

Access and satisfaction in the Arizona Health Care Cost Containment System

by Nelda McCall, E. Deborah Jay, and Richard West

Results of a survey conducted in the summer of 1985 of beneficiaries of the Arizona Health Care Cost Containment System and a matched group of Medicaid beneficiaries concerning their access to and satisfaction with medical care services are described in this article. The Arizona Health Care Cost

Containment System is an alternative to Medicaid's acute medical care coverage. The results of the study indicate few differences in access and satisfaction between the two groups of beneficiaries on access to care, reported use of services, or satisfaction with the care received.

Introduction

The Arizona Health Care Cost Containment System (AHCCCS) is Arizona's alternative to traditional Medicaid coverage for acute medical care.¹ Described in this article are the results of a survey conducted in the summer of 1985 of AHCCCS beneficiaries concerning their access to and satisfaction with the medical care services they received. AHCCCS has a number of innovative features that differentiate it from traditional fee-for-service Medicaid programs. The State uses prepaid health plans to deliver services to the indigent population. It selects these plans through a bidding process under which winning bidders are paid a capitated amount (their bid rate). The State is also paid on a prepaid capitated basis by the Federal Government. Under the program, beneficiaries are assigned to a particular "gatekeeper" who manages their care, and they are required to pay small copayments for the services they receive.²

Of special importance in a program such as AHCCCS, which proposes fundamental changes in the way health care services are delivered to the indigent, is whether beneficiaries who are covered by such a program have less access to medical care or lower levels of satisfaction with the medical care they receive than those receiving services in the traditional fee-for-service Medicaid system. In a fee-for-service payment system where beneficiaries are free to choose from a wide variety of providers, these issues, although important, may not be of such significance. Beneficiaries using the traditional fee-for-service system always provide economic benefit to providers by coming in for services; thus, it is in the providers'

interest to maximize accessibility and the courtesy and consideration with which services are delivered. Under a capitated system, the economic incentives are often in the opposite direction: The majority of the providers often receive more economic advantage the less the client is seen. Thus, it becomes necessary in such a system to ensure that acceptable levels of access and satisfaction are maintained.

In the remainder of this article, we will discuss the data sources and methodology for the study, the characteristics of the study population, and the major study findings. The article is concluded with a discussion of access and satisfaction in a capitated environment.

Data sources and methodology

Description of the evaluation

The AHCCCS program is a demonstration project of the Health Care Financing Administration (HCFA). The State of Arizona receives Federal funding as a Medicaid program with waivers to permit its demonstration aspects. The focus of this article is on one aspect of the overall evaluation of the access demonstration—a study of access to care and satisfaction with care compared with a traditional Medicaid program.

Comparison site

The analysis is based on household interviews with a sample of individuals enrolled in AHCCCS and a sample of Medicaid beneficiaries. In deciding on a comparison group of Medicaid beneficiaries, several alternatives were considered. Of primary importance was finding a Medicaid program that matched AHCCCS as closely as possible both in terms of benefits provided and eligibility requirements. The alternatives considered included all or portions of Texas, New Mexico, Colorado, and Utah. The program's benefits and eligibility requirements as well as numerous statistics on demographics, health care facilities, and medical care utilization were compared for these areas. Primary importance was placed on matching factors that would be difficult to control statistically in the analysis, such as the supply of

¹AHCCCS has been granted waivers by the Health Care Financing Administration that allows it not to provide the following mandatory Medicaid services: long-term care, home health care, family planning, and mental health.

²How these unique features of the AHCCCS program have been specifically implemented and how they are operating are the subjects of four reports on implementation and operation. Other reports are available on cost of the program, utilization of medical services, and the quality of medical care delivered. A synopsis of these reports, accession numbers, and costs were published in the Grants and Contracts section of the *Health Care Financing Review*, Summer 1989.

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health care facilities and medical care utilization. Less importance was placed on matching factors such as demographic characteristics that could be controlled for in the analysis.

As a result of these comparisons, New Mexico was chosen as the comparison site. It has a Medicaid system that is similar to Arizona's with respect to its benefits and eligibility requirements; it borders Arizona; and its population has similar demographic characteristics. Additionally, New Mexico's profile of health care resources is similar to Arizona's.³

Description of the survey

The main data source for this analysis is a household survey conducted with 897 AHCCCS Aid to Families with Dependent Children (AFDC) and Supplemental Security Income (SSI) beneficiaries in Arizona enrolled in one of the prepaid plans, and 553 AFDC and SSI Medicaid beneficiaries in the comparison site who had at least 12 months of enrollment as of March 1985. The samples were selected using a stratified two-stage probability sample design in which the primary sampling unit was ZIP code areas and the secondary sampling unit was AHCCCS enrollees. The samples were stratified to disproportionately sample various subgroups of the population. AHCCCS enrollees 65 years of age or over, those living in rural areas, and those affiliated with an individual practice association (IPA) plan⁴ were oversampled so that reliable subgroup analysis would be feasible. The comparison sample was selected to have a similar distribution among the demographic subgroups of interest as the Arizona sample.

The survey in both Arizona and the comparison site covered the following topics: use of medical care services, preventive care received, health status, access to care, satisfaction with care, and demographic, social, income, and insurance information. Also included on the Arizona questionnaire were questions specific to the AHCCCS program, i.e., plan affiliation, primary care physicians, copayments, and experience with county systems. The focus here is on an analysis of access to care and satisfaction with care in Arizona as compared with Medicaid enrollees in the comparison site.

Completed questionnaires were edited manually and by machine. The final analysis weights were constructed taking account of differential response rates and disproportionate sampling of subgroups and the most accurate information on the characteristics

of those sampled. (For example, direct observation on such issues as sex and ethnicity was considered more accurate than information in computerized files.) The weights were designed so that the weighted samples in both Arizona and the comparison site would have the same distribution of urban-rural status, age and eligibility, and race and ethnicity. Thus, the sample in the comparison site was weighted to be similar to the Arizona population and not to represent the actual population in the comparison site. Consequently, the reported values for the comparison site cannot be interpreted as the actual values in New Mexico.

All of the analysis that follows has been weighted using these final sample weights. To account for additional demographic, social, and income differences between Arizona and the comparison site, the analysis was conducted by estimating weighted-regression models containing a binary variable for State along with the variables age, entitlement, race and ethnicity, sex, urban-rural status, education, marital status, income, and number of family members. To report the results of these regression models, we present the actual average of the dependent variable for Arizona. For the comparison site, we present an average that has been regression adjusted to represent the average value that would have occurred in the comparison site if it had had the same averages for the characteristics in the model as Arizona. Tests of the difference between Arizona and the comparison site are based on a t-test of the statistical significance of the coefficient of the binary variable for State.⁵

Characteristics of enrollees

Characteristics of the AHCCCS enrollees, AFDC AHCCCS enrollees, and SSI AHCCCS enrollees are shown in Table 1. The AHCCCS sample members were largely female, minority, young, and urban. More than two-thirds of the sample were female, with a greater percentage of females in the SSI than in the AFDC sample. Hispanics were the most common ethnic group, making up 51 percent of the AFDC sample and 37 percent of the SSI sample. Black people represented 18 percent of the AFDC sample and 13 percent of the SSI sample. Fifty percent of the total sample was under 20 years of age, with 70 percent of the AFDC sample under 20 years of age. Compared with the national distribution of Medicaid eligibility in 1985, AHCCCS contained slightly fewer females and fewer people under 65 years of age and more people 20-64 years of age. AHCCCS also differed considerably from the national Medicaid distribution with respect to race and ethnicity, having considerably more hispanics, fewer white people, and fewer black people (Health Care Financing Administration, 1986).

