Medicaid Beneficiaries under Managed Care: Provider Choice and Satisfaction

Helena Temkin-Greener and Maria Winchell

This study describes patterns of choosing a provider and of consumer satisfaction among prepaid Medicaid beneficiaries in Monroe County, New York, and compares their level of satisfaction to that of fee-for-service Medicaid beneficiaries. Two interview surveys were conducted with AFDC and HR (general assistance) Medicaid eligibles, the first under the fee-for-service system servicing the Medicaid population, and the second 18 months after the introduction of a mandatory, prepaid managed care system for Medicaid beneficiaries. The results show significant ethnic differences in patient choice of provider and provider site. Given the choice, Medicaid beneficiaries switch from clinics as their usual source of care to private physician practice. Under prepayment, white Medicaid beneficiaries tripled their affiliations with private doctors, while "others" doubled theirs. The results also demonstrate higher levels of patient satisfaction with "humaneness of doctors" and with "quality of care" among those beneficiaries under prepaid care, than previously documented for those under fee-for-service. The evaluations of humaneness and quality of medical system may reflect the respondents' perceptions that the process of receiving care under prepaid, managed care is somehow different, no longer second class, and better that it was under the fee-for-service Medicaid.

This study was supported, in part, by an administrative contract with the New York State Department of Social Services and the County of Monroe.

Address correspondence and requests for reprints to Helena Temkin-Greener, Ph.D., Director of Research, Community Coalition for Long Term Care, 311 Alexander Street, Suite 201, Rochester, NY 14604. Maria Winchell, M.A. is Research Analyst in the Office of Clinical Practice Evaluation, Strong Memorial Hospital, University of Rochester. This article, submitted to *Health Services Research* November 7, 1989, was revised and accepted for publication October 30, 1990.

Recent federal laws have allowed for more flexibility in administering the Medicaid programs by offering freedom of choice waivers to those states that wished to enroll their Medicaid eligibles in prepaid, managed care plans (Freund and Neuschler 1986; Freund 1988; Health Care Financing Administration 1986). Many have feared that mandatory enrollment into such plans will cause serious consumer dissatisfaction. Others have argued that it will result in reduced access to care.

An early effort to restrict freedom of choice in New York City's East Harlem ran into deep political trouble that ended the program even before it was implemented. A program for Massachusetts' Medicaid eligibles met with a similar fate. The specter of restrictions on freedom of choice has been so strong in Medicaid reform that it has threatened some voluntary managed care plans (Friedman 1983). The opposition to freedom of choice restrictions in most cases has not been based on prior experience but on fears of the unknown and on vaguely defined "philosophical principles."

Until very recently, most studies of consumer satisfaction with prepaid health care have focused on middle-class, employed populations (Mechanic 1975; Gray 1980; Luft 1980; Zastowny, Roghmann, and Hengst 1983; Marquis, Davies, and Ware 1983; Merkel 1984; Murray 1987; Like and Zyzanski 1987). Relatively little has been written about health care-seeking patterns and utilization by the poor enrolled in prepaid plans (Greenlick, Freeborn, Columbo, et al. 1972; Bice et al. 1973; Rabin, Bice, and Starfield 1974; Freeborn 1977; Luft 1981; Ware, Rogers, Davies, et al. 1986). Similarly, little is known about patient satisfaction among the low-income populations. A study by Gaus, Cooper, and Hirschman (1976) reported equally high levels of patient satisfaction with medical care among the Medicaid fee-for-service population and the Medicaid health maintenance organization (HMO) members. The authors suggested that low levels of expectancy and difficult access to care in either case may account for the relatively high, and similar, level of satisfaction in the two groups. A more recent study by Davies and co-workers (1986) compared patient satisfaction of HMO members to similar persons using the fee-for-service system. The results of the study indicate greater general satisfaction with the fee-for-service system among the higher-income group. The lower-income HMO members expressed greater satisfaction with the technical aspects of care than the low-income fee-for-service group. Not surprisingly, even less is known about the experience of the Medicaid poor mandatorily enrolled in prepaid care plans, given the relative novelty of these Medicaid demonstrations. The most recent results from the Medicaid competition demonstrations in California and Mis-

souri indicate lower satisfaction with medical care in the demonstration group than in the comparison group (Grubb and McLeroy 1988). At the same time, however, perceived access to care is higher in the demonstration than in the comparison group. The authors suggest that the lower satisfaction in the demonstration group may be related to the mandatory lock-in nature of these programs.

