

Health status and utilization: Differences by Medicaid coverage and income

by Judith D. Kasper

By several measures of health status, the Medicaid population is in worse health than are persons without Medicaid. In addition, poor persons without Medicaid coverage are in poorer health than those who are not poor. Use of health services among those in poor health shows Medicaid eligibles use services at a level

comparable to those who are not poor and without Medicaid. Among the poor without Medicaid, the reduced likelihood of seeing a physician and purchasing a prescribed drug indicates the importance of Medicaid coverage in obtaining access to care.

Introduction

The Medicaid program was enacted in 1965 to provide access to mainstream health care for the poor. Considerable research since then suggests that significant gains in access to care have been achieved for the poor population, many of whom are covered by Medicaid (Aday, Andersen, and Fleming, 1980).

Use of health services by the Medicaid population has come under increasing scrutiny as States and the Federal Government seek to control the health portion of their budgets. Utilization patterns of the Medicaid population depend on several factors, ranging from the characteristics of the covered populations to the limits particular State programs place on services provided. The Medicaid population is, by definition, poor. Medicaid eligibility requires low income, although income eligibility levels vary considerably by State. However, as many observers of the program have noted, Medicaid does not cover all poor people (Rymer, Burwell, and Madigan, 1984; Joe, Meltzer, and Yu, 1985; Reinhardt, 1985). National data from 1980 indicate 49 percent of the poor and 23 percent of the near poor had Medicaid coverage during that year (Kasper, 1986). More recent data on recipients only (those who used services as opposed to all eligibles) indicate declining ratios of Medicaid recipients to the population with incomes below poverty (.64 in 1984, down from levels of .72 in 1972 and .92 in 1977, Gornick, Greenberg, Eggers et al., 1985).

One of the major factors in health care use by Medicaid eligibles, as for any population, is health status. The health status of this group as a whole may be expected to be worse than that of the rest of the population for three reasons.

- Those with Medicaid are poor and the relationship between poverty and poor health is well documented.
- Many adults receive coverage because they are disabled and receiving Federal assistance in connection with their disability under the Supplemental Security Income (SSI) program.¹

¹The Supplemental Security Income (SSI) program for the aged, blind, and disabled was established by Congress in 1972. A federally administered cash program, SSI was designed to replace the Federal-State programs of Old-Age Assistance (OAA), Aid to the Blind (AB), and Aid to the Permanently and Totally Disabled (APTD). Usually, receipt of a cash payment under SSI means automatic eligibility for Medicaid.

- In States that have programs for the medically needy, people may qualify for coverage because they incur medical expenses that bring their incomes below the qualifying level.

The complex eligibility criteria for Medicaid result in a heterogeneous population with regard to many characteristics including health status.

This article describes and compares the health status of various eligibility groups within the Medicaid population to that of poor persons without Medicaid and persons who are not poor. It examines physician, prescribed medicine, and hospital use among persons in these populations who are in poor health and thus have the greatest need for care. Only the noninstitutionalized population is included in this analysis because the 1980 National Medical Care Utilization and Expenditure Survey (NMCUES), from which these data are taken, excluded the institutionalized population.

National data on health status of Medicaid eligibles by eligibility category and use of services are presented in this article for the first time. Comparisons are made, as well, between those with and those without Medicaid. Of particular interest are comparisons of the Medicaid-covered with the poor who do not qualify for Medicaid. In addition, data are presented for the Medicaid populations of four States—New York, California, Michigan, and Texas—which together represent almost one-half of the national Medicaid population.

Determinants of Medicaid eligibility

The eligibility criteria that have developed since the Medicaid program was implemented have resulted in one of the most complex of all assistance programs (Rymer, Oksman, Bailis et al., 1979). In general terms, Medicaid coverage is tied to eligibility for government cash assistance programs, specifically Aid to Families with Dependent Children (AFDC) and

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Supplemental Security Income (SSI) for the aged, blind, and disabled. About three-quarters of all Medicaid recipients (users of services, not enrollees) were receiving cash payments through AFDC or SSI eligibility in 1984 (Gornick, Greenberg, Eggers et al., 1985).

Because Medicaid is jointly financed by Federal and State governments, States have considerable flexibility in designing their Medicaid programs within broad Federal guidelines. States must provide Medicaid coverage for all AFDC cash recipients but have the authority to set the need standards that determine who qualifies for AFDC. In most States, persons receiving SSI assistance are automatically eligible although there are some exceptions. There are several optional groups that may be covered by Medicaid—these are the AFDC and SSI noncash Medicaid eligibles as well as others such as children in foster homes or institutionalized persons who would be receiving cash assistance were they not institutionalized.

Aside from deciding about coverage for these optional groups, States may choose to cover medically needy individuals. A medically needy program greatly expands the number of potential eligibles, and as of 1980, 29 States and the District of Columbia had such a program (that number has remained unchanged to 1986). The decision to cover the medically needy means extending Medicaid coverage to persons with incomes below the medically needy income standard who meet categorical eligibility criteria. Also included are those who experience medical bills sufficient to reduce income below the medically needy standard. This standard is set relative to AFDC payment standards (not to exceed 133-1/3 percent of the highest amount paid to an AFDC family of the same size). As a result, in most States the medically needy level is lower than the SSI cash assistance level for which a national minimum exists. (Gornick, Greenberg, Eggers et al., 1985 presents medically needy and SSI cash assistance levels for all States.) There is no national minimum for AFDC income levels. These are set at the discretion of the States.

In addition to those groups already mentioned, some States also provide Medicaid coverage to other poor or medically needy persons regardless of whether they meet categorical eligibility criteria, but the entire expense for these State-only eligibles rests with the States. (Greater detail regarding Medicaid eligibility and program characteristics is available in Rymer, Oksman, Bailis et al., 1979).

As this brief description makes clear, eligibility for Medicaid is tied primarily to poverty or poverty in conjunction with poor health. Consequently, the composition of the Medicaid population is different from that of the U.S. population as a whole. Examining the health status of the Medicaid population and its use of health care requires that both the diverse characteristics of this population and type of eligibility be taken into consideration.

Data and methods

The data for this article are taken from the 1980 National Medical Care Utilization and Expenditure Survey (NMCUES). NMCUES was designed to provide data addressing a broad range of policy issues concerning the financing and delivery of health services in the United States. A national probability sample of 6,600 households (about 17,900 people) from the civilian noninstitutionalized population comprised the NMCUES national sample. The household survey component consisted of five interviews conducted with respondents to gain detailed information about medical care use, expenditures, sources of payment, health insurance coverage, and respondent characteristics for calendar year 1980.

In addition to the national survey, four separate surveys were conducted of the noninstitutionalized Medicaid-eligible populations of New York, California, Michigan, and Texas. A stratified sample of sufficient size was drawn from each State's Medicaid eligibility file to yield 1,000 Medicaid noninstitutionalized cases (about 3,400 people) in each State. The same data collection procedures were used for the State Medicaid Household Survey (SMHS) as for the national household survey component. Although most of the data presented in this article are from the national household sample, some data from the four-State sample are shown. NMCUES was cosponsored by the Health Care Financing Administration and the National Center for Health Statistics. The data were collected by the Research Triangle Institute and its subcontractors, the National Opinion Research Center and Systemetrics, Inc.

