

# Uninsured Working-Age Adults: Characteristics and Consequences

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*While estimates of the country's uninsured vary, ranging from 10 to 18 percent of the general population, virtually every study on use of medical services reports that lack of health insurance represents a major barrier to medical care. Based on the 1986 national Robert Wood Johnson Access Survey of 10,130 noninstitutionalized persons, the characteristics of working-age adults without health insurance, and the consequences, are examined. Among working-age adults, the uninsured are most likely to be poor or near-poor, Hispanic, young, unmarried, and unemployed. Compared with the insured, they have significantly fewer ambulatory visits during a year, are less likely to have contact with a medical provider during a 12-month period, and are more likely to receive their care in a hospital outpatient clinic or emergency room. Differences in health status do not account for these findings. Especially among persons with chronic and serious illnesses, the uninsured are less likely than the insured to receive medical care. Further, the uninsured are significantly more likely to report needing but not receiving medical care, primarily for economic reasons, and although poorer, they have higher out-of-pocket medical expenses than others in the population.*

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Since the turn of the century, a wide range of efforts has been directed at increasing the proportion of the nation's population that is covered by health insurance (Numbers 1984). Significant reductions in the number of uninsured have resulted from federal initiatives, the most important, of course, being the Medicare and Medicaid programs introduced some 30 years ago. The introduction of health insurance as a job benefit for government employees, the inclusion of health insurance in collective bargaining agreements between unions and management, and the growth of HMOs and other prepaid medical care programs also have expanded coverage. However, in the past several years, at best, coverage has remained stable and, indeed, may have declined.

Consequently, there continues to be extensive concern about the size of the nation's uninsured population, characteristics of the uninsured, and the consequences of lack of insurance (Andersen et al. 1987). In part, the uninsured have received sustained attention because lack of access to timely and appropriate care for preventable and readily remediable illnesses may lead to chronic or difficult-to-treat health problems (Davis and Rowland 1983).

In part, also, the persistence of a significant-sized uninsured group is of policy concern because uncompensated care represents a major fiscal problem for many hospitals and health providers. The care of the uninsured places great financial stress on public and teaching hospitals, especially, and leads many hospitals with high proportions of poor patients to adopt explicit limits on care for patients without insurance (Feder, Hadley, and Mullner 1984).

The 1986 Robert Wood Johnson Foundation's national survey of access to care provides an opportunity to update information on the characteristics of the uninsured. The breadth of the survey also permits examination of the consequences of being uninsured for use of health services. Given the improbability of "universal" health insurance in the near future and current cost-containment pressures on all providers, it is important that policy research identifies the characteristics of the uninsured population and assesses the consequences of their being uninsured so that appropriate new initiatives can be properly developed to solve the long-term and persistent problem of health care for the uninsured.

## METHOD

The data for this analysis were obtained by a telephone survey of 10,130 persons in the continental United States, conducted in 1986. They represent 76 percent of the persons selected for interviews. The results reported here are weighted to represent the U.S. population living in households with telephones. Information on children ages 17 and under, and on the small number of adults who could not be interviewed themselves, was obtained from knowledgeable household members. Further details on the study group and the interview procedures have been reported in Freeman, Blendon, Aiken, et al. (1987).

## THE ELUSIVE NUMBER OF UNINSURED

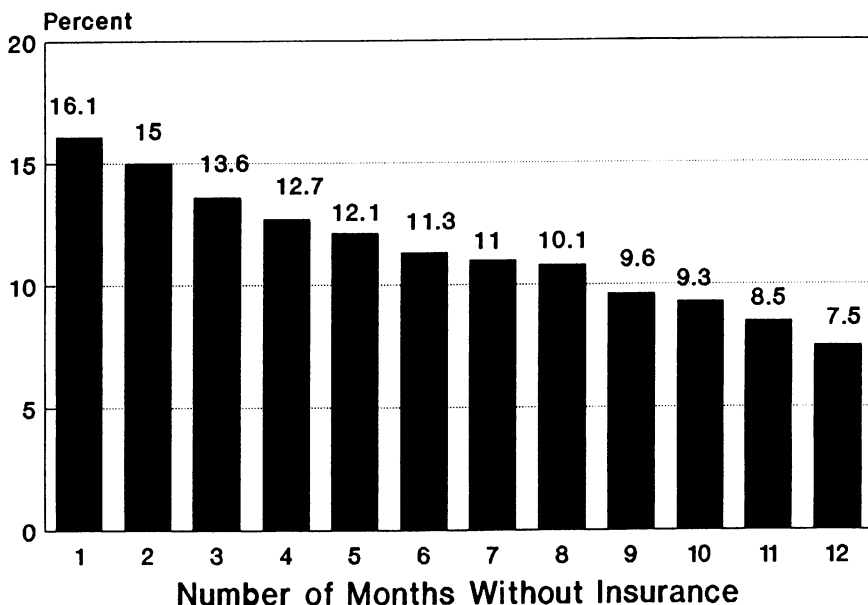
Estimates of the uninsured range from 10 to 18 percent for the nation's population as a whole; there is no agreed-upon estimate of the proportion of the population that is uninsured, for the results of different government and foundation-supported surveys vary (Swartz 1984). These variations in estimates of the proportion of the uninsured are mainly due to methodological differences in data collection procedures.<sup>1</sup>

