# Uninsured and Underserved: Inequities in Health Care in the United States

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THE UNITED STATES HAS ONE OF THE HIGHEST quality and most sophisticated systems of medical care in the world. Most Americans take for granted their access to this system of care. In times of emergency or illness, they can call upon a vast array of health resources—from a family physician to a complex teaching hospital—assured that they will receive needed care and that their health insurance coverage will pick up the tab for the majority of bills incurred.

For a surprisingly large segment of the United States population, however, this ease of access to care does not exist. At any point in time, over 25 million Americans have no health insurance coverage from private health insurance plans or public programs (Kasper et al. 1978). Without health insurance coverage or ready cash, such individuals can be and are turned away from hospitals even in emergency situations (U.S. Congress. House. Committee on Energy and Commerce 1981). Some neglect obtaining preventive or early care, often postponing care until conditions have become life-threatening. Others struggle with burdensome medical bills. Many come to rely upon crowded, understaffed public hospitals as the only source of reliable, available care.

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The absence of universal health insurance coverage creates serious strains in our society. These strains are felt most acutely by the uninsured poor, who must worry about family members—a sick child, an adult afflicted with a deteriorating chronic health condition, a pregnant mother—going without needed medical assistance. It strains our image as a just and humane society when significant portions of the population endure avoidable pain, suffering, and even death because of an inability to pay for health care. Those physicians, other health professionals, and institutions that try to assist this uninsured group also incur serious strain. Demands typically far outstrip available time and resources. Strain is also felt by local governments whose communities include many uninsured persons, because locally funded public hospitals and health centers inevitably incur major financial deficits. In recent years, many of the public facilities that have traditionally been the source of last-resort care have closed, thereby intensifying the stresses on other providers and the uninsured poor.

As serious as these strains have been in the last five years, the years ahead promise to strain the fabric of our social life even more seriously. Unemployment levels today are the highest since the Great Depression. With unemployment, the American worker loses not only a job but also health insurance protection. As unemployment rises and the numbers of the uninsured grow, fewer and fewer resources are available to fill the gaps in health care coverage. Major reductions in funding for health services for the poor and uninsured have been made in the last year; further reductions are likely. Deepening economic recession, high unemployment, and declining sales revenues are strapping the fiscal resources of state and local governments. Their ability to offset federal cutbacks seems limited. Nor can the private sector be expected to bridge this gap. The health industry is increasingly becoming an entrepreneurial business endeavor—with little room for charitable actions.

It is especially timely, therefore, to review what we know about the consequences of inadequate health insurance coverage for certain segments of our population. The first section of this paper presents information on the number and characteristics of the uninsured, while the second section describes patterns of health care utilization by the uninsured. The third section assesses the policy implications of these facts and offers recommendations for future public policy to ensure access to health care for all.

## Who Are the Uninsured?

The 1977 National Medical Care Expenditure Survey (NMCES) provides extensive information on the health insurance coverage of the U.S. population. Six household interviews of a nationwide sample of over 40,000 individuals were conducted over an 18-month period during 1977 and 1978. By following the interviewed population for an entire year, NMCES provided a comprehensive portrait of health insurance coverage, including changes in health insurance status during the course of that year.

Although the scope of the NMCES survey provides extensive information on the characteristics and utilization patterns of the uninsured, it should be noted that the profile of the uninsured presented here describes the portion of the population without insurance in 1977. Recent changes in health insurance coverage due to unemployment and cutbacks in eligibility for Medicaid have increased the size of the nation's uninsured population, but are not reflected in the statistics in this paper.

In the NMCES results, individuals classified as insured are those who were covered throughout the year by Medicaid, Medicare, the Civilian Health and Medical Program of the Uniformed Services (Champus), Blue Cross/Blue Shield or commercial health insurance, or who were enrolled in a health maintenance organization. Differences in scope of coverage among the insured were not available, although further analysis of the NMCES data will address this issue. Therefore, many individuals in the insured category may have actually had very limited health insurance coverage, leaving them basically uninsured for most services. For example, many individuals classified as insured have coverage for inpatient hospital care, but are not covered and are, therefore, essentially uninsured for primary care in a physician's office. In contrast, insured individuals also include those enrolled in a health maintenance organization offering comprehensive coverage for both inpatient and ambulatory care.

The uninsured fall into two groups: the always uninsured and the sometimes uninsured. The always uninsured are individuals without Medicare, Medicaid, or private insurance coverage for the entire year. Individuals using Veterans Administration hospitals and clinics or community health centers are classified as uninsured unless they have

third-party coverage. The sometimes uninsured are those who were covered by public or private insurance part of the year but were uninsured the remainder of the year. The sometimes uninsured include the medically needy individuals who qualify for Medicaid coverage during periods of large medical expenses, but are otherwise uninsured. Changes in insurance status during the year are generally the result of loss of employment, change in employment, change in income or family situation that alters eligibility for Medicaid, or loss of private insurance when an older spouse retires and becomes eligible for Medicare.

A snapshot view of the uninsured at a given point in time understates the number of people who spend some portion of the year uninsured. At any one time, there are over 25 million uninsured Americans, but as many as 34 million may be uninsured for some period of time during the year. Approximately 18 million are without insurance for the entire year, and 16 million are uninsured for some portion of the year (Wilensky and Walden 1981; Wilensky and Berk 1982).

The 34 million uninsured are persons of all incomes, racial and ethnic backgrounds, occupations, and geographic locations. In some cases whole families are uninsured, while in others coverage is mixed depending on employment status and eligibility for public programs (Kasper et al. 1978). However, the poor, minorities, young adults, and rural residents are more likely than others to be uninsured. As noted in table 1, over one-quarter of all blacks and minorities are uninsured during the year—a rate 1 ½ times that of whites. This disparity holds across the demographic and social characteristics of the uninsured (Wilensky and Walden 1981; Institute of Medicine 1981).