Measures of health status

There are a variety of ways to evaluate health status, ranging from respondent-reported assessments to clinical examinations. The measures used here are self assessments of health reported by respondents and are those developed over the years for use in surveys such as the National Health Interview Survey (conducted by the National Center for Health Statistics), the National Health Care Utilization Surveys (conducted by the Center for Health Administration Studies, University of Chicago), and the Rand Health Insurance Experiment (conducted by the Rand Corporation). Although these measures have their limitations, they identify persons in the poorest health and have been shown to relate well to levels of health service use. Because these measures have been used to describe the population as a whole for some years, it is of interest to evaluate the Medicaid population by these same measures and, in particular, to do so by type of Medicaid eligibility. A description of these measures follows:

Perceived health status—Respondents were asked how they viewed their health relative to others their age. A parent responded for children under 14 years

of age. Responses were coded "excellent," "good," "fair," or "poor," and are grouped as "excellent or good" and "fair or poor" in this article, for reasons of sample size.

Activity limitations—A series of questions used routinely in the National Health Interview Survey was used to determine whether a person had a chronic condition that limited his or her activities. A chronic condition was one that lasted 3 months or longer, or was one of a number of conditions defined as chronic by the National Center for Health Statistics (NCHS) for this purpose. The activities asked about were age-related so that adults were asked about work and children about play. The NMCUES sample yielded very few children with activity limitations. Data for this measure are not presented for children. Four categories resulted from this series of questions:

- Person was not limited in any way.
- Person was not limited in his or her major activity (such as work or play), but was limited in performing other activities.
- Person was limited in the amount or kind of performance of his or her major activity.
- Person was unable to perform his major activity.

Functional limitations—There are numerous measures of functional limitations but all focus on a person's ability to perform specific activities of daily living (Katz, Ford, Moskowitz et al., 1963; Katz and Akpom, 1976; Shanas, 1977). The measures used in NMCUES were adapted from a set used in the Rand Health Insurance Experiment (Stewart, Ware, Brook et al., 1978). A series of 14 questions were asked of all persons 17 years of age or over, and an 8-item scale was constructed from these questions to reflect severity of levels of functional impairment (the questions are available in Bonham, 1983; Corder, Williams, and Conklin, 1986, indicates how the scale was created). Among those persons with some limitation (not restricted to only those caused by chronic conditions because so few nonchronic conditions were reported, Corder, Williams, and Conklin, 1985), persons were classified according to the most severe limitation they reported. The least severe category was "limitation of vigorous activities" and the most severe was "needs assistance with self-care."

Restricted activity days—Restricted activity days includes days when because of illness a person was in bed, did not go to work or school, or cut down on usual activities. In NMCUES, the recall period for restricted activity days was about 3 months rather than the 2-week period used in the National Health Interview Survey (NHIS).

Restricted activity days can be viewed as either a measure of health status or a behavioral response to illness (Mechanic, 1979; Wolinsky, Coe, Miller et al., 1983). Unlike the activity and functional limitation measures, however, they reflect the effects of both acute and chronic illness. For this reason, they may better reflect health status differences in some populations where chronic conditions are rare, such as children.

Medicaid eligibility and aid category

Medicaid eligibility and aid category in NMCUES were based both on reports by respondents and verification from administrative records. A file was constructed from administrative records provided by the States that were included in the national sample. All persons who reported Medicaid and were verified through records as Medicaid eligibles were assigned the appropriate aid category. Some persons were regarded as Medicaid eligibles based on reporting of cash assistance or sources of payment for medical care even though they were not found in administrative records (about one-third of all eligibles). In other words, all those reporting cash assistance could be assigned an aid category. Not every noncash eligible could be assigned an aid category, however. Thus, this article groups all noncash eligibles with State-only eligibles (who may be cash or noncash). The State-only eligibles are a very small group. Noncash eligibles include both optional coverage groups, such as low-income children under 21 years of age or families with unemployed fathers and the medically needy.

Reliability of estimates

Because the data in this article are based on a sample of the U.S. population, they are subject to sampling error. Tests of statistical significance (Z-scores) were used to determine whether differences between population estimates were significant at the .05 level. More details concerning the statistical design of NMCUES, weighting and imputation procedures, and the standard errors for the estimates presented in this article are available on request.

Findings

Factors influencing health status differences

The Medicaid population is expected to be in poorer health because of the link between poverty, poor health, and eligibility already discussed. Even without these obvious influences, however, two additional factors may contribute to observed health differences between the Medicaid and non-Medicaid populations: the age and sex distributions of these populations and differences in how health status is perceived and reported.

The eligibility criteria for Medicaid result in large differences in the age and sex composition of this population compared to persons not eligible for Medicaid. Overall, there is greater representation of both children and the elderly within the Medicaid group (Table 1). The age distribution is most skewed among male eligibles. Relatively few adult males gain Medicaid eligibility because they are seldom the AFDC adult. Most males with Medicaid are children under 18 years of age—60 percent compared with 27 percent of males without Medicaid who are not poor.

About one-fourth of males with Medicaid are between 18 and 64 years of age. In contrast, 65 percent of the male population without Medicaid who are not poor fall within this age range. Medicaid eligibility for males 18-64 years of age derives mainly from SSI disability or coverage not associated with cash assistance, such as medically needy status. The remaining 12.8 percent of males with Medicaid are age 65 or over compared with 8.0 percent in the same age group without Medicaid and who are not poor. A higher percentage of males with Medicaid were 75 years of age or over as well.

Because of the presence of AFDC mothers primarily in the group 18-44 years of age, the female Medicaid population is more evenly distributed by age than is the male Medicaid population. As a whole, the Medicaid population between 18-64 years of age is predominantly female for the same reason—most AFDC adults are women. Of the female Medicaid population, 37 percent are children under 18 years of age, compared with 26 percent who are not poor. Females 18-64 years of age represent 44.3 percent of all females with Medicaid compared with 64.7 percent of females who are not poor and without Medicaid.

Among females with Medicaid, 14.1 percent are 65 years of age or over compared with 9.3 percent of those without Medicaid who are not poor. The percentage of females 75 years of age or over was not

significantly different between the Medicaid population and the population that is not poor (3 to 4 percent).

The poor without Medicaid, similar to the Medicaid population, are overrepresented among the youngest and oldest age groups. Compared with the 11.6 million children under 18 years of age with Medicaid coverage, about 9.7 million poor children in this age range are not covered by Medicaid.

There are fewer working-age adults (18-64 years) in the poor population without Medicaid coverage and a higher percentage of elderly persons than in the population that is not poor. The difference is most striking among females.

Of poor females without Medicaid coverage, 21 percent are age 65 or over, compared with 9.3 percent of females who are not poor. Of poor females without Medicaid, 10 percent are age 75 or over, compared with 2.8 percent who are not poor, and 4.3 percent of those with Medicaid coverage.