³For a detailed description of the comparisons made in the selection of the sites, *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

⁴Plan types were defined during site visits conducted by Deborah Freund and other members of the project team. An IPA was classified according to the definitions used by the Office of Health Maintenance Organization: *1980 National HMO Census*, DHEW Pub. No. PHS 81-5959, Public Health Service, U.S. Government Printing Office, June 1980, p. 37-38.

⁵A detailed description of the statistical methodology employed is presented in appendix D of *Evaluation of the Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

Table 1
Percent of AHCCCS enrollees, by eligibility category and selected characteristics

Characteristics	Total	AFDC	SSI	Characteristics	Total	AFDC	SSI
Sex		Percent		Marital status²—con't.			
Female	65.8 (1.2)	63.7 (1.6)	70.4 (2.2)	Never married	38.7 (3.0)	48.9 (5.4)	+ +30.0 (3.0)
Male	34.2 (1.2)	36.3 (1.6)	+29.6 (2.2)	Refused to respond	0	0	0
Race and ethnicity				Income³			
White	33.4 (2.6)	28.2 (2.8)	+ +45.1 (3.6)	Under \$3,000	30.4 (1.9)	38.0 (2.4)	+ +13.2 (2.4)
Hispanic	46.8 (2.4)	51.0 (2.8)	+ +37.1 (3.6)	\$3,000-\$4,999	40.2 (1.9)	35.2 (2.2)	+ +51.7 (3.2)
American Indian and Alaskan Native	3.0 (0.7)	2.7 (0.8)	3.6 (1.5)	\$5,000-\$6,999	10.9 (1.3)	10.8 (1.7)	11.1 (1.8)
Asian and Pacific Islander	0.6 (0.3)	0.5 (0.3)	0.9 (0.3)	\$7,000-\$15,999	9.8 (1.0)	8.7 (1.3)	12.2 (2.0)
Black	16.2 (2.5)	17.5 (2.6)	13.3 (3.1)	\$16,000 and over	1.2 (0.4)	1.0 (0.5)	1.7 (0.9)
Age				Don't know or refused to respond	7.6 (1.0)	6.5 (1.4)	10.2 (1.8)
Under 20 years	50.2 (1.6)	69.9 (1.5)	+ +5.3 (1.4)	Mean number of people supported by household income	3.4 (0.1)	4.0 (0.1)	+ +2.1 (0.1)
20 to 65 years	37.6 (1.4)	30.1 (1.5)	+ +54.8 (2.3)	Insurance			
65 years or over	12.1 (0.7)	0 (0.0)	39.9 (2.2)	Eligible for Medicare:			
Urban-rural status				Yes	19.3 (1.3)	2.5 (0.9)	+ +57.6 (2.6)
Urban	73.6 (2.6)	74.8 (2.8)	71.0 (3.7)	No	68.7 (2.4)	85.8 (2.7)	+ +29.4 (2.4)
Rural	26.4 (2.6)	25.2 (2.8)	29.0 (3.7)	Don't know	12.1 (2.0)	11.7 (2.5)	13.0 (1.8)
Education¹				Eligible for benefits from the Indian Health Service:			
None	7.2 (1.0)	4.8 (1.2)	+ +11.3 (1.9)	Yes	1.9 (0.6)	2.3 (0.8)	1.0 (0.5)
Attended elementary	48.9 (1.8)	51.5 (2.5)	44.5 (2.9)	No	94.8 (0.9)	94.7 (1.0)	95.0 (1.5)
Attended high school	36.6 (1.7)	37.0 (2.0)	35.8 (2.9)	Don't know	3.3 (0.6)	3.0 (0.7)	4.1 (1.3)
College or technical school, postgraduate school, advanced degree	5.6 (1.0)	5.9 (1.3)	5.2 (1.7)	Has other types of insurance:			
Don't know	1.6 (0.6)	0.7 (0.6)	3.1 (1.3)	Yes	4.8 (0.9)	4.8 (1.2)	4.7 (1.2)
Marital status²				No	93.9 (1.0)	93.7 (1.4)	94.5 (1.2)
Married	11.7 (1.6)	9.9 (2.4)	13.2 (2.2)	Don't know	1.3 (0.4)	1.5 (0.5)	0.7 (0.4)
Widowed	15.0 (1.5)	1.0 (0.8)	+ +27.0 (2.5)	Smoking behavior⁴			
Divorced	23.6 (2.3)	25.8 (4.6)	21.6 (2.3)	Smokes cigarettes—			
Separated	11.1 (1.4)	14.4 (2.8)	8.2 (1.6)	Yes	32.1 (2.4)	31.5 (3.2)	32.8 (2.5)
				No	67.8 (2.4)	68.2 (3.2)	67.2 (2.5)

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Education was asked only for sample members 6 years of age and over. Following are the numbers of respondents in each group: AFDC AHCCCS enrollees, 362; SSI AHCCCS enrollees, 411; total AHCCCS enrollees, 773.

²Marital status was asked only for sample members 17 years of age and over. Following are the numbers of respondents in each group: AFDC AHCCCS enrollees, 196; SSI AHCCCS enrollees, 404; total AHCCCS enrollees, 600.

³1984 household income before taxes.

⁴Smoking behavior was asked only for sample members 10 years of age and over. Following are the numbers of respondents in each group: AFDC AHCCCS enrollees, 293; SSI AHCCCS enrollees, 407; total AHCCCS enrollees, 700.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Standard errors are in parentheses. Following are the numbers of persons in sample: AFDC AHCCCS enrollees, 484; SSI AHCCCS enrollees, 413; total enrollees, 897.

SOURCE: (McCall, Jay, and West, 1987).

Seventy-four percent of the total sample lived in an urban area. With respect to levels of education, more than two-fifths of the SSI sample reported that they had attended high school. Approximately 11 percent of the SSI sample and 5 percent of the AFDC sample (6 years of age or over) had never attended school. With respect to marital status, 30 percent of the SSI sample had never been married, 30 percent were divorced or separated, 27 percent were widowed, and only 13 percent were currently married. For AFDC beneficiaries, 49 percent were never married, 40 percent were divorced or separated, and only 10 percent were currently married.

Seventy-one percent of the total sample reported a family income of less than \$5,000, with a mean of 3.4 people supported by that income. AFDC beneficiaries reported significantly smaller incomes than did SSI beneficiaries (38 percent of AFDC reported incomes of less than \$3,000 versus only 13 percent of SSI beneficiaries) and larger mean numbers of people supported by the income (4.0 versus 2.1). Nineteen percent of all beneficiaries said that they were covered by Medicare, and the percent for SSI beneficiaries was 58. Only 2 percent of all beneficiaries reported coverage by the Indian Health Service and 5 percent by other insurance.