## *Age*

The uninsured population, whether covered for all or part of a year, is almost entirely under age 65. Nearly one-fifth of the non-aged population is uninsured for some or all of the year. Less than 1 percent of the aged, barely 200,000 persons, are uninsured during the year (table 1). This is attributable primarily to Medicare which provides basic coverage for hospital and physician services to most older Americans. The success of Medicare in providing financial access to health care for the elderly is demonstrated by the extensive coverage of the elderly today in contrast to the dramatic lack of insurance prior to imple-

TABLE 1
Insurance Status during Year by Age and Race, 1977

| Age and Race | Total | Always Uninsured | Uninsured Part of Year | Always Insured |
|---|---|---|---|---|
| | Number in millions | | | |
| Total, all persons | 212.1 | 18.1 | 15.9 | 178.1 |
| Persons under age 65 | 189.8 | 18.0 | 15.8 | 156.0 |
| White | 163.7 | 14.5 | 12.5 | 136.7 |
| Black and Other | 26.1 | 3.5 | 3.3 | 19.3 |
| Persons age 65 and over | 22.3 | 0.1 | 0.1 | 22.1 |
| White | 20.2 | 0.07 | 0.09 | 20.0 |
| Black and Other | 2.1 | 0.03 | 0.01 | 2.1 |
| | Percentage | | | |
| All persons | 100% | 8.6% | 7.5% | 83.9% |
| Persons under age 65 | 100 | 9.5 | 8.3 | 82.2 |
| White | 100 | 8.9 | 7.6 | 83.5 |
| Black and Other | 100 | 13.3 | 12.7 | 74.0 |
| Persons age 65 and over | 100 | 0.4 | 0.5 | 99.1 |
| White | 100 | 0.3 | 0.5 | 99.2 |
| Black and Other | 100 | 1.0 | 0.8 | 98.2 |

*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

mentation of Medicare in 1966 (Davis 1982). Medicaid and private insurance help to fill the gap for those elderly persons ineligible for Medicare because they lack sufficient Social Security earnings contributions. The uninsured elderly are primarily individuals with incomes above the eligibility levels for welfare assistance and Medicaid.

Examination of the uninsured by age group reveals that young adults are the group most likely to be uninsured. As highlighted in table 2, almost one-third of all persons aged 19 to 24 are uninsured during the course of a year. Roughly 16 percent of this age group are without coverage all year, and an additional 14 percent lack coverage at least part of the year. This rate is nearly double that of other age groups. A variety of factors undoubtedly contribute to this situation. Young adults frequently lose coverage under their parents' policies at age 18. Many young adults may elect to forego coverage

TABLE 2
Percent Uninsured during Year by Selected Population Characteristics, 1977

| Population Characteristic | Percent Uninsured during Year | Percent Always Uninsured | Percent Uninsured Part of Year |
|---|---|---|---|
| All persons | 16.1% | 8.6% | 7.5% |
| Age | | | |
| Under age 65 | 17.8 | 9.5 | 8.3 |
| less than 6 years | 19.6 | 8.3 | 11.3 |
| 6 to 18 years | 16.1 | 8.6 | 7.5 |
| 19 to 24 years | 30.3 | 16.0 | 14.3 |
| 25 to 54 years | 16.1 | 8.7 | 7.4 |
| 55 to 64 years | 12.6 | 8.2 | 4.4 |
| Age 65 and over | 0.9 | 0.4 | 0.5 |
| Occupation | | | |
| Farm | 22.3 | 15.9 | 6.4 |
| Blue collar | 19.8 | 11.3 | 8.5 |
| Services | 20.8 | 11.9 | 8.9 |
| White collar | 12.6 | 5.6 | 7.0 |
| Region | | | |
| Northeast | 10.7 | 5.4 | 5.3 |
| North Central | 12.5 | 5.7 | 6.8 |
| South | 20.5 | 11.6 | 8.9 |
| West | 20.8 | 11.7 | 9.1 |

*Source:* Wilensky and Walden (1981), and data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

when it is available, since coverage is costly and they assume themselves to be relatively healthy. High youth unemployment, as well as employment in marginal jobs without health benefits, make insurance difficult to obtain or afford for this group.

## *Employment*

Employment status and occupation are important factors in assessing the likelihood of being uninsured for all or part of a year. Most American workers receive their health care coverage through the workplace, but insurance coverage varies widely depending on the type of employer (Taylor and Lawson 1981). Employees of small firms are

less likely to be insured than employees of large firms. For example, 45 percent of employees in firms of 25 or fewer employees do not have employer-provided health insurance compared with only 1 percent in firms with more than 1,000 employees. Yet, small firms employ over 20 percent of all workers. Unionized firms are six times more likely to have employee health insurance than are nonunionized firms.

Insurance status varies by type of employment (table 2). Nearly one-quarter of all agricultural workers are uninsured during the year, with 16 percent uninsured for the entire year. As expected, white collar workers are the most likely to be insured, while blue collar and service workers fare only somewhat better than agricultural workers (Wilensky and Walden 1981). Among blue collar and service workers, insurance coverage is low in the construction industry, wholesale and retail trades, and service industries, and high in manufacturing. Of manufacturing employees, 96 percent have health insurance through their place of employment (Davis 1975).

## *Residence*

These trends in coverage by employment are reflected in the regional picture of insurance status. In the heavily industrial and unionized Northeast and north central regions of the country, the percentage of uninsured during the year is half that of the South and the West. In these areas where agricultural interests are strong and unionization less extensive, over 20 percent of the population is uninsured during the course of a year. Of those living in the South and West, 11 percent are uninsured throughout the year compared with 5 percent in the Northeast and north central regions. Similarly, people in metropolitan areas are more likely to be insured than people living outside metropolitan areas (Wilensky and Walden 1981).

