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Low-Income Persons' Access to Health Care: NMCUES Medicaid Data

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Synopsis

Data from the National Medical Care Utilization and Expenditure Survey (NMCUES) are presented on access to medical care for low-income people in 1980. NMCUES was a national probability household survey jointly sponsored by the National Center for Health Statistics and the Health Care Financing Administration. NMCUES also included four State Medicaid Household Surveys. Data from both the national sample, for all low-income people, and from the four State surveys, for Medicaid people, were included in this analysis.

The NMCUES data provided several measures which were previously unavailable on Medicaid experience, in particular, detailed Medicaid eligibility information in combination with income, health status, and health care use. This information can provide a comparison between access to care for those covered by Medicaid, and other low-income persons.

In 1980 Medicaid covered a minority of poor and low-income people, only 44 percent of the poor younger than 65 years of age and 38 percent of poor people 65 years of age and older. While almost all elderly had Medicare coverage, about 25 percent of younger low-income people had no form of health insurance, compared with only 9 percent of nonpoor persons who were uninsured.

Another measure of access is a regular source of care, the "place where a person goes for health care when sick." In 1980, 15 percent of people younger than 65 who were covered by Medicaid had no regular source of care. This is similar to the rate for the privately insured. However, the types of providers that were cited as the regular source of care differed. Medicaid recipients were more likely to have hospital outpatient departments and emergency rooms as a regular source. About one-fourth of the uninsured had no regular source of care.

The third measure of access presented is physician-visit rates adjusted for health status. Again, Medicaid-covered persons resembled the privately insured, while the uninsured had much lower visit rates, after adjusting for their relatively good health status.

Within the Medicaid Program, there are differences between States and eligibility groups in rates of physician visits after adjusting for health status. For example, Texas, the most restrictive of the State Medicaid Programs among the four States surveyed, had substantially lower rates, and those differences were most marked for those covered under the Aid for Dependent Children program population.

An examination of trends in measures of access to care during the 1970s suggests that there was little change in access to care for the low-income population during the decade. It is not possible to examine the specific experience of the Medicaid population during the decade owing to a lack of data on that population for the earlier period.

THE MEDICAID PROGRAM was enacted in 1965 to provide health insurance coverage for some low-income persons who would otherwise be unable to afford to pay for health care. At that time health insurance coverage was becoming widespread for employed persons and their families. However, low-income people, many of whom were without employer-sponsored health insurance, experienced substantial financial barriers to obtaining health care.

Several researchers have examined the issue of access to medical care among the poor. These include Aday, Andersen, and others at the Center for Health Administration Studies (CHAS), University of Chicago, using data from surveys in 1963, 1970, 1976, and 1982; Kasper, Walden, and Wilensky, using data from the National Medical Care Expenditure Survey (NMCES) of 1977; and Kleinman, Gold, and Makuc, using 1976–78 data from the Health Interview Survey (*1–6*). These analyses have shown that, for persons with Medicaid or some other form of health insurance coverage, barriers to care have been substantially reduced. However, a large number of persons, particularly low-income persons, remain uninsured and continue to experience problems with access to medical care.

For example, the study using 1976–78 Health Interview Survey data showed that the poor have between 7 and 44 percent fewer physician visits than the nonpoor, depending on the measure of utilization (*6*). The NMCES data showed that nonwhites and persons with less than 12 years of education were much more likely to be uninsured in 1977 (*5*). And the CHAS surveys consistently showed that lower income persons were less likely to visit physicians, although the gap in visit rates had lowered by 1982 (*1*). Data are presented from the National Medical Care Utilization and Expenditure Survey (NMCUES), performed in 1980. It includes more detailed information on the Medicaid population than has been available previously.

Methodology

NMCUES was jointly sponsored by the Health Care Financing Administration (HCFA) and the National Center for Health Statistics (NCHS) of the Public Health Service. NMCUES gathered data on health insurance coverage, including Medicaid coverage, through 5 survey rounds over a 1-year period. Information was collected on respondents demographic and health status characteristics, as well as health care utilization and expenditures (*7*).