Thirty-two percent of AHCCCS members 10 years of age or over reported that they smoked cigarettes. Smoking rates were not significantly different for SSI and AFDC beneficiaries (33 percent SSI versus 32 percent AFDC).

The groups' perceived health status and reported bed- and limited-activity days are given in Table 2. When asked to evaluate their health status, 71 percent rated their health excellent or good relative to others of their age. However, differences were significant between AFDC and SSI beneficiaries, with 51 percent of SSI beneficiaries as compared with 19 percent of AFDC beneficiaries rating their health fair or poor. Twenty-four percent said they spent more than 1 day in bed or limited their usual activity in the previous 3 months. However, significantly more SSI beneficiaries reported one or more bed- or limited-activity days (32 percent SSI versus 23 percent AFDC).

When asked about 24 specific symptoms, AHCCCS enrollees reported a mean of just under 5 symptoms. The mean for AFDC beneficiaries was 4.1, and 6.7 for SSI beneficiaries.

The 24 symptoms were:

- A cough any time during the day or night that lasted for 3 weeks or longer.
- Sudden feelings of weakness or faintness.
- A problem with getting up some mornings tired and exhausted even with a usual amount of sleep.
- A problem with feeling tired for weeks at a time for no special reason.
- Frequent headaches.
- A skin rash or breaking out on any part of the body.
- Diarrhea (loose bowel movements) for 4 or 5 days.
- Shortness of breath even after light work.

- Stiff or aching joints or muscles upon waking up.
- Pains or swelling in the joints during the day.
- Frequent backaches.
- Unexplained weight loss of more than 10 pounds.
- Repeated pains in or near the heart.
- Repeated indigestion or upset stomach.
- Repeated vomiting for a day or more.
- Sore throat or running nose, with a fever as high as 103°F.
- Nose stopped up or sneezing for 2 weeks or longer.
- Unexpected bleeding from any part of the body not caused by accident or injury.
- Abdominal pains (pains in the stomach or belly) not caused by accident or injury.
- Any infections, irritations, or pains in the eyes or ears.
- Toothache.
- Bleeding gums.
- Frequent trouble falling asleep at night.
- Having to get up more than twice a night to urinate.

Findings

Access to medical care

Of great concern in a prepaid program such as AHCCCS is whether enrollees have good access to

Table 2
Percent of AHCCCS enrollees, by eligibility category, perceived health status, bed days, and limited-activity days

Variable	Total	AFDC	SSI
Health status compared with other people of same age			
Excellent	30.9 (1.8)	37.9 (2.4)	+ + 14.9 (2.6)
Good	40.2 (1.8)	43.3 (2.4)	+ + 32.9 (2.4)
Fair	19.2 (1.2)	14.7 (1.2)	+ + 29.5 (2.9)
Poor	9.5 (1.1)	4.0 (1.0)	+ + 21.9 (2.5)
Don't know	0.3 (0.2)	0.1 (0.1)	0.8 (0.6)
Reported bed days or limited-activity days in the last 3 months			
0	74.5 (1.5)	77.4 (2.1)	+ + 67.8 (2.6)
1	1.9 (0.4)	2.0 (0.6)	1.7 (0.8)
2 or more	23.6 (1.4)	20.6 (2.0)	+ + 30.5 (2.4)

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

NOTES: AHCCCS is Arizona Health Care Cost Containment system. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Standard errors are in parentheses. Following are the numbers of persons in the sample: AFDC AHCCCS enrollees, 484; SSI AHCCCS, 413; total enrollees, 897.

SOURCE: (McCall, Jay, and West, 1987).

medical care. Access is usually defined by survey data on usual source of care, difficulty in getting care, waiting time to get an appointment, waiting time to be seen, travel mode, and travel time. Because some of the questions relate to experience in the previous 12 months, we restricted our sample of respondents to those who had been continuously enrolled in AHCCCS for the previous 12 months before the interview.

Because the speed with which one is seen may appropriately differ by the kind of care required, we posed some of these questions (difficulty in getting care, waiting time for appointment, waiting time to be seen) separately for emergency, urgent, and routine care. Emergency care was defined as “. . . medical care that is needed immediately or within a few hours such as in the case of an accident or when someone has a heart attack.” Urgent care was defined as “. . . medical care that is not needed within a few hours but that is needed within a few days such as in the case of a fever, a cough that won’t go away, or an ear infection.” Routine care was defined as “. . . care that is not needed for an emergency and that is not urgent. This includes visits to the doctor for a checkup, and eye examination or for other type of physical examination.”

The results for emergency care are shown in Table 3. Twenty-eight percent of the respondents indicated they had needed emergency care in the last 12 months. Of the people who had needed emergency

care, 25 percent of the Arizona group but only 10 percent of the comparison group had difficulty getting it. Differences in reported difficulty in getting emergency care by AFDC beneficiaries were significantly higher for the AHCCCS group than for the comparison group (29 percent versus 7 percent). There were no significant differences between the AHCCCS group and the comparison group in the percent of SSI enrollees who reported difficulty in getting emergency care, although the percent reporting difficulty was higher (20 percent versus 13 percent). Fifty-three percent of the AHCCCS population received treatment for emergency care within 15 minutes, compared with 41 percent of the comparison site eligibles. However, the AHCCCS population also had a higher percent whose waiting time was more than 60 minutes—16 percent of the AHCCCS group compared with 8 percent of the comparison group.

One reason for these findings may be that AHCCCS members did have some difficulty in receiving emergency care. On the other hand, it should be remembered that emergency care is a service thought to be widely abused in Medicaid and that these are the interviewees’ perceptions of their need for emergency care. Therefore, it is possible that this finding is the result of a faulty perception of the need for emergency care by beneficiaries in an effectively run managed-care system that appropriately keeps people out of emergency rooms.

Table 3

Percent of continuously enrolled AHCCCS enrollees and of comparison group eligibles, by need for and access to emergency care in the past 12 months and by eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
Percent who needed emergency medical care	27.4 (660)	28.9 (512)	28.4 (272)	26.5 (216)	26.0 (388)	32.3 (296)
Of those who needed emergency medical care:	(161)	(128)	(72)	(55)	(89)	(73)
Percent who had any difficulty getting it	25.0	**10.2	28.5	**7.4	19.9	13.3
Percent who received it from their plan	86.2	NA	88.2	NA	83.3	NA
After arriving at place where care was received, waiting time to see a medical person:						
15 minutes or less	53.4	41.1	47.5	34.4	62.4	51.1
16-30 minutes	11.3	**30.8	12.7	**39.5	9.0	19.0
31-60 minutes	16.1	18.9	18.0	17.5	13.3	20.4
More than 60 minutes	16.1	8.2	19.9	8.5	10.4	7.1
Don't know ²	3.1	1.0	1.9	0.1	4.9	2.4

¹Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

²Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

* Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

²“Don't know” category includes those who did not respond to the question.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Numbers of AHCCCS enrollees and comparison group eligibles are in parentheses. NA indicates not applicable.