## *Income and Race*

However, while nature of employment and unionization may explain some of the regional variations, a critical underlying factor in the analysis is the distribution in the population of poverty and minorities. Residents of the South comprise 32 percent of the total population under age 65. Yet 48 percent of the nation's minorities live in the South (Department of Health and Human Services 1982a). The higher

concentration of poor and minority persons in the South in comparison with other parts of the country helps explain the high level of uninsured individuals.

Poverty and lack of insurance are strongly correlated. Of poor families with incomes below 125 percent of the poverty line, 27 percent are uninsured. The near-poor, with incomes between 125 and 200 percent of poverty, fare only slightly better, with 21 percent uninsured during the year. The poor are always more likely to be uninsured than the middle and upper income groups (table 3) (Wilensky and Walden 1981).

The limited health insurance coverage for the poor and near-poor demonstrates the limits of coverage of the poor under Medicaid (Wilensky and Berk 1982). Many assume that Medicaid finances health care

TABLE 3
Percent Uninsured during Year by Ethnic/Racial Background and Income, 1977*

| Ethnic/Racial Background | Percent Uninsured during Year | Percent Always Uninsured | Percent Uninsured Part of Year |
|---|---|---|---|
| White, all incomes | 14.0 | 7.0 | 7.0 |
| Poor | 27.1 | 13.5 | 13.6 |
| Other low income | 21.0 | 10.9 | 10.1 |
| Middle income | 12.6 | 6.3 | 6.3 |
| High income | 8.8 | 4.2 | 4.6 |
| Black, all incomes | 23.2 | 9.7 | 13.5 |
| Poor | 32.2 | 10.6 | 21.6 |
| Other low income | 26.6 | 11.9 | 14.7 |
| Middle income | 17.4 | 8.6 | 8.8 |
| High income | 12.4 | 7.1 | 5.3 |
| Hispanic, all incomes | 24.3 | 12.8 | 11.5 |
| Poor | 29.6 | 9.5 | 20.1 |
| Other low income | 32.0 | 18.2 | 13.8 |
| Middle income | 17.7 | 12.4 | 5.3 |
| High income | 20.0 | 12.3 | 8.0 |

*Source:* Wilensky and Walden (1981).
* In 1977, the poverty level for a family of 4 was $8,000. Poor are defined as those whose family income was less than or equal to 125 percent of the 1977 poverty level. Other low income includes those whose income is 1.26 to 2 times the poverty level; middle income is 2.01 to 4 times the poverty level; and high income is 4.01 times the poverty level or more.

services for all of the poor. However, many poor persons are ineligible for Medicaid due to categorical requirements for program eligibility and variations in state eligibility policies. Two-parent families are generally ineligible for Medicaid and single adults are covered only if they are aged or disabled (Davis and Schoen 1978). Moreover, many states have established income eligibility cutoffs well below the poverty level. Many states have not adjusted income levels to account for inflation, resulting in a reduction in the number of individuals covered over the last few years (Rowland and Gaus 1983). As a result of the restrictions on Medicaid coverage, about 60 percent of the poor are not covered by Medicaid. Of the 35 million poor and near-poor in 1977, almost 5 million or about 15 percent had no insurance throughout 1977. Approximately 35 percent were on Medicaid for at least part of the year (Wilensky and Berk 1982). This situation can only be expected to worsen as the recession swells the numbers of poor and near-poor while cutbacks in social programs and Medicaid further erode the health coverage available to some of the poor.

Thus, while the poor are obviously the least able to pay for care directly, they are the most likely to be without either Medicaid or private insurance. The poor are twice as likely to be uninsured as the middle class and three times as likely as those in upper income groups. Lack of insurance is inversely related to ability to bear the economic consequences of ill health.

Blacks, Hispanics, and other minorities are also more likely to be uninsured than whites regardless of their income; poor blacks are the most likely to be uninsured. As noted in table 3, nearly one-third of poor blacks are uninsured during a year. If you are poor and a member of a minority group, your chances of being uninsured are four times as great as for a high income white.

Yet this relationship between race and income (table 3) actually understates the situation because the aged are included in the population analyzed. The aged are overrepresented in the lower income groups, but, as noted in table 1, almost all of the aged are insured. Thus, inclusion of the aged in table 3 tends to overstate the insured status of the nonelderly poor.

Regional and racial differences in insurance coverage for the population under age 65 are enumerated in table 4. When the aged are excluded from the analysis, the differentials become even more striking. Southerners are nearly 1½ times as likely to be uninsured as those from

TABLE 4
Percent of Persons under Age 65 Uninsured during Year by Race and Residence, 1977

| Race and Residence | Population (in millions) | Percent Uninsured during Year | Percent Always Uninsured | Percent Uninsured Part of Year |
|---|---|---|---|---|
| Total, all persons under 65 | 189.8 | 17.8% | 9.5% | 8.3% |
| South | 60.5 | 22.4 | 12.7 | 9.7 |
| White | 47.9 | 20.4 | 11.8 | 8.6 |
| Black and Other | 12.6 | 30.0 | 16.2 | 13.8 |
| Non-South | 129.3 | 15.7 | 8.0 | 7.7 |
| White | 115.8 | 14.9 | 7.7 | 7.2 |
| Black and Other | 13.5 | 22.2 | 10.7 | 11.5 |
| SMSA | 132.6 | 16.3 | 8.2 | 8.1 |
| White | 111.3 | 14.9 | 7.6 | 7.3 |
| Black and Other | 21.3 | 23.2 | 11.1 | 12.1 |
| Non-SMSA | 57.2 | 21.4 | 12.5 | 8.9 |
| White | 52.5 | 19.9 | 11.6 | 8.3 |
| Black and Other | 4.7 | 38.2 | 23.3 | 14.9 |

*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

other parts of the country. But blacks in the South are 1½ times more likely to be uninsured as are whites from the South or nonsouthern blacks. Southern blacks are twice as likely to be uninsured as nonsouthern whites.