To control for differences in age distributions among the populations of interest, the data that follow are presented within age groups. Persons 65 years of age or over are grouped together for reasons of sample size, even though Table 1 indicates differences among these populations in the proportion of persons 75 years of age or over. Because increased age is associated with a greater likelihood of poor

Table 1
Percent distribution of persons, by sex, Medicaid eligibility, poverty level, aid category, and age: United States, 1980

Item	Population in thousands	Age						
		Under 6 years	6-17 years	18-34 years	35-44 years	45-64 years	65-74 years	75 years or over
Percent distribution								
Male								
Without Medicaid:								
Poor ¹	12,642	² 15.6	21.8	27.2	² 9.1	² 14.5	7.2	² 4.6
Not poor	84,769	7.4	19.8	30.7	12.9	21.3	5.6	2.4
With Medicaid								
AFDC, cash	10,128	^{2,3} 24.6	^{2,3} 34.7	^{2,3} 16.3	(⁴)	^{2,3} 9.1	² 8.5	² 4.3
SSI blind or disabled, cash	5,646	^{2,3} 36.3	^{2,3} 51.0	^{2,3} 9.6	(⁴)	(⁴)	—	—
SSI aged, cash	966	(⁴)	(⁴)	31.5	(⁴)	^{2,3} 35.7	(⁴)	(⁴)
Other ⁵	665	—	—	—	—	—	^{2,3} 59.8	^{2,3} 38.9
	2,851	² 13.3	18.7	28.1	(⁴)	16.1	^{2,3} 15.2	(⁴)
Female								
Without Medicaid:								
Poor ¹	16,135	² 9.6	20.2	² 25.1	² 7.9	² 16.2	² 11.0	² 10.0
Not poor	84,244	7.5	18.5	29.7	13.0	22.0	6.5	2.8
With Medicaid								
AFDC, cash	14,959	^{2,3} 14.7	² 22.5	² 27.2	² 6.5	^{2,3} 10.6	² 9.8	² 4.3
SSI blind or disabled, cash	8,408	^{2,3} 20.5	^{2,3} 35.1	³ 33.0	² 7.8	^{2,3} 3.3	—	—
SSI aged, cash	1,324	(⁴)	(⁴)	25.0	(⁴)	^{2,3} 46.5	(⁴)	—
Other ⁵	1,633	—	—	—	—	—	^{2,3} 45.0	^{2,3} 53.5
	3,593	11.0	^{2,3} 9.5	26.4	² 7.2	19.1	² 15.7	² 11.2

¹ Less than or equal to 150 percent of the poverty level (income adjusted for family size).

² Significantly different at the .05 level from the population without Medicaid who are not poor.

³ Significantly different at the .05 level from the population without Medicaid who are poor.

⁴ Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

⁵ All noncash eligibles and all State-only eligibles, both cash and noncash.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

health and use of health services, age differences within the elderly group may remain a factor in health status and utilization differences detailed later in this article.

As already noted, females are overrepresented in the adult Medicaid population. For example, they constitute 86 percent of the AFDC population from age 18 to 44. It is now well documented that females have higher levels of morbidity and health services use than do men (Verbrugge, 1985). Females are a smaller proportion of the population without Medicaid who are not poor. This may account for some of the health status and utilization differences between this group and the population with Medicaid, particularly among those age 18-44 years. The sample size was not sufficient to show data by both age and sex.

Table 2 shows the relationship between reporting excellent or good and fair or poor health and presence of activity or functional limitations. In the age groups 18-44 and 45-64, those with Medicaid who report excellent or good health are more likely to have a functional or activity limitation than those without Medicaid. For example, of all those with Medicaid age 45-64 and in excellent or good health, 33.1 percent report a functional or activity limitation compared with only 19.4 percent of those without Medicaid. Among those reporting fair or poor health, those with Medicaid were more likely to report both an activity and functional limitation at all ages.

Several relationships are suggested by Table 2. First, persons with Medicaid who report fair or poor health are much more likely to also report functional and activity limitations, and persons without Medicaid report fair or poor health in the absence of such limitations. This may indicate poorer health status among those with Medicaid even within the group of all persons reporting fair or poor health. Second, among persons reporting excellent or good health, a higher percentage of persons with Medicaid are likely

to have a functional or activity limitation than persons without Medicaid. Persons with Medicaid who report excellent or good health in the presence of limitation of function or activity may have lower expectations of health. The elderly, age 65 or over, also have a greater tendency to report excellent or good health in the presence of activity limitations (Kovar and Wilson, 1976). These data show that among the elderly without Medicaid who report excellent or good health, about one-half report a functional or activity limitation as well, compared with less than one-fourth of the age group, 45-64.

Comparisons of health status

Presented in Tables 3, 4, and 5 are measures of health status for the Medicaid population by aid category and for persons without Medicaid coverage, both poor and not poor. Most children and young persons under age 18 are in good health (Table 3). However, at least twice the percentage of both young (under 6 years) and older (age 6-17) children with Medicaid are in fair or poor health, compared with children without Medicaid who are not poor.

No significant differences were found between those with Medicaid and others in the mean number of restricted-activity days among children age 17 or younger. However, for children under 6 years in fair or poor health, the average number of restricted-activity days is much higher for Medicaid children (26.4 days) than for children who are not poor (16.2 days). For children under age 6 who had 15 or more restricted-activity days, children with Medicaid again have a higher average number of restricted days. Among children age 6-17 in fair or poor health, those with Medicaid have fewer restricted-activity days than children without Medicaid who are not poor. For older children with 15 or more restricted-activity days,

Table 2
Relationship between perceived health status and presence of functional or activity limitations for persons, by age and Medicaid eligibility: United States, 1980

Item	Excellent or good health				Fair or poor health			
	Population in thousands	No functional or activity limitations	Functional or activity limitations, but not both	Both functional and activity limitations	Population in thousands	No functional or activity limitations	Functional or activity limitations, but not both	Both functional and activity limitations
	Percent distribution				Percent distribution			
18-44 years								
Without Medicaid	76,966	90.7	8.9	.4	5,787	57.6	32.4	10.0
With Medicaid	4,999	81.3	13.8	(²)	1,961	36.1	43.3	20.6
45-64 years								
Without Medicaid	32,843	78.3	19.4	2.3	8,230	27.5	41.7	30.9
With Medicaid	798	46.5	33.1	(²)	1,708	(²)	37.4	55.1
65 years or over								
Without Medicaid	12,823	49.2	32.0	18.8	6,592	11.9	38.0	50.1
With Medicaid	1,922	25.9	38.5	35.6	2,132	(²)	35.6	59.0

¹ Significantly different at the .05 level from the population without Medicaid.

² Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

Table 3
Measures of health status for persons under 18 years, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Population in thousands	Percent in fair or poor health	Restricted-activity days						
			Mean for—			Percent distribution			
			All persons	Persons in fair or poor health	Persons with 15 or more days	0	1 to 7	8 to 14	15 or more
Under 6 years									
Without Medicaid:									
Poor ¹	3,517	(²)	7.1	(²)	29.0	28.7	39.5	18.3	13.6
Not poor	12,596	3.0	7.7	16.2	27.4	24.4	43.8	16.9	14.8
With Medicaid									
AFDC, cash	4,692	³ 6.7	8.2	³ 26.4	³ 34.6	³ 33.1	³ 37.0	15.4	14.6
All other	3,771	(²)	7.5	(²)	32.3	³ 35.9	³ 34.8	15.9	13.4
	922	(²)	⁴ 11.3	(²)	(²)	21.3	46.0	(²)	(²)
6-17 years									
Without Medicaid:									
Poor ¹	6,017	4.4	7.1	⁴ 9.6	36.1	31.6	38.3	17.6	12.5
Not poor	32,419	2.6	7.4	26.2	32.2	28.4	43.7	14.4	13.5
With Medicaid									
AFDC, cash	6,874	³ 7.8	6.6	³ 10.2	33.1	^{3,5} 39.2	36.3	⁵ 12.5	12.0
All other	5,833	³ 7.8	6.5	³ 10.6	33.5	^{3,5} 39.8	37.0	^{3,5} 11.4	11.9
	1,042	(²)	7.0	(²)	(²)	36.0	32.7	(²)	(²)

¹ Less than or equal to 150 percent of the poverty level (income adjusted for family size).

² Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

³ Significantly different at the .05 level from the population without Medicaid who are not poor.

⁴ Relative standard error is greater than 30 percent but less than 50 percent.

⁵ Significantly different at the .05 level from the population without Medicaid who are poor.

NOTES: AFDC is Aid to Families with Dependent Children.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

there were no differences between those with and without Medicaid.

The distribution of restricted-activity days indicates children with Medicaid are more likely to have no restricted-activity days than are children who are not poor. A similar pattern was observed between children with and without Medicaid for the distribution of bed-disability days (data not shown).

These data on restricted-activity days provide conflicting messages about differences in health status between children with and without Medicaid. Although restricted-activity days may serve as a health status measure, there are difficulties of interpretation, particularly for children. One problem is that parents were asked to report numbers of restricted-activity days over a 3-month period prior to each interview. Differential ability to recall such data accurately may account in part for the pattern of number of restricted-activity days just discussed. Furthermore, there is no way of knowing whether restricted-activity days may be underreported for children with Medicaid or overreported for those without Medicaid. A second problem lies in the extent to which restricted-activity days are a response to illness rather than a direct reflection of differing levels of morbidity. Use of restricted-activity days as a health measure for children is further complicated because parents play a role in deciding when normal activities should be restricted because of illness. In short, these data on restricted-activity days probably reflect variations in recall of events or response to illness by socioeconomic status as well as differences in health status.

Among adults, the Medicaid population is in generally poorer health than both the poor without Medicaid and the population that is not poor (Table 4). Among those age 18-44 and 45-64, both the total Medicaid population and each aid category are more likely to be in fair or poor health, to have a limitation of activity, and to have a functional limitation than either those who are not poor or the poor without Medicaid. Mean restricted-activity days were highest for the Medicaid population as well.

AFDC cash eligibles age 18-44 are four times more likely to report being in fair or poor health than those without Medicaid who are not poor (27.1 percent compared with 6.0 percent). Not surprisingly, in the SSI disabled population, 46.2 percent of the age group 18-44 and 73.8 percent of those 45-64 are in fair or poor health. Presence of activity and functional limitations in the SSI disabled population is quite high as well, about 60 percent in both age groups reported an activity limitation. This compares with about 3 percent of those age 18-44 and 8 percent of those age 45-64 who are not poor.

Among the elderly (age 65 or over), about one-half of both the SSI aged and other eligibles are in fair or poor health compared with about one-third of the elderly who are not poor. Among those age 75 or over, 51.0 percent of those with Medicaid are in fair or poor health compared with 33.1 percent of those who are not poor (data not shown). Of the Medicaid elderly, 70-80 percent reported a functional limitation compared with one-half of the elderly who are not poor.

Table 4

Measures of health status for adults 18 years or over, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Population in thousands	Percent with—			Restricted-activity days			
		Fair or poor health	Any limitation of activity due to chronic condition	Any functional limitation	Mean	Percent with—		
						0	15 or more	30 or more
18-44 years								
Without Medicaid:								
Poor ¹	9,911	² 14.0	² 4.5	11.2	12	34.7	16.9	9.9
Not poor	72,842	6.0	2.7	9.7	10	34.5	17.0	8.6
With Medicaid								
AFDC, cash	6,960	^{2,3} 28.2	^{2,3} 17.7	^{2,3} 23.1	^{2,3} 20	^{2,3} 25.7	^{2,3} 29.0	^{2,3} 18.5
SSI blind or disabled, cash	4,046	^{2,3} 27.1	^{2,3} 9.6	^{2,3} 19.9	² 15	^{2,3} 26.4	^{2,3} 25.0	^{2,3} 15.1
Other ⁵	796	^{2,3} 46.2	^{2,3} 60.3	^{2,3} 41.4	^{2,3} 99	(⁴)	^{2,3} 35.5	(⁴)
	2,105	^{2,3} 23.6	^{2,3} 17.2	^{2,3} 22.4	^{2,3} 24	^{2,3} 22.5	^{2,3} 34.3	^{2,3} 23.5
45-64 years								
Without Medicaid:								
Poor ¹	4,445	² 43.6	² 23.9	² 50.8	² 29	² 34.8	² 33.9	² 24.3
Not poor	36,627	17.2	8.2	27.6	16	40.5	23.2	14.7
With Medicaid								
SSI blind or disabled, cash	2,506	^{2,3} 68.2	^{2,3} 50.5	^{2,3} 73.5	^{2,3} 45	^{2,3} 26.8	^{2,3} 44.6	^{2,3} 37.0
Other ⁵	960	^{2,3} 73.8	^{2,3} 62.2	^{2,3} 79.8	² 50	31.5	² 42.6	² 35.2
	1,145	^{2,3} 66.7	^{2,3} 46.3	^{2,3} 72.4	^{2,3} 46	(⁴)	^{2,3} 50.1	^{2,3} 42.1
65 years or over								
Without Medicaid:								
Poor ¹	4,887	² 42.5	38.9	² 63.3	29	39.4	35.1	26.1
Not poor	14,528	31.1	37.0	52.6	25	40.9	30.9	22.7
With Medicaid								
SSI aged, cash	4,054	^{2,3} 52.6	^{2,3} 54.7	^{2,3} 78.1	^{2,3} 57	^{2,3} 23.8	^{2,3} 54.6	^{2,3} 45.9
Other ⁵	2,265	² 52.3	^{2,3} 54.3	^{2,3} 80.2	^{2,3} 53	^{2,3} 22.5	^{2,3} 53.4	^{2,3} 43.9
	1,545	² 52.6	^{2,3} 53.5	^{2,3} 73.3	^{2,3} 67	^{2,3} 26.9	^{2,3} 56.2	^{2,3} 50.0

¹Less than or equal to 150 percent of the poverty level (income adjusted for family size).

²Significantly different at the .05 level from the population without Medicaid who are not poor.

³Significantly different at the .05 level from the population without Medicaid who are poor.

⁴Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

⁵All noncash eligibles and all State-only eligibles, both cash and noncash.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

Table 5
Age and Medicaid eligibility, by severity of functional limitation: United States, 1980

Item	Age					
	18-64 years			65 years or over		
	With Medicaid	Without Medicaid		With Medicaid	Without Medicaid	
Poor ¹		Not poor	Poor ¹		Not poor	
Population in thousands	9,466	14,356	109,470	4,054	4,887	14,528
Most severe limitation	Percent of persons					
None	^{2,3} 63.6	² 76.5	84.3	^{2,3} 21.9	² 36.7	47.4
Vigorous activities	5.5	6.8	5.3	10.1	10.4	11.2
Doing work	^{2,3} 10.0	4.5	3.5	7.1	6.5	5.7
Walking several blocks	^{2,3} 6.6	3.5	2.9	10.2	15.2	11.1
Walking one block	² 4.9	² 5.2	2.6	11.3	11.7	10.4
Ability to get around	^{2,3} 5.6	² 2.4	1.0	^{2,3} 17.6	8.8	7.5
Needs assistance in walking	(⁴)	(⁴)	(⁴)	^{2,3} 11.3	² 6.5	3.0
Needs assistance in self care	(⁴)	(⁴)	(⁴)	² 10.5	(⁴)	3.7

¹Less than or equal to 150 percent of the poverty level (income adjusted for family size).