One advantage of NMCUES over previous surveys is that self-reported Medicaid coverage was verified using State administrative records. This procedure made it possible to determine the exact number of days that each respondent was eligible for Medicaid.

A nationwide household survey was performed of about 6,600 households with 17,900 persons. The survey was nationally representative of the civilian, noninstitutionalized US population. Data from the national survey was used to estimate the health care experience of all low-income persons, whether or not they were covered by the Medicaid Program. NMCUES did not include data on institutionalized persons, many of whom are covered by Medicaid.

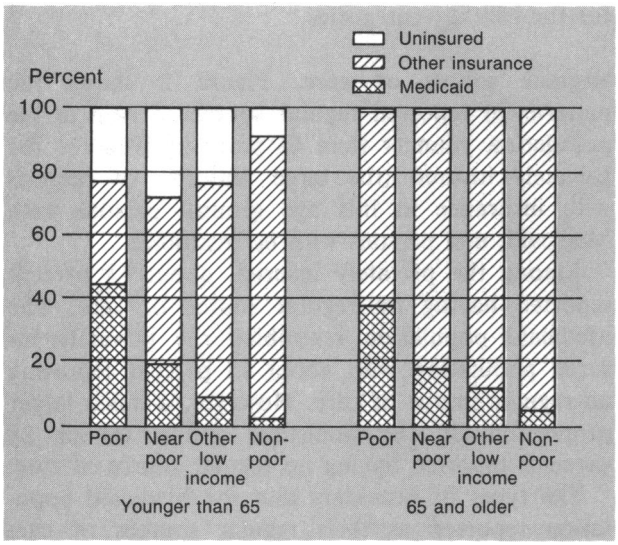
In addition to the national survey, four State Medicaid Household Surveys (SMHS) were performed. These surveys covered samples of the Medicaid populations in California, Michigan, New York, and Texas. Again, only noninstitutionalized Medicaid-covered persons were interviewed. Another survey, called the Administrative Records Survey, obtained administrative records from the four States and the Federal Government. These records contained enrollment, utilization, and expenditures data for all persons reporting Medicare or Medicaid coverage. A series of descriptive reports published by the Health Care Financing Administration (HCFA) provides a variety of analyses of NMCUES data, one of which analyzes access to medical care (*8*).

Several variables from the survey are defined.

Access. Access to medical care is discussed along three dimensions, all of which have been frequently cited in the literature (*1–3*). The first is the presence of health insurance coverage. Estimates of coverage by type were obtained in each of the five survey rounds. The second access indicator is the presence of a reported regular source of care. Each respondent was asked: "Is there a place where you usually go if you are sick or need advice about your health?" Persons who had no regular source of care were considered to be disadvantaged in comparison with those who did. The final access indicator is the level of health service use for a particular group, after controlling for health status levels. Obtaining medical care was considered to be evidence that care was accessible.

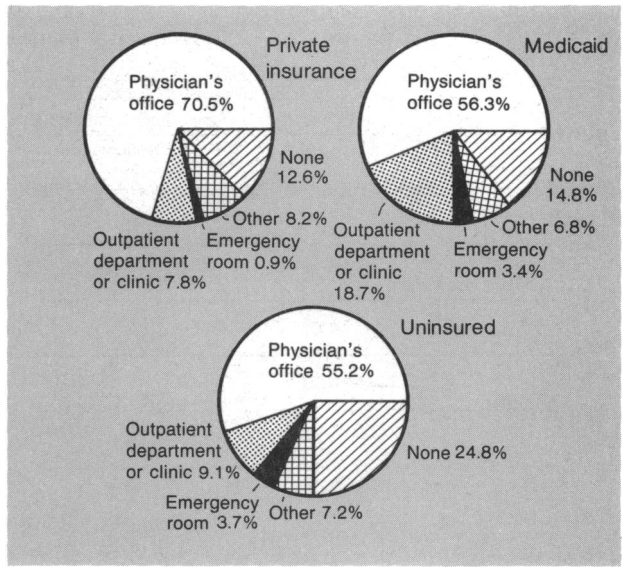
Poverty levels. Persons were grouped according to their family size and family income, which were