Similarly, when differences in insurance status are assessed from the perspective of metropolitan versus nonmetropolitan areas, blacks fare much worse than whites. Over 16 percent of nonelderly residents of Standard Metropolitan Statistical Areas (SMSAs) are uninsured compared with over 21 percent of those residing in non-SMSA areas. But, for minorities living outside SMSAs, almost 40 percent are uninsured—a rate twice that of whites residing in non-SMSA areas and 2½ times that of whites in SMSAs.

Thus, health insurance coverage in the U.S. is to some extent a matter of luck. Those fortunate enough to be employed by large,

unionized, manufacturing firms are also likely to be fortunate enough to have good health insurance coverage. Those who are poor, those who live in the South or in rural areas, and those who are black or minority group members are more likely to bear the personal and economic effects of lack of insurance and the consequent financial barriers to health care.

## Utilization of Health Services by the Uninsured

With the investment in primary care made by federal programs in the late 1960s and 1970s, significant progress in improving access to primary care for the poor and other disadvantaged groups was achieved. Virtually all of the numerous studies examining trends in access to health care conclude that differentials in utilization of physician services and preventive service by income have narrowed (Davis et al. 1981).

In the early 1960s the nonpoor visited physicians 23 percent more frequently than the poor even though the poor, then as now, were considerably sicker than the nonpoor. By the 1970s the poor visited physicians more frequently than the nonpoor, and more in accordance with their greater need for health care services. Blacks and other minorities also made substantial gains over this period. Utilization of services by rural residents also increased relative to urban residents (Davis and Schoen 1978).

However, use of preventive services by the poor, minorities, and rural residents continues to lag well behind use by those not facing similar barriers to health care. Some studies have also found that these differentials continue to exist for all disadvantaged groups even when adjusted for the greater health needs of the disadvantaged (Davis et al. 1981).

The major difficulty with past studies, however, is that they have not examined insurance coverage of subgroups of the poor to detect the cumulative impact of lack of financial and physical access to care. How do uninsured blacks in rural areas fare in obtaining ambulatory care services? Can nearly all disadvantaged persons get care from public hospitals or clinics, or do those facing multiple barriers to care simply do without?

## *Data and Methodology*

New data from the 1977 National Medical Care Expenditure Survey (NMCES) shed some light on the cumulative effect of multiple barriers to care. Insured persons are those covered during the entire year; the uninsured are those uninsured for the entire year. Those insured for part of the year are excluded; presumably their utilization resembles that of the insured for the portion of the year in which they are insured and that of the uninsured for the portion of the year in which they are uninsured.

The NMCES sample was designed to produce statistically unbiased national estimates that are representative of the civilian noninstitutionalized population of the United States. Since the statistics presented here are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken. Tests of statistical significance are indicated in the tables included below (see Department of Health and Human Services 1982d, Technical Notes, for further detail on methodology). Particular caution should be taken in interpreting those data items for which the noted relative standard error is equal to or greater than 30 percent.

The statistics presented here show utilization differentials between insured and uninsured individuals under age 65. Analysis of age-specific differentials between the insured and uninsured showed patterns similar to the general pattern of the nonelderly population. The elderly were excluded from the analysis since the majority of the elderly population is insured.

## *Ambulatory Care*

Most striking is the extent to which insurance coverage affects use of ambulatory care. Table 5 presents data on use of physicians' services from NMCES for the population under age 65; the insured average 3.7 visits to physicians during the year compared with 2.4 visits for the uninsured. That is, the insured receive 54 percent more ambulatory care from physicians than do the uninsured. However, the differential between the insured and uninsured for physician visits may understate the actual differential because variations in scope of coverage among the insured population are not accounted for. Some of the insured may only have insurance coverage for inpatient hospital care, not

TABLE 5
Physician Visits per Person under Age 65 per Year, by Insurance Status, Residence, and Race, 1977

| Insurance Status, Residence, and Race | Uninsured | Insured | Ratio |
|---|---|---|---|
| Total | 2.4 | 3.7 | 1.54* |
| South | 2.1 | 3.5 | 1.67* |
| White | 2.3 | 3.7 | 1.61* |
| Black and Other | 1.5 | 2.8 | 1.87* |
| Non-South | 2.6 | 3.8 | 1.46* |
| White | 2.7 | 3.8 | 1.41* |
| Black and Other | 1.9 | 3.5 | 1.84* |
| SMSA | 2.4 | 3.8 | 1.58* |
| White | 2.6 | 3.9 | 1.50* |
| Black and Other | 1.7 | 3.2 | 1.88* |
| Non-SMSA | 2.3 | 3.3 | 1.43* |
| White | 2.4 | 3.4 | 1.42* |
| Black and Other | 1.6 | 2.9 | 1.81 |

* indicates values for insured and uninsured are significantly different at the .05 level.
*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

ambulatory care. Thus, although their utilization pattern is considered in the insured category, such individuals are actually uninsured for physician visits. Better data on ambulatory-care insurance coverage of the insured population therefore might indicate even greater differentials in use of ambulatory care.

Residence and race also affect utilization of ambulatory services. The lowest utilization of ambulatory care occurs for uninsured blacks and other minorities, including Hispanics. These persons use far less than more advantaged groups. For example, uninsured blacks and other minorities in the South make 1.5 physician visits per person annually, compared with 3.7 physician visits for insured whites in the South. That is, to be advantaged multiply leads to a utilization rate almost 2.5 times that of individuals who are disadvantaged multiply.

These data point to the importance of financial and physical barriers to access. It is not the case that the uninsured manage to obtain ambulatory care comparable in amount to that obtained by the insured

by relying on public clinics, teaching hospital outpatient clinics, nonprofit health centers, or the charity of private physicians. Without insurance, many simply do without care.