The focus of this article is on the choice of provider and on satisfaction with care received by Medicaid beneficiaries participating in the mandatory, prepaid, managed care program in Monroe County, New York. The first objective of this study is to examine patterns of choosing a provider site and the primary care physician following enrollment in the program. The second objective is to evaluate Medicaid clients' satisfaction with various aspects of care received in the new program. The third objective is to compare Medicaid consumers' satisfaction with medical care received under the traditional fee-for-service program and the new prepaid, managed care system in Monroe County, New York.

BACKGROUND

In July 1982, Monroe County, New York became a site of a mandatory, prepaid, managed care program for Medicaid eligibles. This program, known as MediCap, was sponsored by the Health Care Financing Administration (HCFA), the State of New York (NYS), and Monroe County.

The goal of the program was to enroll the entire Medicaid population of Monroe County (approximately 83,000 people in federal fiscal year 1985) in prepaid, managed care plans, on a phased basis. In the first phase of the demonstration, all of those eligible for Aid to Families with Dependent Children (AFDC) and home relief (HR is the NYS general assistance category, i.e., with no matching federal participation) were to be enrolled. This phase began in June 1985, and by May 1986, it was fully implemented with an enrollment of approximately 42,000 persons. Plans and protocols for enrolling the remaining Medicaid populations—the elderly, the mentally and physically impaired, and the medically indigent—were subsequently formulated and presented to local and state departments of social services. A period of prolonged negotiations over the specifics followed, and the program ran out of time to pursue implementation of the remaining phases under then existing federal waivers. Although the demonstration started out with the goal of enrolling the entire Medicaid popula-

tion of Monroe County, only the AFDC and the HR eligibles participated in the "experiment."

Initially, one HMO participated in the program. This HMO—the Rochester Health Network (RHN)—operated essentially as an administrative umbrella organization contracting with 13 affiliated provider groups. Included in the RHN's delivery system were nine health centers located throughout the Greater Rochester area, one independent practice association (IPA) with approximately 700 private practice physicians, and one hospital/medical staff joint venture with 75 primary care physicians. In addition, RHN contracted with all area hospitals to provide inpatient services to its members, MediCap and employer group. In October 1986, Group Health, a staff model HMO, also became a provider under the MediCap program.[1] Under the contractual agreements between NYS, the county, and MediCap, the HMOs received a monthly capitation payment for each enrollee, which varied by age, gender, and category of Medicaid assistance.

For eligible Medicaid recipients, enrollment in the program was mandatory, with good-cause exceptions. Enrollees were free to choose the HMO, the provider site, and the primary care physician.[2] They were required to remain with their chosen provider for a minimum of six months, subject to grievance appeals. All inpatient, emergency, and specialty care had to be preauthorized by the primary care physician. The mandatory nature of the program, provider lock-in, and the necessity for referrals and prior approvals required some radical changes in the health care-seeking behavior of MediCap members.

METHODS

DESCRIPTION OF SURVEYS

Data were gathered in two surveys conducted among Medicaid eligibles in Monroe County. The first survey (also referred to as the "pre-survey") was conducted with 495 randomly selected AFDC eligible heads of household in the spring of 1984, approximately one year prior to the introduction of the prepaid, managed care system. The survey questions dealt with patterns of care, expected changes being proposed under the prepaid, mandatory system of managed care, and satisfaction with care obtained. Those interviewed represented a 6.5 percent sample of all AFDC households. The survey yielded information on

974 individuals, 479 children and 495 adults. In its demographic characteristics (age, gender, and ethnicity) the sample population was very much representative of the total AFDC population in Monroe County. The results of this "predemonstration" survey have been reported in detail elsewhere (Temkin-Greener 1986).

The second survey (also referred to as the "post-survey") was conducted in October–December 1986, a little over a year after the implementation of the prepaid, mandatory system. In this survey, 788 adult AFDC and HR MediCap/HMO members were interviewed. The post-survey was designed to address changes in health care–seeking behavior brought about by switching from one system of financing and care provision to another, and in satisfaction with the care being provided. The survey instrument (just as in the pre-survey) was composed of statements with preformulated answers and of Likert scales. In addition, the informants were given an opportunity to use their own words in expressing their concerns or problems with care they were receiving.