SOURCE: (McCall, Jay, and West, 1984).

Table 4

Percent of continuously enrolled AHCCCS enrollees and of comparison group eligibles, by need for and access to urgent care in the past 12 months and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
	Percent					
Percent who needed urgent medical care	44.8 (660)	-1.8 (512)	47.8 (272)	44.1 (216)	40.8 (388)	38.8 (296)
Of those who needed urgent medical care—						
Percent who received it	94.8 (275)	97.1 (193)	94.1 (126)	97.6 (90)	95.9 (149)	96.2 (103)
Percent who received it from their plan	91.9 (262)	NA NA	93.4 (119)	NA NA	89.4 (143)	NA NA
Of those who received urgent medical care (from their plan for AHCCCS)—	(240)	(185)	(110)	(88)	(130)	(97)
Percent who had any difficulty getting it	7.5	4.9	9.5	5.0	4.2	4.9
Waiting time to see a medical person after arriving at the place where care was received:						
15 minutes or less	40.1	34.2	40.3	31.1	39.8	39.7
16-30 minutes	28.9	39.4	29.1	40.1	28.4	38.1
31-60 minutes	15.1	11.7	14.0	12.6	17.0	10.2
60 minutes or more	14.5	14.4	15.4	15.9	13.0	11.8
Don't know ²	1.4	0.2	1.2	0.2	1.8	0.2
Percent who had an appointment	57.6	51.3	54.0	44.0	63.5	63.8
Of those who had an appointment—	(140)	(91)	(60)	(37)	(80)	(54)
Waiting time to see a medical person after an appointment was made:						
None	31.2	41.8	38.1	54.1	21.8	25.2
1 day	31.7	23.2	33.0	25.9	29.9	19.5
2 days	11.3	11.1	11.8	7.9	10.7	15.4
More than 2 days	25.2	22.8	17.0	12.8	*36.3	36.2
Don't know ²	0.6	1.2	0.0	0.0	1.3	3.6
Waiting time for those with an appointment to see a medical person after arriving at the place where care was received:						
15 minutes or less	37.5	37.1	40.3	39.6	33.5	33.5
16-30 minutes	36.1	43.0	37.5	40.7	34.2	45.9
31-60 minutes	15.7	10.6	14.3	10.9	17.7	10.5
60 minutes or more	8.9	8.5	5.7	7.5	13.2	9.9
Don't know ²	0.1	NA	2.2	1.4	1.3	0.1

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

** Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹ Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

² "Don't know" category includes those who did not respond to the question.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Numbers of AHCCCS enrollees and comparison group eligibles are in parentheses. NA indicates not applicable.

SOURCE: (McCall, Jay, and West, 1984).

Shown in Table 4 are the results for urgent care. For urgent care, there were no significant differences between the AHCCCS group and the comparison group in the percent of those who received care who had difficulty getting it, in the waiting times to be seen, or in the waiting times for appointments. Overall, only 8 percent of AHCCCS beneficiaries who said they received urgent care and 5 percent of the same group in the comparison site had difficulty getting it. Sixty-three percent of the people in the AHCCCS group and 65 percent of those in the comparison group with an appointment saw the doctor within 1 day after the appointment was made, and 74 percent of those with an appointment in the AHCCCS group and 80 percent in the comparison group were seen within 30 minutes at the doctor's office.

The results for routine care are shown in Table 5. For routine care, a significantly larger percent of people who felt they needed routine care in the comparison group than in the AHCCCS group had difficulty getting routine care, although waiting times for appointments and in offices were not significantly different between the two groups. The percent of those having difficulty receiving routine care in the comparison group was 9 percent of both the AFDC and SSI samples compared with less than one-half that for the AHCCCS group—3 percent of the AFDC and 4 percent of the SSI sample. Forty-eight percent of both the AHCCCS and the comparison groups had to wait more than 2 days for an appointment, and 72 percent in the AHCCCS group with an appointment and 74 percent in the comparison group with an appointment were seen within one-half hour after arriving at the doctor's office.

There was no significant difference between beneficiaries in Arizona and those at the comparison site with respect to knowledge of a number to call if they needed care in the evening or on the weekend (Table 6)—69 percent of the AHCCCS group and 68 percent of the comparison group reported that they knew the place where they usually went for care had a telephone number to call. However, knowledge that the place they usually went to for care had a place to go for care in the evenings and on weekends was significantly greater in Arizona than at the comparison site. Sixty-five percent in Arizona compared with 48 percent in the comparison site said the place where they usually received care had a place to go for care in evenings and on weekends. This difference suggests that AHCCCS beneficiaries have better access to care on nights and weekends.

Both travel mode and travel time were similar for AHCCCS and the comparison site (Table 7). For both groups, excluding "don't knows," the vast majority (77 percent in Arizona versus 82 percent at the comparison site) were driven or drove themselves. Seventeen percent in both groups walked or took a bus.

These data on mode of travel can be compared with those available from the 1980 National Medical Care Utilization Expenditure Survey (NMCUES) for

Medicaid beneficiaries under 65 years of age and for the total U.S. population (Leicher et al., 1985). These data show that the use of a car (either by driving oneself or being driven) was higher for the AHCCCS and the comparison group (77 percent and 82 percent respectively) than for Medicaid beneficiaries under 65 years of age (70 percent) but lower than the estimate for the overall U.S. population (91 percent). The AHCCCS and the comparison groups relied less on walking and public transportation than did Medicaid beneficiaries who were under 65 years of age but more than the U.S. population in general.

Eighty-eight percent of both the AHCCCS beneficiaries and the comparison group took 30 minutes or less to get to the place where they usually received care. Fifty-nine percent of AHCCCS beneficiaries' usual source of care was within 15 minutes. When these data are compared against similar data available from the 1970 and 1976 surveys conducted by the Center for Health Administration Studies, University of Chicago (Anderson et al., 1976) and the NMCUES (Leicher et al., 1985) for the total population and Medicaid eligibles under 65 years of age, we find that more AHCCCS beneficiaries report getting to their usual source of care within 15 minutes than do these other groups. Comparison data range from 37 percent for those within 15 minutes of their regular source of care (1980 NMCUES for the Medicaid eligibles under 65 years of age) to 51 percent of those within 15 minutes of their regular source (1970 Center for Health Administration Studies for the U.S. population).

Use of medical services

A series of questions were asked about the use of particular types of medical care services by AHCCCS and comparison group enrollees continuously enrolled in the program for the 12 months before the interview (Table 8). These included questions about ambulatory visits, phone calls for medical advice, and hospital and nursing home stays. Questions were also asked about visits to doctors for particular symptoms, primary prevention, and preventive care.

There were no significant differences between AHCCCS and the comparison groups in the percent with ambulatory visits in the last 3 months, the percent getting phone advice in the last 3 months, and the number of hospitalizations or length of hospital stays in the last 12 months. There were statistically significant but very small differences in the percent having one or more nursing home stays in the last 12 months, with the AHCCCS population reporting more nursing home use.