The patterns of utilization for different groups provide some insight into the relative importance of financial, physical, and racial barriers to care. Financial access to care is clearly the most important factor affecting use. Insurance coverage reduces much but not all of the differential in use of ambulatory services. Insured blacks in the South, for example, average 2.8 physician visits annually, compared with 3.7 for insured whites in the South. That is, whites average about 30 percent more ambulatory care than blacks and other minorities even if both are insured. But this differential is substantially smaller than the 2½ times greater use of physicians between insured southern whites and uninsured southern blacks.

Location remains an important determinant of use of physician services. Lack of insurance coverage is more predominant in rural areas; however, even among the insured, urban residents are more likely to receive ambulatory care than are rural residents, whether white or black (see table 5). Among insured groups, rural whites receive 3.4 physician visits annually compared with 3.9 visits for urban whites. Rural blacks and other minorities with insurance make 2.9 physician visits compared with 3.2 visits for their insured counterparts in urban areas. That is, a 10 to 15 percent differential in use between urban and rural areas occurs even when financial access to care is not a problem. It should be noted, however, that the quality of insurance for ambulatory care may not be as good in rural areas as in urban areas.

Racial differentials in utilization of ambulatory care are also ameliorated with insurance coverage. Insurance is particularly helpful in improving access to care for minorities. Insured minorities receive 80 to 90 percent more ambulatory care than do uninsured minorities, in both rural and urban areas. But even with insurance, strong racial differences persist.

## *Hospital Care*

Despite the common perception that all disadvantaged persons can obtain hospital care from some charity facility, tremendous differentials in use of hospital care also exist by insurance status, residence, and

race. The insured receive 90 percent more hospital care than do the uninsured (see table 6). Differentials by insurance status are particularly marked in the South and in rural areas. In the South, insured persons receive three times as many days of hospital care annually as uninsured persons, regardless of race or ethnic background.

These hospital utilization differentials clearly demonstrate that the insured fare much better than the uninsured in obtaining health care services. Since those with insurance are likely to have basic coverage for hospitalization, the hospital utilization data provide a more accurate assessment of the role of insurance coverage in the use of health care services than do the ambulatory care differentials in the previous section.

These differentials remove any complacency about the accessibility of inpatient care. They reinforce similar findings by Wilensky and Berk (1982) who find that the insured poor use more hospital care than the uninsured poor. They find the biggest differences between those always uninsured and those on Medicaid all year. Those on

TABLE 6
Hospital Patient Days per 100 Persons under Age 65, by Insurance Status, Residence, and Race, 1977

| Insurance Status, Residence, and Race | Uninsured | Insured | Ratio |
|---|---|---|---|
| Total | 47 | 90 | 1.91* |
| South | 35 | 104 | 2.97* |
| White | 33 | 100 | 3.03* |
| Black and Other | 40† | 119 | 2.98* |
| Non-South | 56 | 84 | 1.50 |
| White | 51 | 81 | 1.59* |
| Black and Other | 89† | 114 | 1.28 |
| SMSA | 50 | 86 | 1.72* |
| White | 44 | 83 | 1.89* |
| Black and Other | 70† | 106 | 1.51 |
| Non-SMSA | 42 | 99 | 2.36* |
| White | 43 | 94 | 2.19* |
| Black and Other | 39† | 175 | 4.49* |

* indicates values for insured and uninsured are significantly different at the .05 level.
† indicates relative standard error is equal to or greater than 30 percent.
*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

Medicaid part of the year used fewer hospital services than those on Medicaid all year. The uninsured also used less hospital care than those privately insured. The analysis here extends these results to examine racial and regional differentials.

More disaggregated information is essential on the types of conditions for which the insured receive inpatient care and the uninsured do not. Standards for appropriate utilization of hospital services are still the subject of wide debate. Some of the differential between the insured and uninsured seen here may be the result of overutilization of hospital services by the insured. However, this is unlikely to explain the entire differential.

Some of the greater utilization of hospital care by the insured may represent self-selection. Those who expect to be hospitalized may obtain such coverage. Hospitalization may itself result in Medicaid coverage of some of the poor and near-poor. However, this should affect primarily those who are insured part of the year and uninsured the remainder of the year. Such partially insured persons are excluded from this analysis. These explanations are unlikely to account for a three-fold differential in use.

Some of the results by region and race are surprising. It is interesting to note that outside the South uninsured blacks receive more hospital days per 100 persons than insured whites. Insured blacks have the highest use. This may reflect greater health problems among blacks, or the tendency of blacks to receive care in public hospitals which have longer stays. Another unexpected result is high hospitalization among insured blacks in nonmetropolitan areas. This is one of the smallest population groups in the study and results, in this case, may simply be statistically unreliable.

Barriers to access to hospital services for the uninsured need to be explored. To what extent do hospitals require preadmission deposits for the uninsured? What are the consequences of such policies on access to care? Which hospitals serve the uninsured and the insured? Do the differences between metropolitan and nonmetropolitan areas reflect the role of teaching hospitals and public hospitals in caring for the uninsured in the inner city? Do the uninsured have to travel sizeable distances to obtain services? What are the health problems of the insured and uninsured, for what conditions are the insured hospitalized but not the uninsured, and what are the health consequences of lack of hospital care for the uninsured? To what extent do any or

all of these factors influence the use of hospital care by the uninsured? Further exploration is certainly warranted.

## *Health Status and Use of Services*

Lower utilization of ambulatory and inpatient care by the uninsured is not a reflection of lower need for health care services. Instead, as measured by self-assessment of health status, the uninsured tend to be somewhat sicker than the insured. Fifteen percent of the uninsured under age 65 rate their health as fair or poor, compared with 11 percent of the insured. Blacks and other minorities in the South systematically rate their health the worst. Of insured blacks and other minorities in the South, 19 percent assess their health as fair or poor, compared with 9 percent of insured whites outside the South.