In the 1986 Robert Wood Johnson Foundation survey, for the population as a whole, the estimate of the number uninsured is approximately 10 percent, on the low side compared with most government surveys (Swartz 1984). Among working-age adults, arbitrarily defined as persons over 18 years of age and under 65 years of age, the proportion uninsured approaches 11 percent. Working-age adults are the focus of this analysis since Medicare provides significant coverage for the elderly population: less than one-half of 1 percent of persons 65 and older are without some type of coverage.

The 11 percent uninsured figure is a point-in-time estimate; that is, it is an estimate of the proportion of working-age adults who reported that they were uninsured at the time of the interview. Items on the survey permitted the estimation of coverage during a one-year period. As shown in Figure 1, some 16 percent of working-age adults, or one in six Americans, were without insurance for one month or more during the year prior to the interview.<sup>2</sup> About one-half of this percentage were uncovered for the full year.

The differences in estimates clearly are of consequence for purposes of precisely estimating the magnitude of the problem of lack of insurance. From the standpoint of developing initiatives that provide

Figure 1: Cumulative Number of Months Uninsured



the equivalent of insurance coverage to the uninsured population, and in assessing the impact of the uninsured on provider fiscal costs, the differences in estimates of the uninsured represent a serious problem. But it is doubtful that future surveys will result in greater convergence of the estimates of the uninsured. There simply are too many imponderables to account for (such as wording of the questions, the overall content of the survey, and so on) in attempting to reduce the variation in the estimate of the uninsured from survey to survey, and the costs of data collection to obtain a figure closer to the "true" proportion who are uninsured annually or at any point in time would be excessive.

But the differences in the estimates of the uninsured from study to study in no way obscure the enormity of the problem. Even if one regards the results of the Robert Wood Johnson Foundation survey as a minimal estimate, some 16 million working-age adults in the United States are uninsured at any given time, and 25 million are without insurance at some time during a year. It is clear that a significant proportion of the nation's adults are faced with a major economic barrier in seeking health care because they lack insurance. Further, from the standpoint of health providers, the consequential number of persons without insurance represents a fiscal burden that constrains

resources and results in the rationing of care by many hospitals and physicians to persons requiring health services.

The survey data confirm that the fiscal burden is borne particularly by hospitals (Table 1). Over twice as many uninsured compared with insured working-age adults (17.5 percent compared with 8.3 percent) report that their usual source of care is a hospital ambulatory clinic or an emergency room. Almost one-quarter of the uninsured who experienced ambulatory visits in 1986 were seen for their last visit in a hospital clinic or emergency room; this represents almost twice the percentage of the insured who used such settings for their last medical encounter.

## CHARACTERISTICS OF THE UNINSURED

Among both males and females, who are distributed in equal proportions among persons reporting they were uninsured, income, ethnicity, employment status, and (to some extent) marital status are related to insurance status. In addition, the uninsured are considerably more likely to be young than the insured. These findings are summarized in Table 2. In profile, the uninsured adult in the population is most likely to be 25 years of age or younger, unmarried, Hispanic, poor, and unemployed.

Income level is a major factor in estimating whether or not a person is uninsured: over one-fourth of persons at or below the poverty level, taking family size into account, are without insurance; the proportion without insurance is almost the same among those between 100 and 150 percent of the poverty level. Then it drops sharply: less than 6 percent of persons with incomes above 150 percent of the poverty level have no insurance coverage.

