%
>24 months	62.2%	18.4%	43.8%	32.8%	29.4%
Total	100.0%	26.8%	73.2%	49.2%	50.8%
Exhibit: > 1 year	81.9%	23.7%	58.2%	42.0%	39.9%

Source: 1990 SIPP panel.

TABLE 6

Months without Insurance and in Poverty, 1991

Months	Uninsured in December 1991			Insured in December 1991
	All	Poor	Nonpoor	
Months without insurance in 1991				
0	0.0%	0.0%	0.0%	92.1%
1	2.9%	1.5%	3.4%	1.0%
2–4	11.6%	9.7%	12.4%	3.8%
5–8	18.6%	16.6%	19.3%	2.1%
9–11	9.3%	10.3%	8.9%	1.0%
12	57.6%	62.0%	56.0%	0.0%
Months without insurance and poor in 1991				
0	46.0%	2.0%	62.2%	96.8%
1	7.7%	1.4%	10.0%	0.9%
2–4	17.8%	12.3%	19.9%	1.6%
5–8	14.1%	32.1%	7.5%	0.6%
9–11	6.3%	22.2%	0.5%	0.1%
12	8.1%	30.1%	0.0%	0.0%
Months without insurance and poverty ratio < 1.5 in 1991				
0	28.6%	0.5%	39.0%	95.6%
1	5.8%	1.4%	7.4%	0.9%
2–4	18.4%	9.7%	21.6%	2.3%
5–8	18.6%	19.6%	18.2%	1.0%
9–11	12.0%	17.9%	9.9%	0.3%
12	16.7%	51.0%	4.0%	0.0%

Source: 1990 SIPP panel.

Using the first measure—months without health insurance during the year—the findings suggest that 62 percent of the uninsured poor at a point in time in 1991 were uninsured for all 12 months of 1991. In contrast, 56 percent of the nonpoor uninsured were uninsured for the entire year. Although this provides further evidence that the poor face more persistent uninsured spells than the nonpoor, the difference in the proportions of these groups that are without health insurance for the entire year is not large.

In contrast, the results do indicate that some persons are much more likely to be persistently poor *and* uninsured for long periods of time. In 1991, 30.1 percent of the uninsured poor at a point in time had no insurance *and* were poor for the entire year—their income never climbed above the poverty line in any month and they never had insurance in any month.

As described above, Ruggles (1990) has pointed out that month-by-month estimates of poverty may overestimate the extent of persistent poverty because of the volatility of income flows. To counter this problem, estimates are presented that will eliminate some of the volatility in the poverty spell estimates by using a definition of a "poverty spell" that includes the near poor up to 150 percent of the poverty line.

Table 6 shows that, using the monthly definition of poverty and a threshold set at 150 percent of the poverty line, many more persons (51 percent of the uninsured poor) will remain uninsured and poor for the entire year. Only 39 percent of the uninsured with incomes above the poverty line spent no months with income above 150 percent of poverty and without health insurance. Forty percent of this group experienced from 2 to 8 months with incomes below 150 percent of poverty and without health insurance. These findings suggest that many persons spend several months vulnerable to the risks of high health spending, if vulnerability is more broadly defined to include incomes below 150 percent of the poverty line.

Sociodemographic Characteristics of the Uninsured Poor

In order to develop policies that are particularly suited to solving the problems of the uninsured poor, it is important to understand more about their characteristics. Are the uninsured poor similar to the uninsured nonpoor or not? What do the differences between the groups suggest about appropriate strategies for meeting the needs of the uninsured poor?

Employment characteristics. Health insurance in the United States is provided primarily through employers, so it is not surprising that only 29.3 percent of the uninsured poor were employed in December 1991, and only 15.3 percent were employed full-time (Table 7). This is in sharp contrast to employment rates among the nonpoor: 51.2 percent for the uninsured and 52.8 percent for the insured. Table 7 also indicates that almost one-third of the uninsured poor not in the labor force are children. Overall, 83.5 percent of the insured poor are not in the labor force, also not surprising since this group is dominated by people insured through public programs, which typically provide coverage only to those who cannot work.