Figure 1. Health insurance characteristics of the U.S. noninstitutionalized population, by poverty status, 1980



Note: Based on person-years of coverage

Figure 2. Regular source of care for the U.S. population younger than 65 years, by health insurance coverage, 1980



compared with the US official poverty standard (approximately $8,000 for a nonfarm family of four in 1980). Family income included all income sources, including welfare payments. Persons below the poverty standard were called poor, those with incomes between 100 percent and 150 percent of the poverty standard were called near-poor, those between 150 percent and 200 percent of the standard were called other low income, and other persons were called nonpoor.

Health status. While several measures of health status were collected in the survey, only three are presented in this paper. The first is perceived health status, which was the respondent's judgment of health status relative to persons of the same age. The possible health status categories were excellent, good, fair, and poor. This information was only collected once during the year, at the time of the first interview. The second health status measure is restricted activity days; these were days on which a person did not perform usual activities because of health. This information was collected throughout the year.

For persons reporting at least one restricted activity day within any round of the survey, the use-disability ratio was computed as the number of physician visits per 100 days of restricted activity. Using a convention adopted previously by Aday and Andersen, physician's visits occurring in a given survey round were not counted unless there were restricted activity days in that survey round.

Insurance coverage. In each interview, individuals were asked whether they had health insurance coverage and what type of coverage. They were grouped as persons with Medicaid coverage, persons with other kinds of coverage, and the uninsured. Since almost everyone older than 65 years has Medicare coverage, the elderly were analyzed separately from younger persons. The statistics presented are based on person-years of coverage. A person with Medicaid coverage for half of the year and no coverage for the remainder is counted as half of a person-year in the Medicaid group and half of a person-year in the uninsured group.

Findings

Health insurance coverage. Figure 1 shows health insurance characteristics for the four poverty groups, and separately for persons younger than and older than 65. Three insurance categories are presented, Medicaid, other insurance, and uninsured.

Among the poor younger than 65 years of age, only 44 percent had Medicaid coverage and 32 percent had other forms of coverage in 1980. Much lower rates of Medicaid coverage were observed in the near-poor (19 percent) and other low-income (9 percent) populations. However, these groups also had higher rates of other insurance coverage, so that overall rates of uninsurance were similar in the three low-income

Figure 3. Mean restricted activity days, by poverty status and health insurance coverage, United States, 1980

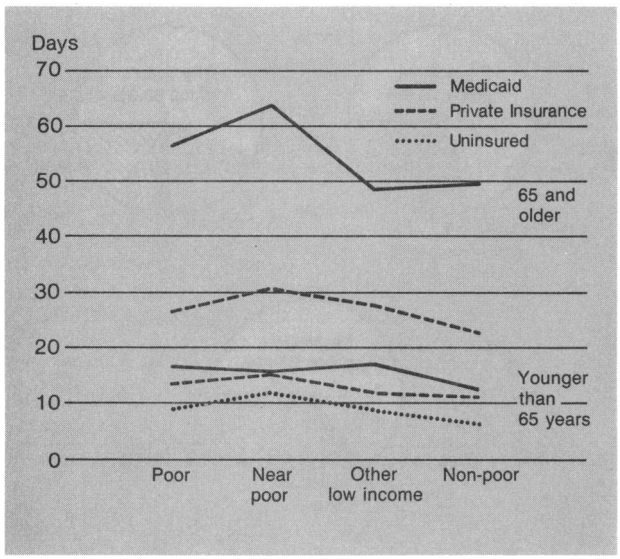
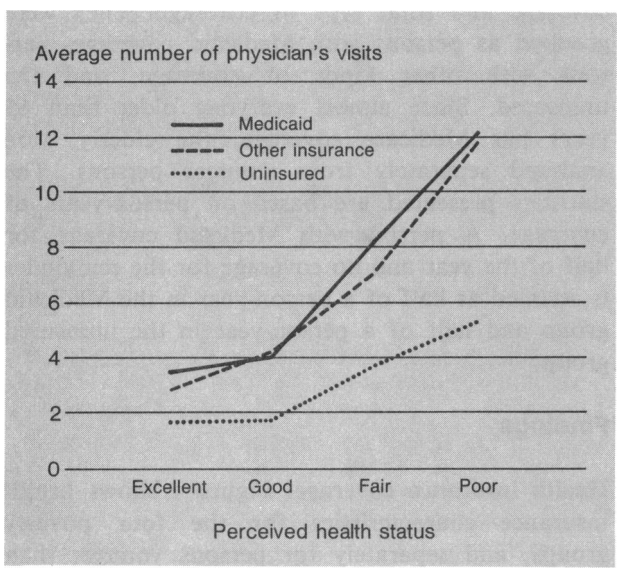