One possible explanation of the higher rate of poor or fair health among the uninsured is that the lack of insurance is itself related to health status. Those who rate their health as poor or fair are more likely to be unable to work because of illness than those who rate their health good or excellent. Since insurance coverage in the United States is related to employment, those who are unemployed due to poor health are also likely to be without insurance. Under an employment-based insurance system, the working population enjoys both good health and insurance coverage, while those too ill to work suffer both lack of employment and lack of insurance.

The sick who are uninsured use medical care services less than their insured counterparts. Utilization of ambulatory services, adjusted for health status, shows that the insured in poor health see a physician 70 percent more often than the uninsured in poor health. Physician visits per person under age 65 in fair or poor health average 6.9 among the insured, compared with 4.1 visits for the uninsured with similar health problems (table 7). Blacks and other minorities with fair or poor health who are insured receive twice as much care as their uninsured counterparts.

Among the uninsured in poor or fair health, the differentials in physician visits by race and residence are especially noteworthy. Uninsured whites have greater access to physician services than do uninsured minorities. A southern white in fair or poor health sees a physician twice as often as a southern minority person in fair or poor health. The same relationship exists for utilization of physician services in

TABLE 7
Physician Visits per Person under Age 65 in Fair or Poor Health per Year, by Insurance Status, Residence, and Race, 1977

| Insurance Status, Residence, and Race | Uninsured | Insured | Ratio |
|---|---|---|---|
| Total | 4.1 | 6.9 | 1.68* |
| South | 3.8 | 6.1 | 1.61* |
| White | 4.4 | 6.4 | 1.45* |
| Black and Other | 2.2† | 5.0 | 2.27 |
| Non-South | 4.5 | 7.4 | 1.64* |
| White | 4.6 | 7.6 | 1.65* |
| Black and Other | 3.5† | 6.5 | 1.86 |
| SMSA | 4.1 | 7.2 | 1.76* |
| White | 4.7 | 7.6 | 1.62* |
| Black and Other | 2.3† | 5.9 | 2.57 |
| Non-SMSA | 4.2 | 6.3 | 1.50 |
| White | 4.3 | 6.4 | 1.49 |
| Black and Other | 3.2† | 5.4 | 1.69 |

* indicates values for insured and uninsured are significantly different at the .05 level.
† indicates relative standard error is equal to or greater than 30 percent.
*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

metropolitan areas. However, the utilization differential between whites and minorities narrows in areas outside the South and in nonmetropolitan areas.

The number of physician visits by the uninsured versus the insured in fair or poor health warrants further examination. It is expected that the individual in fair or poor health would require frequent physician visits for diagnosis and treatment of the condition. The average of five to seven visits annually by the insured would appear to provide a reasonable level of physician contact. But for uninsured minorities in the South in fair or poor health, the average number of visits is two per year. This rate would provide no more than an initial visit and one follow-up visit, which might be insufficient to treat serious or complex illnesses. Thus, lower rates of physician visits could impair adequate treatment and follow-up to promote a rapid recovery.

## *Dental Care*

Dental care, unlike hospital care and most physician services, is not covered under most insurance plans. Therefore, differentials in dental visits between the insured and uninsured are not meaningful. However, the NMCES data do show a striking contrast between dental visits by whites and minorities.

Whites obtain dental care twice as often as minorities, averaging 1.5 visits per year compared to 0.7 visits for minorities. Nonsouthern whites had two times the number of visits as nonsouthern minorities and over three times the number of visits as southern minorities. Rural minorities appear to have the least access to dental services.

The significant differential between access to dental services for minorities and whites warrants further examination. The extent to which this differential reflects differences in health practices and attitudes toward dental care or differences in availability and accessibility to dental care should be explored.

## *Usual Source of Care*

The NMCES data confirm other studies that have found that disadvantaged groups are less likely to have a usual source of ambulatory care and more likely to receive their care from a hospital outpatient department or a clinic than from a physician's office. Table 8, for example, enumerates that 84 percent of the insured have a physician's office as their usual source of care compared with 67 percent of the uninsured. About 50 percent of uninsured blacks and other minorities have a physician's office as their usual source of care. While this percentage is quite low in comparison with other groups, it does not fit the stereotype that all minorities in urban areas receive the bulk of their care from public facilities or hospital outpatient departments.

Uninsured residents of nonmetropolitan areas are more likely to have a physician as a usual source of care than are residents of a metropolitan area. In nonmetropolitan areas, 73 percent of the uninsured have a physician as a usual source of care in contrast to only 63 percent of the uninsured in metropolitan areas. However, nonmetropolitan residents are still likely to have fewer physician visits than their metropolitan counterparts (see table 5). The nonmetropolitan uninsured get more of their care from physicians but receive less total care.

TABLE 8
Percent of Persons under Age 65 Whose Usual Source of Care Is a Physician's Office, by Insurance Status, Residence, and Race, 1977

| Insurance Status, Residence, and Race | Uninsured | Insured | Ratio |
|---|---|---|---|
| Total | 67 | 84 | 1.25* |
| South | 66 | 81 | 1.22* |
| White | 70 | 82 | 1.16* |
| Black and Other | 53 | 76 | 1.41* |
| Non-South | 68 | 85 | 1.25* |
| White | 70 | 86 | 1.22* |
| Black and Other | 45 | 69 | 1.53* |
| SMSA | 63 | 82 | 1.31* |
| White | 66 | 84 | 1.27* |
| Black and Other | 49 | 71 | 1.43* |
| Non-SMSA | 73 | 86 | 1.19* |
| White | 76 | 87 | 1.15* |
| Black and Other | 52 | 79 | 1.53* |

* indicates values for insured and uninsured are significantly different at the .05 level.
*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

These differences in utilization among the uninsured undoubtedly reflect differences between metropolitan and nonmetropolitan areas in the availability of alternatives to physician care. Residents of metropolitan areas are more likely to have access to clinic and outpatient hospital services that can substitute for care in physicians' offices.