²Significantly different at the .05 level from the population without Medicaid who are not poor.

³Significantly different at the .05 level from the population without Medicaid who are poor.

⁴Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

Table 6
Use of health services for persons under 18 years in fair or poor health, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Persons in fair or poor health					
	Population in thousands	Percent with at least one—			Mean	
		Physician visit	Prescribed drug	Hospital stay	Physician visits	Prescribed drugs
Under 6 years						
Without Medicaid:						
Poor ¹	(²)	(²)	(²)	(²)	(²)	(²)
Not poor	379	95.8	85.9	(²)	8.1	7.4
With Medicaid	316	90.3	83.2	(²)	5.5	4.8
AFDC, cash	(²)	(²)	(²)	(²)	(²)	(²)
All other	(²)	(²)	(²)	(²)	(²)	(²)
6-17 years						
Without Medicaid:						
Poor ¹	(²)	(²)	(²)	—	(²)	(²)
Not poor	835	91.9	79.6	(²)	8.4	6.3
With Medicaid	536	85.0	72.1	(²)	6.0	³ 3.8
AFDC, cash	454	82.3	72.3	(²)	5.8	³ 3.8
All other	(²)	(²)	(²)	(²)	(²)	(²)

¹Less than or equal to 150 percent of the poverty level (income adjusted for family size).

²Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

³Significantly different at the .05 level from the population without Medicaid who are not poor.

NOTE: AFDC is Aid to Families with Dependent Children.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

In almost every instance, the poor without Medicaid are in worse health than those who are not poor. They are more likely within each age group to report being in fair or poor health than persons who are not poor. For example, more than 40 percent of poor persons without Medicaid are in fair or poor health in the age groups 45-64 and 65 or over. A higher percent of the poor without Medicaid who are under age 65 report an activity limitation. In addition, one-half of those age 45-64 report a functional limitation

compared with about 28 percent of persons who are not poor in that age group. Finally, more of the elderly poor without Medicaid report a functional limitation than the elderly who are not poor. Although the Medicaid population is in the worst health, those who are poor and without Medicaid are in much worse health than those who are not poor.

Types of functional limitation for persons with and without Medicaid by age group are shown in Table 5. Persons are classified by the most severe limitation

Table 7

Use of health services for persons under 18 years with 15 or more restricted-activity days, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Persons with 15 or more restricted-activity days					
	Population in thousands	Percent with at least one—			Mean	
		Physician visit	Prescribed drug	Hospital stay	Physician visits	Prescribed drugs
Under 6 years						
Without Medicaid:						
Poor ¹	477	96.5	91.0	(²)	6.7	4.8
Not poor	1,867	99.1	92.6	22.3	7.4	5.5
With Medicaid						
AFDC, cash	685	94.9	88.1	(²)	7.3	5.2
All other	505	95.5	86.3	(²)	7.3	4.9
	(²)	(²)	(²)	(²)	(²)	(²)
6-17 years						
Without Medicaid:						
Poor ¹	754	93.0	68.5	(¹)	5.4	2.8
Not poor	4,386	94.1	78.2	20.7	6.3	3.9
With Medicaid						
AFDC, cash	828	³ 98.7	73.4	30.8	6.2	3.2
All other	693	100.0	74.1	35.0	6.6	3.4
	(²)	(²)	(²)	(²)	(²)	(²)

¹ Less than or equal to 150 percent of the poverty level (income adjusted for family size).

² Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

³ Significantly different at the .05 level from the population without Medicaid who are not poor.

NOTE: AFDC is Aid to Families with Dependent Children.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

they reported. Among persons age 18-64 with Medicaid, 10.0 percent reported they were unable to work compared with 3.5 percent of those who are not poor (the SSI disabled are in this age group). Both the Medicaid population and the poor without Medicaid are more likely to have severe limitations than those who are not poor. Of those with Medicaid, 5.6 percent are limited in their ability to get around; 2.4 percent of the poor without Medicaid and 1.0 percent of those who are not poor are so limited.

Among the elderly (age 65 or over), functional limitations are most severe in the Medicaid population. About 40 percent of the elderly with Medicaid are limited in their ability to get around, need assistance in walking, or need assistance in self care. In contrast, only 14.2 percent of the elderly who are not poor have one of these three severe types of limitations.

Health status and services use

The health status of the Medicaid population is of interest because of the implications for health care use. Health status has been shown to be one of the best predictors of use of health services (Andersen, 1968; Andersen and Newman, 1973). The previous section of this article documents the poorer health status of the Medicaid population as a whole and by aid category in comparison to those without Medicaid, particularly those who are not poor.

The Medicaid program was intended to provide access to mainstream medical care for some of the most disadvantaged population groups. This section examines whether for those at greatest risk—persons

with poor health status—Medicaid coverage results in levels of health service use comparable to similar persons without such coverage. Use of physicians' services, prescribed drugs,² and inpatient hospital care are shown by age group and aid category.

Coverage of physician and hospital services is required of all State Medicaid programs, but coverage of prescribed drugs is optional and need not be extended to the medically needy program. Nevertheless, in 1980, only two States provided no coverage for prescribed drugs and only one State with a medically needy program did not extend drug coverage to this group. Almost all States did impose some type of limitation on drug services, either through restricted formulary lists or limits on number of prescriptions or refills per month.

Among children in fair or poor health (Table 6) or those with 15 or more restricted-activity days (Table 7) there are almost no differences in use of health services between those with Medicaid coverage and those without. The exception is the lower average number of prescribed drugs for older (age 6-17 years) Medicaid children compared with those who are not poor (3.8 for the former compared with 6.3 for the latter, Table 6). Otherwise, among children with fair or poor health, those with Medicaid are as likely to see a physician or obtain a prescribed drug as children who are not poor. They had similar numbers of physician visits as well.

² Measured as separate purchases of drugs. No distinction is made between purchases of different medicines and refills of the same medication.

Among adults under age 65 in fair or poor health (Table 8), those with Medicaid are as likely, or more likely in some instances, to see a physician or use at least one prescribed drug as adults without Medicaid who are not poor. Poor persons without Medicaid, however, are significantly less likely to obtain prescribed drugs than their counterparts who are not poor. In the age group 45-64, they are less likely to see a physician as well. In the elderly population age 65 or over, most of whom have Medicare coverage, those with Medicaid and in fair or poor health are both more likely to see a physician and more likely to use a prescribed drug than those without Medicaid and in fair or poor health.

Higher mean numbers of physician visits and prescribed drugs occurred for persons with Medicaid in both the age 45-64 and age 65 or over populations in comparison to the poor without Medicaid. Persons with eligibility other than SSI cash assistance had the highest levels of use, which may indicate the poorer health of the noncash eligibles among whom are the medically needy.

Use of services for adults with functional limitations is presented in Table 9. Almost no differences exist in the likelihood of seeing a physician or using a prescribed drug. However, mean numbers of physician visits and prescribed drugs are

consistently higher for those with Medicaid than for the poor without Medicaid coverage, 9.7 versus 5.7 mean physician visits among those age 18-44 and 9.8 versus 6.7 among those age 65 or over. As before, mean numbers of physician visits, prescribed drugs, and restricted-activity days are much higher for other eligibles (noncash and State-only Medicaid eligibles). Average number of prescribed drugs purchased is especially high among those age 45-64 with Medicaid and having a functional limitation, 20.3 per person for the SSI disabled and 23.7 for other eligibles, compared with about 13 for persons without Medicaid.