Thirty-nine percent of AHCCCS beneficiaries and 40 percent of the comparison group indicated that they had no ambulatory visits in the last 3 months. Fourteen percent of the AHCCCS group versus 3 percent of the comparison group received medical advice by telephone and 86 percent of the AHCCCS group versus 80 percent of the comparison group did not have a hospitalization in the last 12 months. Just

Table 5

Percent of continuously enrolled AHCCCS enrollees and of comparison group eligibles, by need for and access to routine care in the past 12 months and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
	Percent					
Percent who needed routine medical care	59.9 (660)	67.3 (512)	55.7 (272)	58.9 (216)	*65.7 (388)	*78.9 (296)
Of those who needed routine medical care—						
Percent who received it	91.7 (394)	92.0 (364)	92.9 (153)	91.3 (135)	90.3 (241)	92.7 (229)
Percent who received it from their plan	90.8 (366)	NA NA	90.5 (142)	NA NA	91.1 (224)	NA NA
Of those who received routine medical care—	(327)	(336)	(128)	(121)	(199)	(215)
Percent who had any difficulty getting it	3.6	*9.1	3.4	9.1	3.8	9.1
Waiting time to see a medical person after arriving at the place where care was received:						
15 minutes or less	37.9	38.8	44.1	34.6	+31.5	44.2
16-30 minutes	33.9	32.1	35.3	37.9	32.3	25.6
31-60 minutes	18.2	15.8	13.5	10.2	+23.9	22.4
60 minutes or more	9.1	10.8	7.1	14.6	11.5	6.7
Don't know ²	0.8	*2.3	0.0	**2.7	1.8	2.0
Percent who had an appointment	83.6	80.4	80.8	70.7	87.0	91.5
Of those who had an appointment—	(276)	(271)	(104)	(81)	(172)	(190)
Percent who called for the appointment	65.2	55.5	77.1	67.1	**51.9	42.4
Percent whose appointment was set by the provider	33.0	39.8	19.7	26.6	**47.8	54.4
Waiting time for those with an appointment to see a medical person after arriving at the place where care was received:						
15 minutes or less	37.3	39.9	45.0	37.6	+28.8	41.4
16-30 minutes	35.1	34.3	36.4	43.4	33.6	25.0
31-60 minutes	18.0	16.8	11.6	7.9	**25.1	26.5
60 minutes or more	8.7	8.1	7.1	10.8	10.5	5.7
Don't know ²	0.9	0.9	0.0	0.5	2.0	1.5
Of those who called for an appointment—	(177)	(136)	(81)	(47)	(96)	(89)
Waiting time to see a medical person after an appointment was made:						
None	10.9	12.6	8.0	11.6	15.6	14.5
1 day	22.5	26.6	27.4	24.2	+14.5	29.0
2 days	17.1	12.8	16.1	12.8	18.7	12.9
More than 2 days	48.0	47.9	47.7	50.6	48.7	44.2
Don't know ²	1.5	0.2	0.8	0.8	2.5	0.0

¹Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

²Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+* Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

²"Don't know" category includes those who did not respond to the question.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Numbers of AHCCCS enrollees and comparison group eligibles are in parentheses. NA indicates not applicable.

SOURCE: (McCall, Jay, and West, 1984).

Table 6

Percent of AHCCCS enrollees and of comparison group eligibles, by access to medical care in the evenings and weekends, and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
Percent						
Percent who said that the place where they usually received medical care (the plan in Arizona) had a number to call if they needed care evenings or weekends	69.0 (897)	68.3 (553)	72.1 (484)	70.5 (243)	* 62.0 (413)	63.4 (310)
Of those who knew a number to call, percent who have used it	24.8 (602)	31.9 (348)	27.2 (344)	27.3 (156)	* 18.5 (258)	** 43.4 (192)
Percent who said that the place where they usually received medical care (the plan in Arizona) had a place to go for care in the evenings or weekends	64.7 (897)	** 47.5 (553)	67.1 (484)	** 49.5 (243)	59.3 (413)	** 42.9 (310)
Of those who knew that there was a place to go, percent who have ever gone there in the evenings or weekends	35.8 (550)	42.9 (241)	37.0 (317)	38.8 (107)	32.9 (233)	* 54.0 (134)

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

** Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+* Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹ Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Numbers of AHCCCS enrollees and comparison group eligibles are in parentheses.

SOURCE: (McCall, Jay, and West, 1984).

a little more than 1 percent in the Arizona group but fewer than 0.5 percent in the comparison group had one or more nursing home stays in the last 12 months.

When the groups were queried on whether they saw a doctor for any of 24 specific symptoms, there were significant differences for only 4 symptoms. The comparison site respondents saw a doctor significantly more often for a cough, frequent headaches, and urination more than twice a night. AHCCCS enrollees saw a doctor significantly more often for unexplained weight loss of more than 10 pounds, although the difference between the percents was very small. The average number of symptoms for which a doctor had been seen in the last 12 months was about four for both the AHCCCS and comparison groups. The comparison group, especially the SSI beneficiaries, reported slightly but not significantly more symptoms.

When these symptom responses were compared with appropriate doctor contact rates developed by Aday, Anderson, and Fleming (1980) from a 1977 survey of 43 practicing community physicians, the doctor contacts by both groups in most of the age-symptom groups (where the sample sizes were larger than 10) indicated that more people contacted a doctor for the symptom than was recommended by the panel of medical experts.⁶ Thus, there do not appear to be

problems with access to necessary care in either the AHCCCS or the comparison groups. In the majority of cases, it appeared that both groups were getting more care than might be desirable. It should be remembered, however, that this finding is based on the opinions of a panel of community-based physicians from a 1977 survey.

With respect to primary prevention activities—that is, having a doctor talk to them about the dangers of smoking; storage of cleaning products away from children; use of safety belts; family planning; and women, infant, and children (WIC) services—there were no significant differences between the AHCCCS and the comparison groups except for WIC services, where AHCCCS AFDC beneficiaries more often (32 percent for AHCCCS beneficiaries versus 21 percent for the comparison group) had a doctor or other medical person talk to them about benefits and services available through the program (Table 9).

With respect to preventive care (physical exams, eye exams, dental exams, blood pressure checks, and, for women over 18, pap smears and breast examinations) there were few significant differences

The ratio is the difference between the number of people with a given symptom contacting a physician at least once for the symptom and the number that a panel of community physicians said should contact a doctor for the symptom. The ratio is calculated separately by five age groups. The panel of community physicians' responses were from a 1977 survey.

⁶The symptom response ratio, a measure developed by Aday, Anderson, and Fleming (1980), was used to construct a measure of appropriateness of visits to a physician for a particular symptom.