Figure 4. Average number of physician's visits per person for those younger than 65 years, by perceived health status, and health insurance coverage, United States, 1980



groups, 24 percent (poor), 27 percent (near-poor), and 23 percent (other low-income). In comparison, the nonpoor had almost no Medicaid coverage (2 percent), widespread other forms of coverage (89 percent), and a much lower rate of uninsurance (9 percent).

As noted, almost all of the elderly had Medicare coverage. Figure 1 shows the availability of Medicaid in combination with Medicare. The rate of Medicaid coverage for the elderly poor (38 percent) was lower than for younger poor persons. Medicaid coverage in other income groups was similar for the two age categories.

Regular source of care. Figure 2 shows the patterns in reported regular source of care in the population younger than 65 years in 1980 for the privately insured (the large majority of persons with insurance in this age group), persons with Medicaid, and persons with no insurance.

Among the privately insured, about 13 percent reported having no regular source of care. The Medicaid population resembled the privately insured population with about 15 percent reporting no regular source of care. However, a much larger proportion of the uninsured group (about 25 percent) reported having no regular source of care.

The types of providers that the Medicaid population reported as their regular sources of care were quite different from those of the privately insured group. Only 56.3 percent of persons covered by Medicaid reported physicians as their regular source of care, compared with 70.5 percent reported by privately insured persons. A relatively large percent of people covered by Medicaid reported hospital outpatient departments (18.7 percent) and emergency rooms (3.4 percent) as regular sources of care. The uninsured resembled the Medicaid population in the percentage reporting physicians (55.2 percent) and emergency rooms (3.7 percent) as a regular source of care, and they resembled the privately insured in the percentage reporting outpatient departments (9.1 percent) as a regular source.

These differences in the sources of care between Medicaid persons and the privately insured (that is, Medicaid persons more often report hospital outpatient departments and emergency rooms) suggest that Medicaid provided access to a different mix of providers than that used by persons with private insurance.

Utilization adjusted for health status. In examining differences in utilization between the Medicaid population and other insurance groups, it is important to control for differences in health status. Figure 3 shows differences between health insurance and poverty groups in mean number of days of restricted activity during the year.

In the population younger than 65, people covered by Medicaid consistently had the highest rates of restricted activity for all income groups. More moderate rates were observed for persons with other forms of insurance. The lowest rates

occurred among the uninsured. Rates of restricted activity clustered between 10 and 20 days in this younger than 65 age group, so that the differences between insurance groups, while consistent, were not dramatic.

In contrast, there were extreme differences in the number of restricted activity days between elderly persons with Medicaid and elderly persons with other forms of insurance. The elderly with Medicaid coverage experienced an average of more than 50 days of restricted activity during the year, with significantly higher rates among the near-poor than among other income groups. Elderly persons without Medicaid coverage had rates about half of those of the Medicaid group. Since Medicaid provides certain benefits not covered by Medicare (such as drugs), the elderly are likely to seek Medicaid only when they have health problems which require such coverage.