This "notch" group of persons with incomes 100–150 percent of the poverty level, are of major policy concern. Many of these are part

Table 1: Insurance Status and Use of Hospital Emergency Rooms and Clinics

	<i>Insured</i>	<i>Uninsured</i>
Percent using ER or hospital clinic as usual source of ambulatory care	8.3	17.5*
Percent using ER or hospital clinic as source of last ambulatory visit	13.2	24.3*

\* $p < .01$ .

Table 2: Characteristics of Uninsured Working-Age Adults

	<i>Percent of Uninsured</i>
<i>Sex</i>	
Male	10.8
Female	10.8
<i>Income</i>	
Less than 100 percent of poverty	28.6*
100-150 percent of poverty	23.7
More than 150 percent of poverty	7.1
<i>Ethnicity</i>	
White	9.3*
Black	12.4
Hispanic	26.1
<i>Marital Status</i>	
Married	8.7*
Not married	16.5
<i>Employment Status</i>	
Employed	8.5*
Not in labor force	12.4
Unemployed	31.0
<i>Age</i>	
18-25	19.9*
26-34	11.0
35-44	8.2
45-54	7.1
55-64	6.1

\* $p < .01$ .

of the working poor who are ineligible for governmental health care programs but have neither insurance nor the means to pay personally for the costs of care. The size of the notch group is sensitive to changes in Medicaid eligibility; between 1975 and 1983, for example, eligibility changes reduced, from 63 to 46 percent, the proportion of low-income persons covered by Medicaid (Blendon et al. 1986).

In an analysis of Arizona's effort to provide health care for the poor by contracting for prepaid health care on the basis of competitive bids, a similar notch group was identified (Freeman and Kirkman-Liff 1985). In the Arizona evaluation, it was found that this group had the lowest access to care and comprised the highest proportion of the population with unmet health care needs.

While there is only a small black-white difference in insurance status, both of these groups are significantly more likely to be insured than persons of Hispanic background. The relatively high proportion of black women receiving Aid to Families with Dependent Children,

and thus covered by medicaid, contributes considerably to the proportion of blacks with coverage. The low proportion of Hispanic persons with health insurance should be of particular concern: a reasonable hypothesis is that this group includes a considerable number of undocumented workers who do not receive public assistance or many workers who are employed as farm laborers or in service occupations and who lack the negotiating power to receive health insurance as a fringe benefit.

Married persons are considerably more likely to have insurance than single, divorced, or widowed persons (9 compared to 16 percent), since a proportion of them are covered by spouses' policies. Unlike married adults, single, divorced, and widowed persons rarely have an opportunity to obtain coverage as part of the insurance packages of other family members. Further, the disposable incomes of unmarried persons generally are lower than incomes of those living with spouses.

This finding on economic level is mirrored by the relations between employment status and insurance coverage. Fewer than 7 percent of employed persons have no insurance, in contrast with almost 30 percent of persons reporting themselves as unemployed and 11 percent of persons not in the labor force.

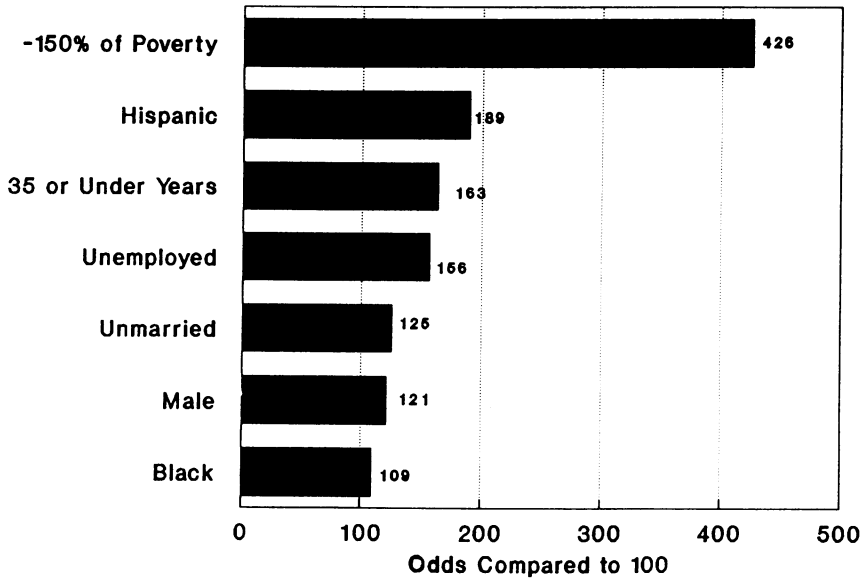
A logit analysis of the variables discussed was undertaken. All of these variables are significantly related to being insured (gender is at the .06 probability level, slightly higher than the conventional .05 level used for significance tests).