Table 7
Percent of AHCCCS enrollees and comparison group eligibles, by travel mode, travel time, and eligibility category

Variable	Total		Total excluding don't knows		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
How respondent gets to the place where care is usually received:	Percent							
Walk	8.4	6.8	8.7	8.1	9.7	8.3	5.2	3.3
Public bus	8.3	7.4	8.6	8.8	8.0	7.8	9.0	6.4
Taxi	1.0	1.4	1.0	1.7	1.1	1.5	1.0	1.4
Drive self	23.2	19.2	24.1	22.8	24.9	19.2	19.5	19.1
Friend or relative drives me or child	51.0	50.0	53.0	59.4	51.4	49.9	50.3	50.4
Plan provides transportation	0.8	0.2	0.8	0.2	0.1	0.0	+2.2	0.4
Other	3.5	2.5	3.6	3.0	2.0	1.3	+7.0	5.3
Don't know ²	3.8	**15.6	NA	NA	3.0	**15.2	5.7	**16.8
Time to get to usual place where care is received:								
15 minutes or less	56.3	50.3	59.0	57.9	58.6	51.8	+51.0	46.8
16-30 minutes	28.0	26.4	29.4	30.4	26.0	25.4	+32.6	29.0
31-60 minutes	8.7	9.8	9.1	11.3	8.8	10.4	8.4	8.3
60 minutes or more	2.4	*0.7	2.5	2.8	2.5	*0.2	2.2	1.9
Don't know ²	4.6	**13.1	NA	NA	4.1	**12.3	5.8	**14.8

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

** Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹ Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

² "Don't know" category includes those who did not respond to the question.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Following are the numbers of persons in sample: AFDC AHCCCS enrollees, 484; AFDC comparison group, 243; SSI AHCCCS enrollees, 413; SSI comparison group, 310; total enrollees, 897; total comparison group, 553. NA indicates not applicable.

SOURCE: (McCall, Jay, and West, 1984).

between the AHCCCS and the comparison groups (Table 10). The percent having physical exams, eye exams, blood pressure checks, pap smears, and breast exams in the last year were almost identical for both the AHCCCS and the comparison groups. More than 2 out of every 5 of the AHCCCS relevant populations had physical exams (46 percent AHCCCS versus 44 percent comparison), pap smears (44 percent AHCCCS versus 44 percent comparison), and breast exams (46 percent AHCCCS versus 46 percent comparison) in the last year. Two of every 5 AHCCCS members had an eye exam (40 percent AHCCCS versus 39 percent comparison), and more than 2 of every 3 AHCCCS members had their blood pressure checked in the last year (68 percent AHCCCS versus 68 percent comparison). Significantly fewer AHCCCS AFDC beneficiaries had dental exams in the last year (35 percent AHCCCS versus 48 percent comparison), but this finding was expected given the more generous benefit structure of the comparison site Medicaid program.

Satisfaction with medical care

Satisfaction with medical care received is evaluated by examining beneficiary responses to specific questions about various aspects of their health care delivery. Also of interest is beneficiaries' knowledge of the complaint process and, for those beneficiaries who made a complaint, their satisfaction with that process.

Questionnaire respondents were asked to rate their satisfaction with particular elements of the care they received on a 4-point scale (4 = very satisfied, 3 = somewhat satisfied, 2 = somewhat dissatisfied, 1 = very dissatisfied). Elements of care examined were overall medical care and six specific elements of the medical care process: office waiting time, night and weekend availability, convenience, cost, information, and courtesy.

Overall, 55 percent of the AHCCCS population were very satisfied with their medical care, 23 percent were somewhat satisfied, 6 percent were somewhat dissatisfied, and 5 percent were very dissatisfied;

Table 8

Percent of continuously enrolled AHCCCS enrollees and comparison group eligibles having various levels of use of medical services, by eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
Ambulatory visits in past 3 months:				Percent		
No visits	38.9	40.5	45.4	51.1	+ +29.8	25.8
1 visit	19.3	16.8	20.1	20.6	18.3	11.7
2-3 visits	19.2	16.2	18.8	12.4	20.0	21.7
3 visits or more	22.6	25.8	15.7	15.9	+ +32.1	39.6
Don't know ²	0.0	0.6	0.0	0.1	0.0	1.5
Got medical advice for themselves over the telephone	13.8	3.0	14.4	8.2	12.9	19.8
No overnight hospital stay in past 12 months	85.6	80.4	88.7	85.5	81.2	73.3
Admitted to hospital and discharged the same day	7.2	8.4	5.6	7.1	9.3	10.2
1 or more nursing home stay	1.2	**0.3	0.0	0.0	2.9	**0.7

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

** Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹ Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

² "Don't know" category includes those who did not respond to the question.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Following are number of persons in sample: AFDC AHCCCS enrollees, 272; AFDC comparison group, 216; SSI AHCCCS enrollees, 388; SSI comparison group, 296; total enrollees, 660; total comparison group, 516.

SOURCE: (McCall, Jay, and West, 1984).

10 percent said they didn't know (Table 11). The percents were very similar for SSI and AFDC beneficiaries. These rates of satisfaction, although high, were even higher for the comparison site, where 71 percent reported themselves very satisfied, 22 percent somewhat satisfied, 4 percent somewhat dissatisfied, and 1 percent very dissatisfied; 2 percent of the comparison site group didn't know about their overall satisfaction.

One reason for the higher level of "don't knows" in the Arizona sample may be that, overall, AHCCCS beneficiaries had a shorter time (only since October 1982) to form an opinion about the AHCCCS program. Comparison site beneficiaries, on the other hand, were asked to comment on a program that has been in existence since 1967.

To obtain one measure of overall satisfaction for each of our measures, we constructed mean satisfaction scores calculated on a 4-point scale in the manner mentioned previously. Those who reported that they did not know were excluded from the calculation of the means. In Arizona, mean ratings ranged from 3.0 to 3.7, with a mean for overall medical care of 3.4 (Table 12).

AHCCCS enrollees were most satisfied with costs paid out of pocket for medical care (mean rating = 3.7). AHCCCS enrollees also tended to be highly satisfied with the courtesy and consideration shown by doctors (mean rating = 3.6), the overall medical care they received (mean rating = 3.4), and the information given to them about what was wrong (mean rating = 3.4). They were less satisfied with the

availability of care on nights and weekends (mean rating = 3.2), the ease and convenience of getting to the doctor (mean rating = 3.2), and waiting time in doctors' offices or clinics (mean rating = 3.0).

Respondents at the comparison site were generally slightly more satisfied than the AHCCCS sample. Mean satisfaction ratings were significantly higher for three of the seven measures: courtesy and consideration shown by doctors, overall medical care, and availability of medical care on nights and weekends. The significantly lower level of satisfaction on availability of care on nights and weekends in Arizona is puzzling because other parts of the survey—that is, questions on access to care—seem to indicate better availability of care on nights and weekends to the Arizona population than to the comparison group.

It should be noted that the differences discussed are very small. It might be argued that small but significant differences in the satisfaction scores for the AHCCCS and the comparison group could be predicted because of the restricted freedom of choice for the Arizona population. AHCCCS beneficiaries are required to enroll in a managed-care plan, whereas the comparison site population has no such restriction on choice of provider. Such a restriction, some argue, in and of itself, might be expected to result in lower levels of beneficiary satisfaction.