Five dimensions of satisfaction were evaluated using a 29-item scale questionnaire (Ware and Snyder 1975; Ware et al. 1976; Aday, Anderson, and Fleming 1980). These were: humaneness of doctors, quality of care, general satisfaction, continuity of care, and convenience of services. (Only the first three dimensions had been addressed in the 1984 presurvey.) Each scale consisted of a number of statements that measured respondents' evaluation of different aspects of health care. Respondents were given a choice of "strongly agree," "agree," "uncertain," "disagree," or "strongly disagree" with each statement. The scales were created in such a way that if agreeing with a statement implied approval of the health care system, the response "strongly agree" was coded as 5 and "strongly disagree" was coded as 1, with other responses coded as 4, 3, and 2. If the statement implied a reproach to the medical system, coding occurred in the opposite manner with "strongly agree" being equal to 1, and so forth. A mean score for each scale was calculated in such a way that higher scores would reflect more favorable ratings of, or greater satisfaction with, medical care. In the post-survey, satisfaction with care was evaluated via multivariate analyses. To facilitate the interpretation of group differences in the pre-and the post-surveys, satisfaction is also reported as a relative measure of "dissatisfaction." The dissatisfaction score is presented as the percent of respondents in each group who are more dissatisfied than the median (Aday, Andersen, and Fleming 1980).

LIMITATIONS OF SURVEYS

One aspect of this study involves a comparison of predemonstration and postdemonstration measures in populations of AFDC and HR Medicaid beneficiaries. Ideally, one would wish to conduct a panel study in which the pre- and the post-surveyed individuals were the same persons, rather than sample populations with matching characteristics. However, panel studies are difficult to accomplish, especially when dealing with Medicaid recipients whose spells of eligibility tend to be episodic. Although the AFDC recipients have longer spells of eligibility than the HR recipients, well over 50 percent of the AFDC recipients become ineligible within 12 to 18 months (Temkin-Greener, Phillips, and Richardson 1983). Additionally, the cost of a panel study in this Medicaid population was beyond the means of the project. The two surveys were conducted within approximately 20 months of each other.

Another potential limitation of this study is that no attempt was made to separate those who actually used health care services after becoming an HMO member from those who did not. Although only those who had been HMO members for at least six months were interviewed, it is not known how many had in fact used prepaid care. However, the relationship between utilization and satisfaction is far from clear. While some research treats satisfaction as a consequence of utilization, other research views it as an antecedent to utilization. Satisfaction with medical care is multidimensional and involves both inputs and outcomes. Attitude scales that evaluate response categories to general statements about doctors and medical care more likely measure attitudes antecedent to use. On the other hand, scales that measure personal experience may be more reliable as outcome measures of utilization. The relationship between satisfaction and utilization is a tenuous one and is difficult to capture and demonstrate in a cross-sectional study such as this one.

DATA COLLECTION

To a degree, the sample size was predetermined by the availability of funding. Approximately 800 interviews could be financed, resulting in a sampling error of 3.5 percent. Based on the caseload estimates of the AFDC and the HR populations enrolled in the program, 800 interviews represented approximately 6 percent of the total caseload. The MediCap/HMO eligibility file was used to select a random sample of AFDC and HR heads of household. Only those with at least six months of membership in a prepaid system were eligible to participate in the

study to assure that they had had sufficient time to experience the new system and to develop an opinion about it. The population of eligibles was stratified by category of Medicaid eligibility, and a random sample (using a random-number generator) was taken from each stratum. Fifteen hundred names of eligible enrollees were drawn. Given our prior experience with the mobility of this population, enough names needed to be drawn initially to replace those who could not be located.

Six interviewers were hired and trained for the project. Interviewers were paid per completed interview (i.e., all questions addressed and answered). On average, an interview took 30–45 minutes to complete. Unfortunately, no Spanish-speaking interviewers were available. The interviewers were instructed not to survey those unable to communicate in English; thus 23 subjects were eliminated from the interview. Six others refused to be interviewed. In households with children under 16 years of age, a child was also randomly selected and parents were interviewed on behalf of the selected child regarding the patterns of care seeking.

When 788 adult members had been interviewed, the survey was stopped. The interviews provided completed information on 1,302 MediCap/HMO members: 1,064 AFDC and 238 HR eligibles. Given the average monthly enrollment of 23,822 during the first 15 months of the program, the survey yielded information on 5.5 percent of the enrolled population.