But, as seen in Table 7, employment is not a guarantee of insurance coverage. For various reasons (e.g., low wages on the job, working for a small employer, pre-existing conditions), many workers do not have insurance through their job. Although studies have shown that one of the most important characteristics of a job is firm size (McBride 1996), the SIPP FPRF does not contain this variable. Nevertheless, some circumstantial evidence can be obtained from looking at other employment characteristics. The number of hours worked (e.g., part-time vs. full-time) is an important determinant of insurance status because part-time workers are likely to earn lower wages and are less likely to be eligible for health insurance than full-time workers. In fact, 42.3 percent of the insured nonpoor were working full-time, compared to only 35.3 percent of the uninsured nonpoor and only 15.3 percent of the uninsured poor. Table 7 also shows that the uninsured poor who are working are more likely than other groups to be employed in industrial sectors such as agriculture or retail trade, sectors known for their low

TABLE 7

Employment Characteristics of the Uninsured at a Point in Time, 1991

	Uninsured		Insured	
	Poor[a]	Nonpoor	Poor[a]	Nonpoor
Employment status				
Employed	29.3%	51.2%	12.2%	52.8%
Full-time	15.3%	35.3%	7.2%	42.3%
Part-time	14.0%	15.9%	5.0%	10.6%
Unemployed	11.4%	9.5%	4.4%	1.6%
Out of labor force	59.4%	39.3%	83.5%	45.6%
Age 0–17	31.9%	23.3%	44.9%	21.8%
Others	27.5%	16.0%	38.6%	23.8%
Occupation (percent of workers)				
Professional	9.7%	10.7%	10.6%	28.0%
Technical	21.6%	24.6%	28.5%	33.0%
Service	31.2%	23.2%	28.9%	11.8%
Farming	5.8%	4.2%	9.0%	2.0%
Precision	9.7%	15.2%	4.7%	10.3%
Laborer	21.9%	20.7%	18.1%	14.4%
Armed Forces	0.0%	1.3%	0.3%	0.5%
Industry (percent of workers)				
Agriculture	13.3%	9.3%	11.9%	5.6%
Mining	0.3%	0.4%	0.0%	0.6%
Construction	6.2%	8.9%	1.9%	3.7%
Manufacturing	9.3%	10.4%	12.9%	19.5%
Transportation	6.0%	5.7%	2.6%	8.0%
Wholesale trade	4.2%	2.6%	2.1%	3.9%
Retail trade	28.0%	26.6%	22.7%	14.5%
Service	32.4%	33.2%	41.3%	38.0%
Public sector	0.4%	3.1%	4.6%	6.3%

Source: 1990 SIPP panel.
[a]Poverty status defined by annual definition.

wages. Just over 30 percent of the employed uninsured poor are working in a service occupation, compared to only 11.8 percent of the working insured nonpoor.

Sociodemographic characteristics. Perhaps the most dramatic difference between the poor and the nonpoor is in the number of children who are poor (Table 8). Among the poor, children account for 32.4 percent of the uninsured and 45.6 percent of the insured, whereas only 24.7 percent of the nonpoor uninsured and 22.9 percent of the insured nonpoor were children. The large proportion of uninsured poor children reflects a number of phenomena. First, children may not be covered by a parent's insurance policies, even if the parent is covered. Second, poor families are often larger than nonpoor families. Third, parents may decide voluntarily to forego insurance coverage for their children because of low health care costs for most children over the age of three. Fourth, income increases with age, so older respondents are less likely to be in poverty.

The uninsured poor are more likely to live in the South than any other region of the United States. Over 50 percent of the uninsured poor live in the South, and the region has overall higher poverty rates, lower wages, lower unionization rates, lower living costs, and less generous welfare programs than the rest of the country. The percentage of nonwhites is higher among the uninsured poor (26.5 percent) than among the uninsured nonpoor (14.3 percent) or insured nonpoor (9.6 percent). However, an even higher proportion of the *insured* poor were nonwhite (31.8 percent).

Entries and Exits from Uninsured Spells

Most health insurance coverage in the United States is provided by private employers or the federal government, through Medicaid and Medicare. Uninsured persons enter a spell without health insurance by losing one of these sources of coverage and exit an uninsured spell by gaining one of these sources. There are likely to be systematic differences between the types of people who are able to obtain coverage through these different sources. For example, Medicaid is a program designed to provide health insurance coverage for people with incomes below the poverty line and coverage is typically available

TABLE 8

Demographic Characteristics of the Insured and Uninsured: 1991

	Uninsured in December 1991		Insured in December 1991	
	Poor	Nonpoor	Poor	Nonpoor
Age				
0–17	32.4%	24.7%	45.6%	22.9%
18–24	16.8%	18.2%	8.4%	8.6%
25–34	19.5%	22.6%	14.9%	16.5%
35–44	13.9%	17.1%	8.0%	16.7%
45–54	9.5%	9.7%	5.1%	11.7%
55–64	7.6%	7.5%	4.9%	9.1%
65+	0.4%	0.2%	13.1%	14.5%
Region				
Northeast	9.5%	14.2%	18.7%	21.5%
South	55.5%	41.6%	37.4%	31.3%
Midwest	17.4%	19.4%	26.4%	26.8%
West	17.7%	24.9%	17.5%	20.4%
Race				
White	68.2%	79.9%	63.4%	87.3%
Black	26.5%	14.3%	31.8%	9.6%
Other	5.3%	5.8%	4.9%	3.2%

Source: 1990 SIPP panel.

only to those with incomes significantly below the poverty line. Although point-in-time estimates suggest that only about 40 percent of the poor are covered by Medicaid (*Green Book* 1996), it is nevertheless likely that exits from uninsurance to Medicaid coverage will be more prevalent for the poor than for others. To cite another example, persons who enter a spell simply because they lost a job which provided them with health insurance and income above the poverty line are probably likely to end this spell by obtaining private coverage.