After controlling for Medicaid coverage among the elderly, for the most part the four poverty groups did not differ greatly in the mean number of restricted activity days. Those covered by Medicaid were similar in their relatively high levels of restricted activity; others were similar in their relatively low levels.

Figure 4 shows the average number of physician's visits per person, by perceived health status and health insurance coverage, for the U.S. population younger than 65 years in 1980. Figure 4 illustrates that the rates of visits for the Medicaid population and the privately insured group were very similar for all four health status categories, while visit rates for the uninsured were dramatically lower. Differences were most pronounced for those in poorest health. Uninsured persons reporting poor health had an average of about 5 visits per year, while persons in poor health with private insurance or Medicaid had about 12 visits.

Table 1 shows an additional measure of physician use, the use-disability ratio, which also illustrates the similarity in the pattern of use for Medicaid enrollees and persons with private insurance. The use-disability ratio is used to adjust the physician's visits measure for differences in the level of disability between groups. The ratio is the number of visits per 100 days of restricted activity for persons with at least 1 restricted activity day. In the table, ratios are compared by age and health insurance coverage.

In the younger age group, Medicaid enrollees had 18.1 physician's visits per 100 days of restricted activity (use-disability ratio of 18.1), which did not differ significantly from persons who were

Figure 5. Average number of physician's visits per Medicaid enrollee, by State and perceived health status, United States, 1980

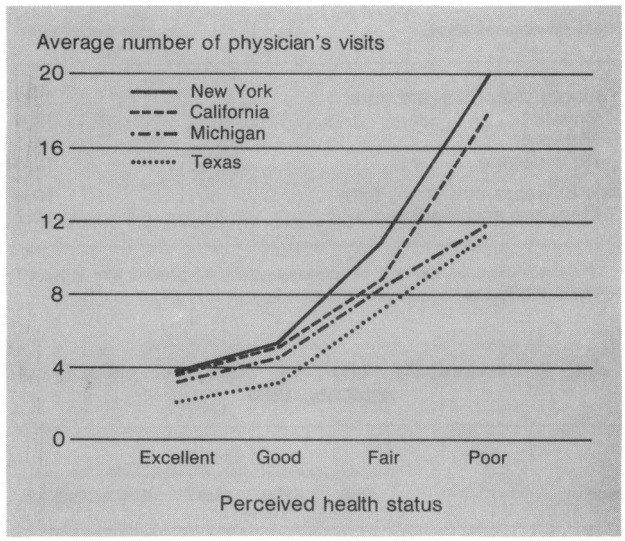
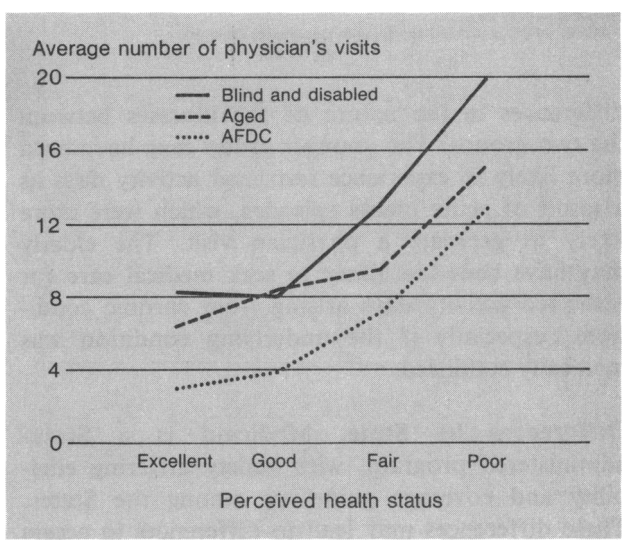


Figure 6. Average number of physician's visits per Medicaid enrollee, by perceived health status and category of eligibility, in New York, California, Michigan, and Texas, combined



privately insured (19.4). Both groups had much higher ratios than the uninsured (12.0). As before, health status differences do not fully explain the relatively low visit rates of the uninsured.