The use of hospital services for persons in fair or poor health and persons with a functional limitation is presented in Table 10. Among those age 18-44, there are no differences in likelihood of an admission or average number of days between those with and without Medicaid. For those with a functional limitation, there was a greater likelihood of hospitalization among other eligibles (noncash and State-only) in the age 45-64 group. As already noted, physician visits and prescribed medicine purchases were higher for this eligibility group as well.

The elderly (age 65 or over) in the other (noncash and State-only) category have both a greater likelihood of hospitalization and higher average

Table 8
Use of physician services and prescribed drugs for adults 18 years or over in fair or poor health, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Population in thousands	Persons in fair or poor health				
		Percent with at least one—		Mean		
		Physician visit	Prescribed drug	Physician visits	Prescribed drugs	Restricted activity days
18-44 years						
Without Medicaid:						
Poor ¹	1,387	77.4	² 67.4	8.6	² 6.0	28
Not poor	4,400	85.2	86.6	8.4	9.0	33
With Medicaid						
AFDC, cash	1,097	^{2,3} 90.5	³ 84.5	9.5	³ 10.1	42
Other ⁴	497	89.7	³ 86.6	8.4	8.3	30
45-64 years						
Without Medicaid:						
Poor ¹	1,936	² 77.8	² 73.3	6.7	12.8	46
Not poor	6,294	86.4	82.9	7.7	14.8	39
With Medicaid						
SSI blind or disabled, cash	708	86.1	³ 84.2	^{2,3} 10.8	^{2,3} 21.9	² 58
Other ⁴	763	^{2,3} 96.6	^{2,3} 93.4	^{2,3} 12.9	³ 20.8	64
65 years or over						
Without Medicaid:						
Poor ¹	2,077	84.3	82.6	7.5	14.8	80
Not poor	4,515	88.3	87.0	9.0	17.7	74
With Medicaid						
SSI aged, cash	1,184	^{2,3} 94.7	^{2,3} 93.8	³ 11.0	³ 20.9	54
Other ⁴	813	² 92.6	³ 91.4	8.9	15.9	72
		^{2,3} 96.8	^{2,3} 96.3	^{2,3} 13.5	^{2,3} 27.3	90

¹ Less than or equal to 150 percent of the poverty level (income adjusted for family size).

² Significantly different at the .05 level from the population without Medicaid who are not poor.

³ Significantly different at the .05 level from the population without Medicaid who are poor.

⁴ All noncash eligibles and all State-only eligibles, both cash and noncash.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

Table 9

Use of physician services and prescribed drugs for adults 18 years or over with a functional limitation, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Population in thousands	Persons with a functional limitation				
		Percent with at least one—			Mean	
		Physician visit	Prescribed drug	Physician visits	Prescribed drugs	Restricted activity days
18-44 years						
Without Medicaid:						
Poor ¹	1,112	84.0	79.6	² 5.7	5.8	37
Not poor	7,061	87.6	81.1	7.8	7.2	33
With Medicaid	1,604	85.8	83.3	³ 9.7	^{2,3} 11.2	45
AFDC, cash	803	92.5	² 90.1	³ 8.9	^{2,3} 10.4	36
Other ⁴	471	91.6	85.2	^{2,3} 12.2	³ 11.2	² 60
45-64 years						
Without Medicaid:						
Poor ¹	2,259	² 80.0	76.9	7.1	12.6	² 48
Not poor	10,111	89.0	83.9	7.8	13.3	36
With Medicaid	1,841	84.0	80.9	^{2,3} 10.9	^{2,3} 20.7	² 57
SSI blind or disabled, cash	766	77.9	76.2	9.6	^{2,3} 20.3	61
Other ⁴	829	90.4	85.6	^{2,3} 12.5	^{2,3} 23.7	² 58
65 years or over						
Without Medicaid:						
Poor ¹	3,095	85.9	85.1	² 6.7	14.4	39
Not poor	7,646	88.1	87.3	8.5	16.1	37
With Medicaid	3,167	91.2	90.4	³ 9.8	³ 18.0	^{2,3} 67
SSI aged, cash	1,817	91.3	90.3	8.2	14.3	² 59
Other ⁴	1,132	89.3	88.7	^{2,3} 11.6	^{2,3} 22.6	^{2,3} 86

¹Less than or equal to 150 percent of the poverty level (income adjusted for family size).

²Significantly different at the .05 level from the population without Medicaid who are not poor.

³Significantly different at the .05 level from the population without Medicaid who are poor.

⁴All noncash eligibles and all State-only eligibles, both cash and noncash.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

numbers of hospital days than the elderly without Medicaid, both the poor and those who are not poor. Because older individuals within the elderly population are at greater risk for hospitalization, one explanation might be that noncash and State-only eligibles are older. However, this is not the case. Persons age 75 or over represent about 29 percent of elderly noncash and State-only eligibles. They represent about 50 percent of SSI aged cash recipients whose use of hospital services is generally not different from that of the population without Medicaid.

Utilization, including hospital use, is shown only for those reporting poor health. It is possible that although fewer persons in the noncash and State-only group are age 75 or over, they make up a higher percentage of those in poor health. However, among the Medicaid elderly who report fair or poor health, about 49 percent of cash recipients are age 75 or over, compared with 33 percent of other eligibles (data not shown). Thus, the higher rates of physician, prescribed drug, and hospital use among elderly noncash eligibles appears to be a result of the poorer health of this group, rather than the greater age of this population. Among these noncash and State-only eligibles are the medically needy, and these data confirm the greater demand for health services by

these individuals, even within a population all of whom report poor health.

Differences in four-State survey

In addition to the national survey, data were collected in State Medicaid Household Surveys conducted in New York, California, Michigan, and Texas. The States were chosen for their large Medicaid programs, their locations in different regions, and their Medicaid programmatic differences ranging from generous to restrictive in terms of benefits and eligibility.

The four States varied greatly in the composition of their Medicaid programs. Eligibility requirements were different, so that individuals in identical financial circumstances may have qualified for Medicaid in one State but not another. Texas, for example, has much lower AFDC payment levels than the other three States and no medically needy or State-only program. A brief description of program differences by State is presented in Table 11.