Based on the logit analysis, for each of the measures discussed, the odds of being uninsured were calculated, after dichotomizing each of the seven variables. As shown in Figure 2, holding all other variables constant in each case, working-age adults below 150 percent of the poverty level have over four times the risk of being uninsured than others, and persons of Hispanic background have almost twice the risk of being uninsured. Age and employment status are other important risk factors. These findings from the logit analysis confirm the results reported from the tabular analysis.<sup>3</sup>

## CONSEQUENCES OF BEING UNINSURED

The consequences of being uninsured in terms of access to care are summarized in Table 3. Persons uninsured at the time of the interview compared with insured persons at that time are significantly less likely to have an ambulatory visit in a year; on the average they have 1.2 fewer visits to a physician in a year. The lowest numbers of visits, of

Figure 2: Odds of Being Uninsured



course, are among persons uninsured for all or most of the year; the highest numbers are among those covered for the 12 months. Since fewer than 7 percent of working-age adults are hospitalized in a year, the sample sizes for comparing hospital experience for insured versus uninsured persons are small. While not statistically significant, the trend is the same as for ambulatory visits, with a considerably smaller proportion of the uninsured than the insured being hospitalized during this period of time.

These differences in use of health services are not a matter of an uninsured population being “healthier” than an insured population. Self-reports of health status have been shown to be a reasonably good predictor of medical condition (Davies and Ware 1981; Yergan et al. 1981). Although Table 4 shows uninsured persons in good and excellent health with somewhat fewer visits on the average than insured working-age adults, *more importantly, those in fair or poor health average only one-half as many ambulatory visits as their insured counterparts.*

The consequences of being uninsured are further elaborated by the findings reported in Table 5. Persons who report that they have



Table 3: Insurance Status and Ambulatory Hospital Experience

	<i>Insured</i>	<i>Uninsured</i>
Percent without ambulatory visit in year	35.7	44.0*
Mean number of ambulatory visits in year	4.7	3.5*
Percent hospitalized in year	6.7	5.1

\* $p < .01$ .

Table 4: Mean Number of Visits by Health Status

	<i>Insured</i>	<i>Uninsured</i>
Good or excellent health	3.9	3.1
Fair or poor health	11.9	5.6*

\* $p < .01$ .

chronic and serious illnesses are less likely to have access to care. This finding again refutes the possibility that the uninsured represent a healthier population. There is a similar but not statistically significant trend for those with hypertension.

From the standpoint of the health care of individual community members, the limited access of the uninsured to health services has to be of major policy concern. The economic barrier of being without insurance restricts opportunities for preventive services and early recognition and treatment of illness. Consequently, when providers respond to the medical needs of the uninsured, they are likely to face patients with more advanced and complicated health conditions than if preventive and early treatment had been forthcoming. Ultimately, persons who do not receive timely care because of lack of insurance will require treatment, but the costs of providing care at public expense for neglected health problems may far outweigh the deferred costs of timely care.

The survey included a number of measures designed to elicit evaluations of health care from the persons interviewed. In Table 6, several indicators of inequities in access to health services are shown. The uninsured in the population are over twice as likely than the insured to report having needed medical care during the year that they did not receive, and almost three times as likely to report economic barriers to care. Almost 50 percent of the uninsured report having paid over \$25 dollars out-of-pocket for their last ambulatory visit as com-

Table 5: Mean Number of Ambulatory Visits for Persons with and without Serious or Chronic Illness

	<i>Insured</i>	<i>Uninsured</i>
With chronic/serious illness	10.1	6.6*
With hypertension	7.6	5.7
With neither	3.6	3.0

\* $p < .01$ .

Table 6: Indicators of Inequities in Medical Care

<i>Indicator</i>	<i>Percent of Insured</i>	<i>Percent of Uninsured</i>
Thought needed medical care during last year but did not receive	9.2	19.9*
Percent not receiving health care for economic reasons	6.5	16.7*
Out-of-pocket costs of last ambulatory visit over \$25	29.9	49.9*
Among persons with one or more physician visits in a year with serious symptoms, percent who did not see or contact a physician	44.8	70.7*

\* $p < .01$ .

pared with fewer than 30 percent of the insured. This is the case despite the large proportion of the uninsured below or only minor percentage points above the poverty level.