The table shows a striking difference in the use-disability ratio of people younger than 65 years (18.2) and those 65 years and older (10.4). The elderly saw physicians much less frequently than did younger persons, when visit rates were adjusted for the number of restricted activity days which they experienced. This may reflect the

Table 1. Use-disability ratio[1], by age and health insurance coverage, United States, 1980

Health insurance coverage	Use-disability ratio
Younger than 65 years, total	18.2
Private	19.4
Medicaid	18.1
No coverage	12.0
Age 65 years and older, total	10.4
Medicare and Medicaid	10.7

[1] Physician visits per 100 days of restricted activity for persons with at least 1 restricted activity day.

Table 2. Use-disability ratio[1], by State and category of eligibility, 1980

State	Category			
	Total	AFDC	Aged	Blind or disabled
California	16.8	22.4	12.3	16.0
Michigan	16.8	20.4	10.0	14.1
New York	17.9	20.0	9.4	19.6
Texas	11.8	16.4	8.9	12.6

[1] Physician visits per 100 days of restricted activity for persons with at least 1 restricted activity day.
NOTE: AFDC is Aid to Families with Dependent Children.

differences in the nature of the illnesses between the two groups. The younger group may have been more likely to experience restricted activity days as a result of acute illness episodes, which were more likely to generate a physician visit. The elderly may have been less likely to seek medical care for restricted activity days arising from chronic conditions, especially if the underlying condition was medically stabilized.

Differences by State. Medicaid is a State-administered program, with widely differing eligibility and coverage guidelines among the States. These differences may lead to differences in access to medical care. While the national survey did not provide State-specific estimates owing to sample size limitations, inferences about access to care in four States can be drawn from the State Medicaid Household Surveys (SMHS). Figure 5 shows the average number of physician's visits by health status for the four SMHS States.

The rank order of the States was consistent in terms of average number of physician's visits for all health status groups, New York (greatest), California, Michigan, and Texas (lowest). Differences among the States were greatest for persons reporting poor health. These groups reported an average of 20 visits in New York and 11 visits in Texas.

Table 2 shows use-disability ratios by State. It shows that New York (17.9) was followed closely by California (16.8) and Michigan (16.8). The Texas Medicaid ratio was much lower (11.8). The low overall use-disability ratio in Texas reflects both lower ratios in each eligibility group and the high proportion of aged persons among Texas Medicaid enrollees.

It is not clear what the direct effects of Medicaid Program differences were on physician's visit rates in the States. Coverage of physician's visits was mandatory under Medicaid. While States were allowed to limit the number of covered visits, Texas did not do so in 1980. Texas actually had a more generous charge-based reimbursement system for physician's visits in 1980 than did the other three States which used fee schedules. Texas had numerous other program limitations, however, which may have acted indirectly to limit access to medical care.

An alternative explanation for the lower rates in Texas is the fact that Texas had no medically needy program in 1980. The medically needy often qualify for Medicaid coverage during an acute phase of illness when visit rates are likely to be high. Therefore, its Medicaid population may have been "healthier" relative to other States within the basic assistance categories. It is unlikely that this completely explains observed differences, since medically needy individuals are only about 15 percent of the Medicaid population of the other three States.

Category of eligibility. The SMHS data can also be used to examine differences in the use of physician's services by the three basic groups which comprise the Medicaid population: adults and children receiving Aid to Families with Dependent Children (AFDC), the aged, and the blind or disabled population. These four groups are very different in age and health needs. AFDC-covered persons comprise about 75 percent of the Medicaid population and are most often relatively young and healthy. The aged are all older than 65. The blind or disabled group all have chronic health problems and most are younger than 65 years of age.

Figure 6 shows the average number of physician visits by perceived health status for each of the three groups. In this figure, survey results for the four States are grouped. The blind and the disabled had the highest visit rates, followed by

the aged. Lowest rates of visits were experienced by the AFDC population for all health status categories.

A quite different picture emerges when use-disability ratios are examined by category of eligibility (table 2). AFDC-eligibles had the highest ratios in all States, followed by the blind and disabled. The aged consistently had the lowest use-disability ratios. This is consistent with the age patterns observed earlier (table l) in which the elderly nationally had relatively low use-disability ratios. It also illustrates the importance of using more than one health status measure when studying access to care.