With respect to the complaint process, only 26 percent of AHCCCS enrollees said that they knew how to make a complaint about the medical care provided by their plan. Twenty percent of those who

Table 9

Percent of AHCCCS enrollees and comparison group eligibles, by exposure to primary prevention and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
Percent						
Percent who had a doctor or other medical person talk to them about:						
Benefits and services that might be available through the WIC program	NA	NA	32.3 (484)	*20.7 (243)	NA	NA
The need to store cleaning products and other household or lawn chemicals where their children can't get to them	NA	NA	31.5 (484)	29.3 (243)	NA	NA
Using approved safety car seats to protect their children while riding in a car	NA	NA	33.3 (484)	38.3 (243)	NA	NA
Family planning or ways to delay or prevent becoming pregnant (women only)	NA	NA	42.9 (484)	41.6 (243)	NA	NA
Health problems that are caused by smoking (asked only of members 10 years of age or over)	23.7 (700)	31.7 (431)	22.8 (293)	30.4 (131)	24.9 (407)	33.4 (300)

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

** Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Numbers of AHCCCS enrollees and comparison group eligibles are in parentheses. NA indicates not applicable.

SOURCE: (McCall, Jay, and West, 1984).

Table 10

Percent of AHCCCS enrollees and comparison group eligibles, by receipt of preventive care in the last year and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
Percent						
Physical examination	46.1	44.1	47.0	44.1	44.1	44.1
Eye examination	40.0	38.6	40.6	38.9	38.7	37.8
Dental examination	32.1	41.0	35.3	*47.6	+ +24.7	26.0
Blood pressure checked	68.2	68.2	60.6	61.2	+ +85.6	84.5
Pap smear (women 18 years of age or over only)	44.2	44.0	55.5	54.5	+ +32.8	33.4
Breast examination (women 18 years of age or over only)	46.4	46.4	55.9	51.0	+ +36.8	42.1

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

** Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Following are the numbers of persons in sample: AFDC AHCCCS enrollees, 484; AFDC comparison group, 243; SSI AHCCCS enrollees, 413; SSI comparison group, 310; total enrollees, 897; total comparison group, 553.

SOURCE: (McCall, Jay, and West, 1984).

Table 11

Percent of AHCCCS enrollees and of comparison group eligibles, by level of satisfaction with their medical care and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹	AHCCCS	Comparison group ¹
Overall medical care:				Percent		
Very satisfied	55.0	**70.8	54.5	**69.9	56.1	*73.0
Somewhat satisfied	23.3	21.8	24.4	24.8	20.9	15.3
Somewhat dissatisfied	5.9	4.3	6.1	*2.8	5.4	7.6
Very dissatisfied	5.5	**1.0	5.1	**1.1	6.3	*0.8
Don't know ²	10.3	**2.0	9.8	**1.4	11.4	**3.4
Waiting time in doctors' offices or clinics:						
Very satisfied	37.9	38.7	34.5	35.4	+ +45.9	46.4
Somewhat satisfied	26.4	33.2	28.7	34.4	+21.2	*30.6
Somewhat dissatisfied	11.0	**19.3	10.9	**22.6	11.2	11.9
Very dissatisfied	14.2	**5.0	16.0	**5.3	9.9	4.2
Don't know ²	10.5	**3.8	9.9	**2.4	11.8	6.8
Availability of medical care on nights and weekends:						
Very satisfied	34.2	*47.9	36.6	48.8	+28.6	**45.4
Somewhat satisfied	13.8	20.0	13.9	20.7	13.5	18.3
Somewhat dissatisfied	5.5	4.6	6.3	5.6	3.5	1.9
Very dissatisfied	9.0	6.2	10.0	6.3	6.3	5.6
Don't know ²	37.6	**21.5	33.1	**18.4	+ +48.0	**28.7
Ease and convenience of getting to the doctor:						
Very satisfied	46.8	51.1	45.7	53.0	49.4	46.9
Somewhat satisfied	25.4	28.2	25.9	27.7	24.3	29.4
Somewhat dissatisfied	9.6	10.4	10.4	10.7	7.8	9.6
Very dissatisfied	9.6	6.9	10.2	*5.1	8.1	10.6
Don't know ²	8.6	**3.4	7.8	*3.4	10.4	**3.5
Costs paid out of pocket for medical care received:						
Very satisfied	72.1	68.1	73.7	70.8	68.6	62.2
Somewhat satisfied	10.9	**18.5	9.9	**18.1	13.0	19.4
Somewhat dissatisfied	2.9	5.1	3.2	4.4	2.0	6.5
Very dissatisfied	3.7	3.3	3.7	1.3	3.7	7.9
Don't know ²	10.4	**4.9	9.4	5.4	12.7	**4.0
Information given about what was wrong:						
Very satisfied	61.2	64.1	62.5	66.5	58.3	58.8
Somewhat satisfied	12.9	*23.7	13.2	*23.2	12.0	*24.7
Somewhat dissatisfied	8.3	6.6	8.2	5.2	8.4	9.6
Very dissatisfied	7.6	**3.0	6.8	3.5	9.3	**1.8
Don't know ²	10.1	**2.6	9.2	**1.4	12.1	*5.2
Courtesy and consideration shown by doctors:						
Very satisfied	66.4	*74.3	65.2	*74.5	69.3	74.1
Somewhat satisfied	13.5	18.1	14.5	17.2	11.0	20.1
Somewhat dissatisfied	4.2	4.4	4.9	6.1	2.5	0.6
Very dissatisfied	6.3	**0.7	6.3	*0.5	6.1	*0.8
Don't know ²	9.7	**2.6	9.0	**1.7	11.1	*4.4

*Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

**Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+ + Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

²"Don't know" category includes those who did not respond to the question.

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Following are the numbers of persons in the sample: AFDC AHCCCS enrollees, 484; AFDC comparison group, 243; SSI AHCCCS enrollees, 413; SSI comparison group, 310; total enrollees, 897; total comparison group, 553.

SOURCE: (McCall, Jay, and West, 1984).

Table 12

Percent of AHCCCS enrollees and of comparison group eligibles, by mean¹ satisfaction with their medical care and eligibility category

Variable	Total		AFDC		SSI	
	AHCCCS	Comparison group ²	AHCCCS	Comparison group ²	AHCCCS	Comparison group ²
	Percent					
Overall medical care	3.4 (800)	**3.6 (553)	3.4 (439)	**3.6 (243)	3.4 (361)	*3.6 (310)
Waiting time in doctors' offices or clinics	3.0 (797)	3.1 (553)	2.9 (439)	3.0 (243)	+*3.2 (358)	3.3 (310)
Availability of medical care on nights and weekends	3.2 (522)	*3.4 (553)	3.2 (319)	*3.4 (243)	3.2 (203)	*3.4 (310)
Ease and convenience of getting to the doctor	3.2 (819)	3.3 (553)	3.2 (448)	3.4 (243)	+3.3 (371)	3.2 (310)
Costs paid out of pocket for medical care received	3.7 (801)	3.6 (553)	3.7 (440)	3.7 (243)	3.7 (361)	3.4 (310)
Information given about what was wrong	3.4 (802)	3.5 (553)	3.4 (441)	3.5 (243)	3.4 (361)	3.5 (310)
Courtesy and consideration shown by doctors	3.6 (805)	**3.8 (553)	3.5 (442)	**3.7 (243)	3.6 (363)	3.7 (310)

¹Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 5-percent level.

* Statistically significant differences between AHCCCS enrollees and comparison group eligibles at 1-percent level.