The metropolitan and nonmetropolitan differential for physicians as a usual source of care is markedly reduced among the insured. As seen in table 8, 86 percent of insured nonmetropolitan residents and 82 percent of insured metropolitan residents have a physician as a usual source of care. Insurance coverage significantly increases the proportion of minorities who have a physician's office as their usual source of care. Among the minority uninsured 49 percent of those living in metropolitan areas and 52 percent of those in nonmetropolitan areas have a physician as a usual source of care. In contrast, for insured minorities, 71 percent in metropolitan areas and 79 percent outside of metropolitan areas have physicians as a usual source of care. This would suggest that Medicaid and private health insurance coverage

enable a substantial number of minorities to obtain care in a physician's office.

## *Convenience of Care*

When they are able to obtain care, the uninsured must travel longer distances than the insured to obtain it. As enumerated in table 9, 25 percent of the uninsured travel 30 minutes or more to obtain care compared with 18 percent of the insured. Differentials in travel time between the insured and uninsured are somewhat more marked in rural areas than in urban areas, but travel time is a problem for uninsured persons everywhere. These data suggest not only that the uninsured receive less care, but also that when they do obtain care they do so by searching over a longer distance for providers willing to see them. The effort involved in such a search for care may discourage the use of preventive services, resulting in the uninsured only seeking

TABLE 9
Percent of Persons under Age 65 Traveling More Than 29 Minutes to Receive Medical Care, by Insurance Status, Residence, and Race, 1977

| Insurance Status, Residence, and Race | Uninsured | Insured | Ratio |
|---|---|---|---|
| Total | 25 | 18 | 1.39* |
| South | 29 | 21 | 1.39* |
| White | 30 | 20 | 1.48* |
| Black and Other | 28 | 26 | 1.09 |
| Non-South | 21 | 16 | 1.29* |
| White | 22 | 16 | 1.35* |
| Black and Other | 17 | 21 | .81 |
| SMSA | 22 | 17 | 1.27* |
| White | 21 | 16 | 1.32* |
| Black and Other | 24 | 24 | 1.00 |
| Non-SMSA | 29 | 20 | 1.46* |
| White | 30 | 20 | 1.50* |
| Black and Other | 23 | 19 | 1.24 |

* indicates values for insured and uninsured are significantly different at the .05 level.
*Source:* Data from the U.S. Department of Health and Human Services, National Center for Health Services Research, National Medical Care Expenditure Survey.

care for serious illness or in crises. This would help explain the lower utilization levels of the uninsured.

When the uninsured arrive at a care provider, they generally have to wait longer for care to be delivered. Regardless of residence, the waiting time for insured blacks and other minorities is longer than the waiting time experienced by uninsured whites. Waiting times are longer in the South. Uninsured southern minority persons experience the longest waiting times. The NMCES data show that they wait one-third longer than do insured southern whites (Department of Health and Human Services 1982a).

## Policy Implications

The utilization differentials between the insured and uninsured underscore the importance of financial barriers to health care. Lack of insurance coverage is the major barrier. It markedly affects the amount of both ambulatory and inpatient care received. Without insurance coverage, many individuals obviously do without care. Those able to obtain care incur substantial travel and waiting times.

Lack of insurance coverage has three major consequences: it contributes to unnecessary pain, suffering, disability, and even death among the uninsured; it places a financial burden on those uninsured who struggle to pay burdensome medical bills; and it places a financial strain on hospitals, physicians, and other health care providers who attempt to provide care to the uninsured.

Research is limited on both the health of the uninsured and the health consequences of having no insurance. Extensive data on utilization patterns by the uninsured disaggregated by residence and race are presented for virtually the first time in this report. But a number of recent studies have shown that medical care utilization has a dramatic impact on health. A recent Urban Institute report by Hadley (1982) explores the relation between medical care utilization and mortality rates. It contains persuasive evidence that utilization of medical care services leads to a marked reduction in mortality rates. A recent study by Grossman and Goldman (1981) at the National Bureau of Economic Research has found that infant mortality rates have dropped significantly in communities served by federally funded community health centers. This growing body of evidence does provide considerable support to

the importance of medical care utilization in assuring a healthy population—and at least indirectly provides a basis for concern that the lower medical care utilization of the uninsured contributes to unnecessary deaths and lowered health status.

Lack of insurance coverage also imposes serious financial burdens on those who try to make regular payments to retire enormous debts incurred in obtaining medical care. With the average cost of a hospital stay in the United States now in excess of $2,000, few individuals can afford to build payments for hospital care into their monthly living allowance (Department of Health and Human Services 1982b). Yet, since the uninsured are more likely to be poor, the economic consequences of lack of insurance fall heaviest on those least able to bear the burden.

In addition to its consesquences for the uninsured, lack of insurance also takes its toll on the health care system. One result is that the financial stability of hospitals and ambulatory care providers willing to provide charity care for those unable to pay is jeopardized. Health care providers serving the uninsured—particularly inner city community and teaching hospitals, county and municipal clinics, and community health centers—absorb much of the cost of this as charity care or a bad debt. Yet this burden is not evenly distributed among hospitals and other providers. A recent study by the Urban Institute found that one-seventh of a national sample of hospitals studied provided over 40 percent of the free care (Brazda 1982).

Recent policy measures are likely to exacerbate this situation. The Omnibus Budget Reconciliation Act of 1981 reduced federal financial participation in Medicaid and curtailed eligibility under the Aid to Families with Dependent Children (AFDC) program. Actions by state governments in response to this legislation could swell the ranks of the uninsured poor by over 1 million people. Coupled with the highest rate of unemployment since the Great Depression and the loss of health insurance coverage frequently occurring with unemployment, the number of uninsured continues to rise. Undoubtedly the situation has worsened rather than improved since the NMCES study in 1977. Today, the access problems of the uninsured should be a pressing concern on the nation's health agenda.