That health insurance is a consequential barrier to care is shown by an additional measure included in Table 6. Persons with one or more ambulatory visits were asked, as part of the survey, if they had experienced one or more symptoms generally requiring a physician contact, such as a pain in the chest, or unexplained bleeding. (See Freeman, Blendon, Aiken, et al. for a further description of this measure.) Some 70 percent of the uninsured reporting one of the symptoms had failed to contact a physician, in contrast to 45 percent of the insured. Similarly, although the differences are less sharp, and are not presented in tabular form, a larger proportion of the uninsured had failed to have a physical examination in a year, uninsured women were less likely than insured women to have had pap smears or breast examinations, and pregnant women were less likely to have had a medical encounter during the first trimester of pregnancy. Sample sizes in these

subanalyses are small, and the differences are not always statistically significant or are small. For example, only a small proportion of women in the population reported wanting but not receiving family planning services. But the difference between the 1.2 percent of the insured who reported wanting but not receiving family services and the 2.5 percent of the uninsured is consequential when stated in terms of the number of women—some 1 million.

Additional measures confirm the inequities in care related to insurance status. The uninsured were less likely to be satisfied with the care received during their last ambulatory visit, a higher proportion waited for more than half an hour to receive treatment, a greater percentage reported language problems in communicating with their providers, and a larger proportion would have preferred to go to a provider different than the one who treated them.

## CONCLUSIONS

Although the number of uninsured persons cannot be estimated precisely, a significant number of working-age adults in the United States—between 16 and 22 million Americans—face substantial economic barriers to health care. These millions of persons, mainly the poor and near-poor, are excessively burdened with chronic and serious illness. Lack of public and private health insurance reduces their chances of early detection of disease and of timely treatment of their chronic and acute medical conditions.

Since Medicare and Medicaid were put in place over two decades ago, no major inroads have been made nationally toward improving access to medical services for working-age adults without insurance. In fact, stiffer Medicaid eligibility requirements, curtailed employer-sponsored insurance, and the growth of employment in service occupations where employers are less likely to provide coverage have, if anything, swollen the ranks of Americans without health insurance.

Both from the standpoint of providing appropriate health care for all of the nation's population and that of making the distribution of medical care costs more equitable, the public and private sectors need to act in order to reduce significantly the number of uninsured persons or at least to provide the means for them to obtain required health care. Clearly, additional initiatives that address the plight of the uninsured are an urgent national priority.

## NOTES

1. These methodological differences in data collection procedures include (1) variations in the wording of the items used to obtain information on insurance status, in the position of items in interview schedules, and in the content covered in the different schedules; (2) whether information is obtained from all persons in the sample or from informants who report on the entire membership of households sampled; and (3) whether or not persons who report being on welfare or having HMO membership are automatically included as insured in developing the estimate. Further, some surveys, in estimating the proportion uninsured, discard those cases that do not answer the relevant items, while others include responses based on information about completed cases; similarly, some surveys adjust the estimate of the uninsured to take into account the proportion uninsured among persons in households where it was impossible to complete interviews, and others do not.

Thus, for example, telephone surveys, such as the Robert Wood Johnson Foundation's 1986 survey, find a smaller proportion uninsured than the face-to-face Health Information surveys of the National Center for Health Statistics. The Current Population surveys also have higher estimates, but in these surveys persons are questioned about whether or not they were uninsured at any time during the year; estimates in this case are higher than those in surveys that obtain a point-in-time estimate by asking about current insurance status. Moreover, a 1988 report of the General Accounting Office (1988) takes particular note of the Marquis (1983) study, which finds that one-third of families that reported no health insurance actually were insured.

2. The finding that 11 percent were not covered at the time of the interview and 16 percent were uninsured sometime during the year argues against Swartz's (1984) conclusion that survey results about a year's insurance experience are valid estimates of the number of uninsured at any point in time.
3. Additional logit analyses were undertaken in which interactive terms for every combination of two variables were included. Inclusion of these terms increases the predicted uninsured. However, these analyses always include, either separately or in combination with another of the seven variables, all of the measures reported in Figure 2. In terms of understanding the risks of being uninsured, all seven of the measures are consequential.

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