+ Statistically significant differences between AFDC and SSI AHCCCS enrollees at 5-percent level.

+* Statistically significant differences between AFDC and SSI AHCCCS enrollees at 1-percent level.

¹Means calculated on a 4-point scale, where 1 = very dissatisfied, 2 = somewhat dissatisfied, 3 = somewhat satisfied, 4 = very satisfied; "don't know" answers were excluded.

²Values for comparison group eligibles were regression adjusted to correspond to the AHCCCS averages of the following characteristics: age, race and ethnicity, sex, urbanicity, AFDC and SSI, education, marital status, income, and number of family members. Thus, the values presented for comparison group eligibles represent our best predictions of what the value would be if the means of these variables in the comparison sample were the same as in the AHCCCS sample. The adjustment procedure is described in detail in appendix D of the *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report* (McCall, Jay, and West, 1984).

NOTES: AHCCCS is Arizona Health Care Cost Containment System. AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. Numbers of persons in sample are in parentheses.

SOURCE: (McCall, Jay, and West, 1984).

knew how to make a complaint had done so. Of these people, the mean satisfaction rating with the complaint process was 2.3 on a scale ranging from 1 to 4, where 1 = very dissatisfied and 4 = very satisfied. A significantly smaller percent of comparison group members knew how to make a complaint (18 percent); and of those people who knew how to make a complaint, only 4 percent said they had actually done so.

Summary of findings

Access:

- There were few significant differences between the Arizona group and the comparison group on any of the access measures.
- For emergency care, a significantly larger percent of Arizona AFDC beneficiaries reported difficulty receiving emergency care.
- On routine care, access may have been better in Arizona, where a smaller percent of beneficiaries reported difficulty getting routine care.
- On difficulty receiving care and waiting times for urgent care, there were no significant differences. There were also no significant differences in travel mode and travel time between the Arizona group and the comparison group.

Use:

- There were no significant differences in use of

ambulatory visits in the last 3 months or hospitalizations in the last 12 months.

- For those with each of 24 specific symptoms, there were also few significant differences between the Arizona group and the comparison group in seeing a doctor. For only four of these symptoms were there significant differences between the groups.
- When compared with appropriate doctor contact rates developed by a panel of community physicians, both the Arizona group and the comparison group saw physicians more often than was necessary.
- There were no significant differences in the discussion of safety belts, smoking, storage of cleaning products, and family planning between the Arizona group and the comparison group.
- There were few significant differences in use of preventive care (physical exam, eye exam, blood pressure check, pap smear for women 18 years of age or over, and breast exam for women 18 years of age or over) in the last year except for dental care, where the comparison group had a more generous benefit package.

Satisfaction:

- When satisfaction with particular elements of medical care received was ranked by respondents on a 4-point scale (4 = very satisfied, 3 = somewhat satisfied, 2 = somewhat dissatisfied, 1 = very dissatisfied), the AHCCCS group scored very high.
- Average satisfaction scores for Arizona were:

- Costs paid out-of-pocket, 3.7.
- Courtesy and consideration shown by doctors, 3.6.
- Overall medical care, 3.4.
- Availability of care on nights and weekends, 3.2.
- Ease and convenience of getting to doctor, 3.2.
- Waiting time in doctor's office or clinic, 3.0.
- Although satisfaction scores were very high for the Arizona group, the average satisfaction scores for the comparison group were significantly higher (+.2) for courtesy and consideration shown by doctors, overall medical care, and availability of care on nights and weekends.
- Only 1 out of 4 of the AHCCCS enrollees said they knew how to make a complaint; however, the rate for the comparison group was even lower (fewer than 1 in 5 beneficiaries).

In summary, this survey does not indicate any areas of substantial problems with access to or satisfaction with medical care under the AHCCCS program. The program, despite its shaky start, had by its third year come to a point where problems with its delivery system were not substantially different from those experienced by traditional Medicaid systems.

The survey does, however, highlight some areas for improvement and further study: the AFDC emergency care process, primary prevention activities, preventive care for SSI eligibles, satisfaction with courtesy of doctors, availability of care on nights and weekends, and beneficiary knowledge of the complaint process.

It should also be remembered that the AHCCCS program is a dynamic one, changing as the participating plans and the providers and members connected to them evolve over time. Thus, investigations of access and satisfaction need to be ongoing processes that are part of the overall internal evaluations of the program.

It is suggested here that the AHCCCS program, as of its third program year, had about the same access to medical care, use of care, and satisfaction with medical care received by categorically eligible beneficiaries as would a traditional Medicaid program. This finding should allay the concerns of some program critics who worried that AHCCCS might result in wholesale access problems.

Although early results are encouraging, further study of access is necessary. These studies should be used to analyze the distribution of use of services by beneficiaries through investigation of the AHCCCS claims and encounter data. They should also evaluate the quality of medical care delivered for selected diagnoses under the program. These analyses are upcoming as part of our overall evaluation of the AHCCCS program was completed in January 1989. Together, findings from these studies should enable us to make policy-oriented conclusions on the program's performance in providing access to care.

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References

- Aday, L., Anderson, R., and Fleming, G. V.: *Health Care in the U.S.: Equitable for Whom?* Beverly Hills, Calif. Sage Publications, 1980.
- Anderson, R., Lion, J., and Anderson, O.: *Two Decades of Health Services: Social Survey Trends in Use and Expenditure*, 1976.
- Health Care Financing Administration: Medicaid States Tables for Fiscal Year 1985. Draft of unpublished data, 1986.
- Leicher, E. S., Howell, E. M., Corder, L. S., and LaVange, L.: Access to Medical Care in 1980. HCFA City and State Agency, Working Paper Series No. 85-13. July 1, 1985.
- McCall, N., Paringer, L., Crane, M., et al.: *Evaluation of the Arizona Health Care Cost Containment System: Fourth Implementation and Operation Report*. Contract No. HCFA-500-83-0027. Prepared for the Health Care Financing Administration. Menlo Park, Calif. SRI International, 1988.
- McCall, N., Jay, E. D., and West, R.: *Evaluation of the Arizona Health Care Cost Containment System: Access and Satisfaction Report*. Contract No. HCFA-500-83-0027. Prepared for the Health Care Financing Administration. Menlo Park, Calif. SRI International, 1987.
- McCall, N., Crane, M., Haber, S., et al.: *Evaluation of the Arizona Health Care Cost Containment System: Third Implementation and Operation Report*. Contract No. HCFA-500-83-0027. Prepared for the Health Care Financing Administration. Menlo Park, Calif. SRI International, 1987.
- McCall, N., Henton, D., Haber, S., et al.: *Evaluation of the Arizona Health Care Cost Containment System: Second Implementation and Operation Report*. Contract No. HCFA-500-83-0027. Prepared for the Health Care Financing Administration. Menlo Park, Calif. SRI International, 1987.
- McCall, N., Henton, D., Crane, M., et al.: *Evaluation of the Arizona Health Care Cost Containment System: First Year Report*. Contract No. HCFA-500-83-0027. Prepared for the Health Care Financing Administration. Menlo Park, Calif. SRI International, 1984.