Trends. As mentioned, several previous national surveys examined access to medical care in the years after the enactment of Medicare and Medicaid legislation and prior to NMCUES. Since each survey had a somewhat different methodology, it is difficult to compare results across time. In particular, previous surveys have not collected detailed data on Medicaid coverage to the extent of NMCUES.

The data in table 3 can be used to estimate changes in access to medical care between 1970, 1976, and 1980, using survey data from CHAS and NMCUES. In making these comparisons, it is important to keep in mind the potential problems with comparing data from surveys that use different methods. The table shows three different measures of access: percent without a regular source of care, mean physician's visits, and use-disability ratio. Data are presented for 1970 and 1976 (CHAS surveys) and for 1980 (NMCUES). The CHAS survey data are available for the total population and for the low-income population, but not separately for Medicaid. NMCUES data are presented for the total population, the low-income population, and the Medicaid population. While the definition of low-income was somewhat different for the two data sources, in both cases about one-third of the U.S. population fell into this category. For NMCUES, this standard was 200 percent of the official poverty level; for the CHAS surveys it was $6,000 in 1970 and $8,000 in 1976.

The percent of people without a regular source of care climbed between 1970 and 1980 from 11 percent to 14 percent. However, among the low-income population, it has remained stable at 16 percent in 1970 and 15 percent in 1980. Therefore, while the CHAS survey found a difference between low-income people and the total population in this measure, NMCUES did not show a difference.

Table 3. Trends in measures of access to medical care, United States, 1970–1980

Category	Percent without regular source of care	Mean physician visits	Use-disability ratio
1970[1]			
Total	11	4.1	14.4
Low income	16	5.5	10.4
1976[1]			
Total	12	4.1	—
Low income	14	4.6	—
1980[2]			
Total	14	4.1	16.3
Low income	15	5.4	13.7
Medicaid	14	5.6	14.1

[1] SOURCE: CHAS.
[2] SOURCE: NMCUES.

The rate of physician visits has remained stable during the decade. All three surveys estimated 4.1 visits per person for the year with higher rates among low-income people. Comparable use-disability ratios are available only for 1970 and 1980. In 1970 the ratio for the total population was 14.4, while for the low-income population it was 10.4. The ratio for both groups increased to 16.3 (total population) and 13.7 (low-income population) for 1980. Differences between the total population and low-income people remained, showing that, after adjusting for poorer health, low-income people visited physicians less frequently, although differences narrowed somewhat during the decade. More detailed information presented in an earlier section showed that in 1980 the Medicaid-covered population had ratios comparable to the privately insured, after adjusting for age. Therefore, the continued difference between the total and low-income populations was because of lower visit rates among the non-Medicaid, low-income group.

Summary

These results from the 1980 NMCUES show that access to medical care remains a problem for a subset of the poverty-level population in the United States, primarily those persons who have no health insurance coverage and who are younger than 65 years of age (17 percent of those below the poverty level). This group is most often without a regular source of care (25 percent) and has the lowest rate of physician visits, after adjusting for their relatively good health status.

Those low-income people who did have Medic-

aid coverage in 1980 (about 44 percent of poor persons younger than 65 years of age and 38 percent of the poor elderly) used medical care services at approximately the same level as the privately insured population after adjusting for health status. However, Medicaid enrollees had access to different sources of medical care (more often hospital outpatient departments and emergency rooms) than did persons with private insurance (more often physician's offices).

The findings suggest that recent initiatives to increase health insurance coverage through expansion of the Medicaid Program and through increased employer-sponsored insurance may be effective strategies for improving access to care for low-income Americans. For example, many States have substantially increased the number of poor people who are covered by Medicaid as a result of recent Federal legislation, which allows for coverage of all poor, pregnant women and young children below the poverty level. Future health survey data will be useful in determining the impact of these and other expansions on access to care for the poor.

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