Some differences in likelihood of reporting fair or poor health are shown in Table 12. AFDC cash recipients under age 18 in California, Michigan, and New York are more likely to be in fair or poor health than the national Medicaid population for this age

Table 10

Use of hospital services for adults 18 years or over in fair or poor health or with a functional limitation, by Medicaid eligibility, poverty level, and aid category: United States, 1980

Item	Persons in fair or poor health			Persons with a functional limitation		
	Population in thousands	Percent with at least one admission	Average hospital days per person	Population in thousands	Percent with at least one admission	Average hospital days per person
18-44 years						
Without Medicaid:						
Poor ¹	1,387	21.4	² 1.9	1,112	26.7	2.9
Not poor	4,400	26.2	3.0	7,061	22.6	3.0
With Medicaid	1,961	30.1	4.1	1,604	30.3	3.6
AFDC, cash	1,097	28.3	³ 3.1	803	31.2	2.2
Other ³	497	(⁴)	² 6.1	471	(⁴)	² 5.6
45-64 years						
Without Medicaid:						
Poor ¹	1,936	⁵ 15.5	2.5	2,259	17.8	2.7
Not poor	6,294	25.8	3.6	10,111	22.5	3.1
With Medicaid	1,708	⁶ 30.9	^{5,6} 6.3	1,841	⁶ 30.8	⁶ 5.0
SSI blind or disabled, cash	708	(⁴)	² 5.1	766	(⁴)	² 4.7
Other ³	763	⁶ 34.8	6.4	829	^{5,6} 34.2	4.8
65 years or over						
Without Medicaid:						
Poor ¹	2,077	⁵ 18.2	² 2.8	3,095	22.3	3.0
Not poor	4,515	29.8	5.5	7,646	27.1	4.0
With Medicaid	2,132	⁶ 36.8	^{5,6} 9.1	3,167	⁶ 34.3	^{5,6} 8.1
SSI aged, cash	1,184	29.9	5.5	1,817	29.0	5.9
Other ³	813	^{5,6} 44.3	^{5,6} 14.0	1,132	^{5,6} 42.0	^{5,6} 11.8

¹ Less than or equal to 150 percent of the poverty level (income adjusted for family size).

² Relative standard error is greater than 30 percent but less than 50 percent.

³ All noncash eligibles and all State-only eligibles, both cash and noncash.

⁴ Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

⁵ Significantly different at the .05 level from the population without Medicaid who are not poor.

⁶ Significantly different at the .05 level from the population without Medicaid who are poor.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the household survey component, National Medical Care Utilization and Expenditure Survey, 1980.

group. In each aid category, the Texas group is more likely to be in fair or poor health than the national average, with the exception of the under age 18 AFDC group.

With regard to physician use (Table 13), the four States are similar to the national population in each category with the exception of the SSI blind or disabled cash recipients in California, Michigan, and New York are more likely to see a physician. Mean physician visits are higher in California and New York for this group as well. Mean numbers of prescribed drugs are significantly lower for adults with Medicaid in each aid category for the four States compared with the national population. Information in Table 11 does not suggest that coverage of drug services was particularly restrictive in these States.

In Table 14 few differences are indicated in hospital use by the four State populations compared with the national Medicaid population. The noncash and State-only eligibles in New York and California are less likely to be hospitalized and average fewer hospital days than the national population.

Conclusions

By several measures of health status, the Medicaid population is in worse health than persons without Medicaid coverage. This relationship holds for children and adult AFDC recipients as well as the SSI and noncash eligible populations. At the same time, poor persons without Medicaid coverage, although often in better health than the Medicaid-covered, are in worse health than those who are not poor.

Among Medicaid children under 6 years of age, the percentage in fair or poor health is twice that of children who are not poor. Among the age group 6-17 with Medicaid, the percentage in fair or poor health is three times that of children who are not poor. Numbers of restricted-activity days among those in fair or poor health are much higher for young Medicaid children compared with similar children who are not poor, but the reverse was true for older children. Among children in poor health by the measures used here, Medicaid coverage provided levels of physician and prescribed drug use comparable to that for children who are not poor.

Table 11
Characteristics of four State Medicaid programs: 1980

Selected characteristic	State Medicaid programs			
	California	New York	Michigan	Texas
Medicaid population in thousands	3,374	2,364	898	682
Categorically needy program: Additional groups covered	6 additional groups, mostly AFDC related	8 additional groups, AFDC and SSI related	3 additional groups, AFDC and SSI related	3 additional groups, mostly institutionalized
AFDC monthly need level	\$511	\$476	\$470	\$187
AFDC monthly payment level (family of 4)	\$487	\$476	\$470	\$140
Medically needy program	yes	yes	yes	no
Medically needy monthly protected income level (family of 4)	\$650	\$458	\$498	—
State-only program	yes	yes	yes	no
Prescribed drug restrictions	100 days supply, restricted formulary list	Restricted formulary list	Prescribed by licensed practitioner	Restricted under drug program, 5 refills in 6 months

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCES: Health Care Financing Administration and National Center for Health Statistics: Data from the National Medical Care Utilization and Expenditure Survey, 1980; Sawyer, D., Ruther, M., Pagan-Berlucchi, A., Muse, D. N.: *The Medicare and Medicaid Data Book, 1981*. HCFA Pub. No. 03128. Office of Research, Demonstrations, and Statistics, Health Care Financing Administration. Washington. U.S. Government Printing Office, Apr., 1982.

The measures of health status for children that are available from NMCUES are limited. Perceived health status and restricted-activity days are used in this article. Shortcomings of restricted-activity days as a health status measure for children were previously discussed. Studies of specific health problems such as lead poisoning, otitis media, and psychosocial and psychosomatic problems have consistently shown greater severity of illness and higher prevalence of these types of conditions among poor children (Egbonu and Starfield, 1982). Additional measures of children's health status need to be included in future surveys to contribute to a better understanding of the relationship between poverty and poor health for children.

Medicaid adults in all aid categories exhibit poorer health status when compared with other adults in the same age group. These differences are not limited to disabled adult eligibles but extend to AFDC recipients and the SSI aged. Among AFDC cash recipients age 18-44, for example, the percentage with activity limitations is three times that for persons in the same age group without Medicaid coverage who are not poor. Higher levels of activity and functional limitations are observed when compared with persons without Medicaid coverage. Most striking, perhaps, is the much greater severity of functional limitations among Medicaid eligibles. For the elderly, one-half of those reporting a functional limitation said they were limited in their ability to get around or needed assistance in walking or with self care. Among the elderly who are not poor, only 27 percent of those reporting any functional limitation reported one of these three severe categories.

These results confirm the poor health status of Medicaid eligibles of all ages and within all aid categories. There are suggestions as well that within the population of all persons in poor health, Medicaid eligibles have more severe health problems, particularly the noncash eligibles. Their higher rates of physician and prescribed medicine use, greater likelihood of hospitalization, as well as severity of functional limitations, point to such a conclusion.

These data also indicate that poor persons without Medicaid coverage, although generally in better health than the Medicaid population, are in significantly worse health than those who are not poor. Poor adults of all ages without Medicaid are more likely to be in fair or poor health and are more likely to have activity limitations (for those under age 65) and functional limitations (for those age 45 and over) than those who are not poor.

One approach to evaluating whether health care is equitably distributed in a population is to examine whether those with the greatest need for care obtain it (Aday, Andersen, and Fleming, 1980). Among persons in poor health, Medicaid coverage provides access to health care at levels comparable to those for persons in the U.S. population who are not poor. The importance of Medicaid coverage in obtaining care is illustrated by the reduced likelihood of seeing a physician and purchasing a prescribed drug among the population under age 65 who are in poor health, are poor, and have no Medicaid coverage. Medicare coverage of persons age 65 or over mitigates the effects of income on use for the poor elderly population. Rates of use by Medicaid eligibles in poor health, on the other hand, are equal to or often

higher than for persons who are not poor. Mean numbers of physician visits and prescribed drugs purchased are especially high for noncash and State-only eligibles, the aid category containing medically needy eligibles.

Since 1980, considerable changes in the Medicaid program have occurred which have affected both the number of persons covered by Medicaid and the composition of the covered population. More recent national data are needed to evaluate whether the

findings of this study hold under the current environment.