Table 9 describes the type of insurance lost by people during the 1990 SIPP panel. A significant proportion of the uninsured (over one-third) were without insurance throughout the SIPP panel or never gained insurance after losing it and are not included in this analysis because it is not known what coverage they lost or gained to start or end their spell. However, among the others, the type of insurance lost seems to depend on the person's economic status. As expected, a larger proportion (29.7 percent) of the poor than the nonpoor (9.2 percent), lost Medicaid coverage, perhaps because of an increase in income or other change in eligibility standards. In contrast, a greater proportion of the nonpoor lost private coverage (46.4 percent) than the uninsured poor (27.1 percent). Similar proportions lost coverage from others (usually coverage provided through a spouse's or parents' insurance policy).

If there are systematic differences related to economic status in the types of insurance lost by the poor as compared to the nonpoor, are there differences in the types of insurance they obtain? Table 10 lists the types of insurance gained by people who lose and then gain insurance. In all cases, people are most likely to reacquire the same type of insurance that they lost. However, people in poverty are more likely than the nonpoor to return to Medicaid coverage after losing it (compare 73.4 percent in the second panel of Table 9 to 57.7 percent in the bottom panel). In fact, Medicaid is the path of exit from uninsurance for 34.6 percent of the poor, as compared to only 10.9 percent of the nonpoor. The nonpoor are more likely to acquire private coverage (48.3 percent) or coverage from others (39 percent).

TABLE 9

Reasons Why Uninsured Spells Began and Ended

Reason Spell Began	*Total*	Reason Spell Ended: Gain Medicare Coverage	Gain Medicaid Coverage	Gain Private Coverage	Gain Coverage from Others
Persons in poverty at start of spell, 1991					
		Percentage of uninsured			
Lost Medicare	0.4%	0.3%	0.0%	0.0%	0.0%
Lost Medicaid	29.7%	0.0%	24.5%	1.0%	4.1%
Lost private coverage	27.1%	0.7%	2.5%	19.9%	4.1%
Lost coverage from others	42.9%	0.0%	7.6%	5.1%	30.1%
Total	100.0%	1.0%	34.6%	26.1%	38.3%
		Percentage by reason for spell beginning			
Lost Medicare	100.0%	92.3%	0.0%	7.7%	0.0%
Lost Medicaid	100.0%	0.0%	82.6%	3.5%	13.9%
Lost private coverage	100.0%	2.4%	9.2%	73.4%	15.0%
Lost coverage from others	100.0%	0.0%	17.7%	12.0%	70.3%
Persons not in poverty at start of spell, 1991					
		Percentage of uninsured			
Lost Medicare	0.4%	0.2%	0.1%	0.2%	0.0%
Lost Medicaid	9.2%	0.3%	5.3%	1.1%	2.5%
Lost private coverage	46.4%	1.0%	1.6%	38.5%	5.3%
Lost coverage from others	44.0%	0.5%	3.9%	8.5%	31.2%
Total	100.0%	1.8%	10.9%	48.3%	39.0%
		Percentage by reason for spell beginning			
Lost Medicare	100.0%	39.1%	14.1%	36.7%	10.1%
Lost Medicaid	100.0%	2.8%	57.7%	12.3%	27.2%
Lost private coverage	100.0%	2.1%	3.5%	83.0%	11.4%
Lost coverage from others	100.0%	1.0%	8.9%	19.2%	70.9%

Source: 1990 SIPP panel.
Note: Spells with observed beginnings and endings only.

TABLE 10

Self-Reported Reason for Lacking Health Insurance, Point-in-Time Uninsured, 1991

		Uninsured	
Reason	All Uninsured	Uninsured Poor	Uninsured Nonpoor
Too expensive/can't afford	60.2%	73.2%	57.3%
Employer does not offer	14.5%	10.4%	15.4%
Unemployed	5.7%	5.9%	5.7%
Have been healthy	2.2%	1.2%	2.4%
Don't believe in health insurance	0.7%	0.1%	0.8%
Can't obtain (preexisting condition)	1.3%	1.2%	1.4%
Covered[a]	10.3%	5.6%	11.4%
Other	5.0%	2.5%	5.6%
Total	100.0%	100.0%	100.0%

Source: 1990 SIPP panel.

[a]Respondents reported no insurance coverage in response to questions on that status, yet reported they were still covered in response to this question.