For many of the uninsured, community health centers and migrant health centers have helped to fill the gap in access created by the lack of insurance. This was especially important for those ineligible for

Medicaid. However, simultaneously with the cutbacks in Medicaid, major reductions were made in these service delivery programs. Overall funding was reduced by 25 percent in absolute dollars, which may lead to 1.1 million fewer people being served than the 6 million served in 1980. The National Health Service Corps, while not as seriously affected now, will be substantially reduced in future years since no new scholarships are being awarded with commitments for service in underserved areas (Davis 1981).

Financial strains on public hospitals and clinics supported by state and local governments are leading to further curtailment of services. Preadmission deposits, often sizeable in amount, impose serious barriers for many of the uninsured seeking hospital care. Teaching hospitals that have for years maintained an open-door policy are reevaluating the fiscal viability of continuing such a policy. In many areas, hospitals are beginning to transfer nonpaying patients to public facilities, further expanding the charity load of those facilities and reducing their ability to remain solvent (Brazda 1982).

Public hospitals, traditionally the care provider of last resort, are under new pressures to close or reduce services as local governments respond to shrinking revenues. Yet, shifting the responsibility of public hospitals to community hospitals will not solve the problem of caring for the uninsured. Recent hearings have documented the refusal of community hospitals to take uninsured patients, even in emergency situations. This has led to documented cases of deaths that could have been avoided with prompt medical attention (U.S. Congress. House. Committee on Energy and Commerce 1981).

Such disparities in access to care are unacceptable in a decent and humane society. Several actions are required to assure progress toward adequate access for all. Medicaid coverage should be expanded to provide basic insurance coverage for all low-income individuals. The Medicaid programs in southern states have tended to have very restrictive eligibility policies leaving many of the poor uncovered (Department of Health and Human Services 1982c). Expanded coverage of the poor through Medicaid would improve the scope of coverage in the South and could help to alleviate some of the extreme utilization differentials between the South and non-South. A minimum income standard set at some percentage of the poverty level would be an important first step. In 1979, 23 states, including most of the southern states, had income eligibility levels for Medicaid below 55 percent of the poverty

level. Texas, Alabama, and Tennessee had the lowest standards in the nation—less than $2,000 for a family of four. Coupled with implementation of a minimum income standard, Medicaid coverage should be broadened to include children and ultimately adults in two-parent families. Such steps would help assure access to care for the nation's poorest families.

Yet, the near-poor and working poor without insurance cannot be forgotten. Today, under Medicaid, only 29 states cover the medically needy to provide health coverage for those with large medical expenses. In effect, this catastrophy coverage provides some measure of protection to working families and is undoubtedly the source of care for many of the "sometimes insured." Coverage for the medically needy is currently very limited in the South; implementation of coverage for the medically needy would be another step toward reducing the disparities between the South and the rest of the country. Expansion of this coverage option is an important component of a positive health care agenda.

Finally, the extensiveness of unemployment in today's economy underscores the need to refine the link between employment and health insurance coverage. "Out of work" ought not to translate to "without health care services." Often, health needs are greatest during periods of stress related to unemployment (Brenner 1973; Lee 1979). Health insurance coverage should be extended through employer plans for a period following unemployment, and guaranteed through public coverage until reemployment. Employers should also be encouraged to provide comprehensive coverage, including prevention and primary care services, to all workers and their families.

These measures would help to provide protection and improved access to care for the 34 million or more Americans now without health care insurance. However, as the metropolitan and nonmetropolitan differentials among the insured demonstrate, financing alone is not enough to correct access differentials. Resources development must be coupled with improved financing in underserved areas to assure that needed providers are available. Continued funding and expansion of the community and migrant health center programs to assure physical access to services for residents of high poverty, medically underserved communities is an essential adjunct to broadened financing for low-income populations. Other important ways to provide expanded insurance coverage without perpetuating the cost inefficiencies of the

existing system include: reform of Medicaid, Medicare, and private health insurance plans to encourage ambulatory care in cost-effective primary care programs; and experimentation with capitation payments to individual primary care centers, networks of centers, hospitals, or other major primary care providers for providing ambulatory and inpatient services to Medicaid beneficiaries.

This agenda of improved financing and resource development represents a positive strategy that can be employed to reduce major inequities in American health care. Today, some will argue that this agenda is too ambitious and costly and would instead opt for a more targeted and incremental approach. For example, instead of expanding Medicaid coverage, advocates of the incremental approach would favor renewed support to public hospitals and financial aid to hospitals serving large numbers of uninsured to mitigate the worst problems. These approaches are piecemeal, however, and do not address the fundamental problems identified in this paper. Such targeted approaches focus on protecting institutions serving the uninsured rather than protecting the uninsured themselves. Thus, they provide for the continued existence of a source of care for the uninsured seeking care, but do not provide comprehensive coverage to the uninsured to encourage early and preventive services. The poor and uninsured who do without care either because they do not live near an "aided facility" or do not know they could obtain free care from a hospital with a financial distress loan would still suffer inequitable health care differentials.

This paper demonstrates that lack of insurance makes a difference in health care utilization. Studies such as the recent work by Hadley (1982) point out the positive impact of medical care on mortality. Society ultimately bears the burden for care of the uninsured. The choice is between paying up front and directly covering the uninsured or indirectly paying for their care through subsidies to fiscally troubled health facilities, higher insurance premiums, and increased hospital costs to cover the cost of charity care and pay for the ill health caused by neglect and inadequate preventive and primary care. Thus, the best and most pragmatic approach is to provide health insurance coverage to the uninsured and to use targeted approaches to improve resource distribution and to remove remaining differentials. The inequities in health care in the United States described here will deepen unless a positive agenda is pursued.

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