Acknowledgments

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Table 12
Measures of perceived health status, activity, and functional limitation, by Medicaid aid category: United States and four States, 1980

Item	Population in thousands	Percent with—		
		Fair or poor health	Any limitation of activity due to chronic condition	Any functional limitation ¹
AFDC, cash				
Under 18 years:				
United States	9,603	6.8	(³)	—
California	829	² 11.2	6.0	—
Michigan	461	² 10.8	5.8	—
New York	693	² 10.4	6.7	—
Texas	256	9.4	7.4	—
18 years or over:				
United States	4,452	29.7	11.7	23.6
California	382	27.7	9.7	22.8
Michigan	243	27.8	12.1	23.1
New York	370	37.8	9.5	28.7
Texas	100	² 37.3	11.9	29.4
SSI blind or disabled, cash⁴				
United States	1,976	60.8	62.1	65.9
California	337	² 73.4	62.0	² 83.1
Michigan	67	66.9	54.6	73.3
New York	214	² 75.0	56.4	² 78.1
Texas	72	² 72.4	54.9	² 83.2
SSI aged, cash				
United States	2,298	52.4	54.4	79.6
California	283	49.6	² 64.4	80.0
Michigan	32	60.2	55.8	73.6
New York	138	60.1	54.8	83.1
Texas	160	² 65.9	48.1	85.1
Other^{4,5}				
United States	4,795	43.2	35.8	50.7
California	513	39.0	² 26.4	45.3
Michigan	114	45.8	28.6	49.7
New York	245	48.0	36.5	51.0
Texas	13	77.8	41.1	39.2

¹Not asked of persons under 17 years of age. Excludes persons who died during the year.

²Significantly different at the .05 level from the total U.S. Medicaid population.

³Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

⁴Only persons 18 years of age or over.

⁵All noncash eligibles and all State-only eligibles, both cash and noncash. Texas has no medically needy or State-only program and only a small number of noncash eligibles.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the State Medicaid household survey, National Medical Care Utilization and Expenditure Survey, 1980.

Table 13

Use of physician services and prescribed drugs by perceived health status, functional limitation, and Medicaid aid category: United States and four States, 1980

Item	Persons in fair or poor health				Persons with a functional limitation ¹			
	Population in thousands	Percent with at least one physician visit	Mean		Population in thousands	Percent with at least one physician visit	Mean	
			Physician visits	Prescribed drugs			Physician visits	Prescribed drugs
AFDC, cash								
Under 18 years:								
United States	652	84.9	5.3	3.6	—	—	—	—
California	92	84.4	6.2	² 2.3	—	—	—	—
Michigan	50	83.4	4.9	2.8	—	—	—	—
New York	72	93.7	6.9	3.7	—	—	—	—
Texas	24	79.0	4.6	² 2.2	—	—	—	—
18 years or over:								
United States	1,324	92.6	8.2	9.1	1,049	91.0	9.1	11.5
California	106	91.0	8.9	² 4.4	87	88.2	10.3	² 5.4
Michigan	68	91.5	8.2	² 5.8	56	87.9	8.8	² 7.0
New York	140	86.4	10.9	² 5.8	106	94.6	12.7	² 6.7
Texas	37	86.4	7.4	² 5.6	30	93.9	8.7	² 6.7
SSI blind or disabled, cash³								
United States	1,201	80.3	10.6	19.5	1,303	77.2	9.7	18.4
California	247	² 92.5	² 15.8	² 10.9	280	² 90.1	² 14.4	² 10.2
Michigan	45	² 93.4	12.0	² 10.6	49	² 94.0	11.2	² 10.2
New York	160	² 95.5	² 19.9	² 11.3	167	² 93.5	² 20.6	² 10.7
Texas	52	90.1	11.3	² 11.7	60	88.2	10.4	² 10.9
SSI aged, cash								
United States	1,205	91.7	8.8	15.6	1,828	90.7	8.2	14.2
California	140	94.4	² 13.6	² 11.0	226	90.9	² 12.1	² 9.6
Michigan	19	94.0	9.5	² 10.9	23	90.1	8.8	² 10.6
New York	83	91.7	9.9	² 9.6	114	91.3	9.1	² 9.5
Texas	105	89.0	8.5	² 11.2	136	88.8	7.6	² 10.3
Other^{3,4}								
United States	2,072	95.0	12.7	22.9	2,362	83.8	12.0	20.8
California	200	89.7	11.7	² 7.3	213	² 91.8	11.9	² 7.5
Michigan	52	87.0	10.9	² 10.0	54	² 95.0	11.5	² 11.0
New York	118	96.7	² 19.4	² 9.7	120	² 95.7	² 17.8	² 9.0
Texas	10	86.9	8.8	² 7.4	8	83.7	11.5	² 9.0

¹Not asked of persons under 17 years of age. Excludes persons who died during the year.

²Significantly different at the .05 level from the total U.S. Medicaid population.

³Only persons 18 years of age or over.

⁴All noncash eligibles and all State-only eligibles, both cash and noncash. Texas has no medically needy or State-only program and only a small number of noncash eligibles.

NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the State Medicaid household survey, National Medical Care Utilization and Expenditure Survey, 1980.

Table 14

Use of hospital services by perceived health status, functional limitation, and Medicaid aid category: United States and four States, 1980

Item	Persons in fair or poor health			Persons with a functional limitation ¹		
	Population in thousands	Percent with at least one admission	Average hospital days per person	Population in thousands	Percent with at least one admission	Average hospital days per person
AFDC, cash⁴						
United States	1,324	28.9	4.1	1,049	31.0	3.1
California	106	23.6	1.5	87	(²)	1.0
Michigan	68	30.8	3.2	56	29.6	3.7
New York	140	³ 14.5	³ 8	106	(²)	³ 7
Texas	37	33.1	4.1	30	34.1	4.4
SSI blind or disabled, cash⁴						
United States	1,201	27.0	5.6	1,303	26.6	5.2
California	247	28.1	4.1	280	25.4	3.6
Michigan	45	30.4	6.0	49	33.2	6.9
New York	160	25.6	6.2	167	25.0	5.8
Texas	52	³ 43.2	8.1	60	37.0	6.2
SSI aged, cash						
United States	1,205	30.2	5.5	1,828	28.8	5.8
California	140	40.5	5.6	226	32.6	3.9
Michigan	19	30.4	7.2	23	22.6	4.8
New York	83	21.4	6.0	114	23.3	5.0
Texas	105	37.0	5.7	136	34.7	5.2
Other^{4,5}						
United States	2,072	40.3	9.3	2,432	38.8	8.2
California	200	³ 28.4	³ 4.1	232	³ 26.0	³ 4.5
Michigan	52	36.1	6.2	57	34.4	6.5
New York	118	³ 28.3	³ 5.0	125	³ 23.5	³ 4.2
Texas	(²)	(²)	(²)	(²)	(²)	(²)

¹Not asked of persons under 17 years of age. Excludes persons who died during the year.

²Fewer than 20 cases or relative standard error greater than or equal to 50 percent.

³Significantly different at the .05 level from the total U.S. Medicaid population.

⁴Only persons 18 years of age or over.

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NOTES: AFDC is Aid to Families with Dependent Children; SSI is Supplemental Security Income.

SOURCE: Health Care Financing Administration and National Center for Health Statistics: Data from the State Medicaid household survey, National Medical Care Utilization and Expenditure Survey, 1980.

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