VI. CONCLUSIONS AND POLICY IMPLICATIONS

Roughly two-thirds of the uninsured at a point in time live in families whose income is below 200 percent of the poverty line and roughly one-quarter live in poverty at a point in time. Although policymakers have directed considerable public resources at closing the access gap for the uninsured poor, research has not focused extensively on the relationship between uninsured spell durations and poverty. This study seeks to close this gap in the literature.

The results presented here, based on data from the 1990 SIPP, conclude that the typical uninsured spell is longer for the uninsured poor (roughly 8.3 months) than for the uninsured nonpoor (roughly 6 months). As a result, roughly 81 percent of the uninsured poor at a point in time will be uninsured for more than two years and roughly 69 percent will be uninsured for more than two years. Put together, all these data imply that almost one-quarter of the uninsured at a point in time are poor persons who have been uninsured for more than one year, and 42 percent are persons with income below 150 percent of the poverty line and uninsured for more than a year. These findings are significant because many analysts have suggested that the finding that roughly 25–30 percent of the uninsured at a point in time are in poverty is misleading because many of the uninsured poor will not be poor or uninsured for a long time. In fact, these findings suggest that over 40 percent of the uninsured are chronically uninsured and poor or near poor.

The uninsured poor are of particular interest for a number of reasons. First, the prohibitive cost of health insurance premiums is an important consideration (Holahan and Zedlewski 1992). Second, the lack of health insurance leads to significant out-of-pocket costs for the poor (Holahan and Zedlewski 1992), which may lead them to use health care inefficiently (e.g., using emergency room care for primary care) and to account for significant percentages of uncompensated care (*Green Book* 1996). Third, health problems can spiral out of control the longer a person is both uninsured and poor: long spell durations

can increase the likelihood of delays in the utilization of health care, exacerbating an already precarious financial position, and leading to a perpetuation of the poverty spell and further declines in health status.

Results from a companion study (McBride forthcoming 1997) provide significant evidence on the health status and health utilization of the uninsured poor. It was found that those with long uninsured spells are likely to have lower health utilization, tied to their lack of access to a mechanism to pay for health care. There is significant support for this hypothesis, as uninsured spell durations are found to be significant predictors of fewer physicians visits and fewer nights in the hospital, even after controlling for other factors. In addition, the long-term uninsured are found to be much less likely to use a physician as their usual source of care. Instead, they turn to other sources of care, such as clinics, hospital emergency rooms, or other hospital sources. However, the long-term uninsured poor are also more likely to have no usual source of care at all.

Policy Implications

A major aim of this study is to inform the health care reform debate. These findings could have considerable bearing on the choice of an appropriate public policy. The findings presented here estimate that over 40 percent of the uninsured are chronically uninsured and poor or near poor, and thus that the cost of obtaining health care will be particularly prohibitive for this group. For roughly one-third of the uninsured poor who exit from uninsurance spells, the Medicaid program provides an exit from uninsured spells. However, the Medicaid program currently provides access to health insurance for less than half of the uninsured poor (*Green Book* 1996), so the potential of Medicaid to resolve this problem is unlikely, especially in the near future, as it faces considerable fiscal and other pressures resulting from changes in welfare programs.

The implications of a high number of people with coincident chronic poverty and uninsured spells are important for health care reform. The treatment of the chronically poor and uninsured would be very different under many proposals. Under the managed competition framework, initially proposed by

health economist Alain Enthoven and folded into the framework favored in 1994 by President Clinton, employers would have been mandated to provide health insurance for their employees, a burden that would be eased by a number of insurance market reforms, including the formation of "health alliances" to allow for the pooling of insurance costs across many employers (Enthoven 1993; Enthoven and Kronick 1989; Starr and Zelman 1993). The unemployed would be covered through some type of public coverage, perhaps also offered through the health alliances. Under this type of system, the treatment of the uninsured poor would depend on their employment status. If a poor person is employed but not insured and the worker's firm is now required to provide health insurance, the reforms would provide coverage but the burdens of the costs of this coverage could be very important. If many of these costs are imposed directly on employers, then employers could respond by attempting to shift these costs to employees through lower wages or perhaps through cutbacks in hours worked. On the other hand, if the reforms call for a higher proportion of costs imposed directly on employees, then this could also impose a substantial burden on the working poor. Finally, the uninsured poor who are not working would obtain insurance through a public plan and the costs will be borne by other taxpayers.

A number of policymakers have suggested solving the problem of uninsurance by offering people without health insurance tax incentives to purchase insurance. For example, people with low incomes could be offered a tax credit or voucher to purchase health insurance. Other proposals would create a tax deduction for the purchase of health insurance. Since the tax incentive proposals often require some contribution from the uninsured and are often voluntary, these plans are likely to lead to less coverage of the uninsured poor than would be expected under other approaches. This would be especially true for the uninsured who are also in the midst of long poverty spells.

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