RESULTS

The post-test survey sample appears somewhat older and more heavily female than the total population of AFDC/HR MediCap/HMO members (Table 1). This is to be expected since the interviews contain information only for the heads of households and one child under the age of 16, whenever applicable. The population of MediCap/HMO enrollees is by definition younger since it includes approximately 2.6 children per AFDC household. In addition, since AFDC heads of household are predominantly female, it is not surprising to see a greater proportion of females in the sample population than in the MediCap/HMO population. The ethnic distribution of the sample population closely approximates the population for whites and blacks. Others, who are mostly represented by the Hispanic population, are underrepresented due to the lack of available Spanish-speaking interviewers. In the post-survey, blacks and Hispanics are evaluated in a common category of "others." It should be noted that early analyses in

Table 1: Comparison of Demographic Patterns For Medicaid HMO Population and the "Post-survey" Sample Population: Percent Distribution, Monroe County, New York

	Medicaid HMO Population 1985/1986	*"Post-survey" Sample Population*
Age Group		
0–15	49.6	39.5
16–24	18.5	14.7
25–29	10.5	14.1
30+	21.4	31.6
Gender		
Females	58.6	68.9
Males	41.4	31.1
Ethnicity		
White	31.7	32.7
Black	52.7	57.6
Other	15.6	9.7
Category of Medicaid assistance		
AFDC	80.9	81.7
HR	19.1	18.3
Total	100.0	100.0
(N)	(30,438)	(1,302)

Source: Medicaid HMO Population; MediCap Eligibility Files for 1985 and 1986 Survey Population; Satisfaction Survey 1986.

which blacks and Hispanics were treated as separate groups showed no significant differences between them, although both groups were significantly different from whites in all aspects of health care seeking behavior and in satisfaction with care. The distribution of AFDC and HR eligibles in the sample population is representative of the total population of MediCap/HMO enrollees.

CHOICE OF PROVIDER

A number of past studies have suggested that the poor are more unwilling than others to change to a "better" source of care should it become available (Olendzki 1975; Kassanoff 1969; Susser and Watson 1971). Although "better" is rarely defined, the various authors apparently hold in common an assumption that private physicians provide "that extra" quality of care that one cannot obtain in other health care settings. The Medicaid poor appear to share this middle-class belief, even if such structural obstacles as transportation problems and a general unwillingness by many private physicians to participate in fee-for-service

Medicaid, limit them from realizing its "benefits" (Temkin-Greener 1986).

Although the introduction of a prepaid, managed care system for Medicaid eligibles in Monroe County could not have eased transportation problems for the poor, it did affect access to office-based physicians by allowing the HMOs to reimburse physicians for their services at a rate higher than the usual Medicaid fee. Within the traditional Medicaid system, only 7.6 percent of the AFDC eligibles in Monroe County claimed to have had a private physician as their usual source of care. Under prepayment, 18 percent of AFDC enrollees had an office-based physician as their source of primary care (Table 2). The proportions of whites receiving primary care from a private physician almost tripled for AFDCs under prepayment, while the proportion for nonwhites (predominantly blacks) doubled. The proportions for HR eligibles under prepayment are very similar to those of the AFDCs, in the same ethnic groups. Overall, the changes in the site of care have been predominantly away from the hospital outpatient setting to the private office setting.

Informants were asked if they changed their source of primary care upon enrollment in managed care. Of those interviewed, 23 percent (N = 279) chose a new source of care. By far, the most common reason given for switching to a new site of care was proximity to home—23 percent of whites and 32 percent of nonwhites gave this as their main reason (Table 3). Five percent of whites and 14 percent of

Table 2: Percent Distribution of Regular Source of Care By Ethnicity and Category of Medicaid Assistance

	"Pre-survey": Fee-for-Service			*"Post-survey": Capitated/Managed Care*					
	Ethnic Group			*Ethnic Group*					
	White	*Other*	*Total*	*White*		*Other*		*Total*	
Source of Care	*AFDC*	*AFDC*	*AFDC*	*AFDC*	*HR*	*AFDC*	*HR*	*AFDC*	*HR*
Hospital outpatient department	70.2	50.7	56.4	38.4	38.5	43.3	45.6	41.7	43.3
Freestanding health center	14.8	43.1	34.7	31.5	28.2	45.0	40.6	40.6	36.6
Private practice physician	11.6	5.9	7.6	30.1	33.3	11.7	12.5	17.7	19.3
Other	3.4	0.3	1.3	—	—	—	1.3	—	0.8
Total	100	100	100	100	100	100	100	100	100
(N)	(285)	(675)	(960)	(346)	(78)	(718)	(160)	(1064)	(238)

Table 3: Percent Distribution of Reasons Given by Those Who Changed Their Source of Care upon Joining HMO; by Ethnicity and Category of Medicaid Assistance ("Post-survey": Capitated/Managed Care)

Reasons for Changing Source of Care	*Ethnic Group*					
	White			*Other*		
	AFDC	*HR*	*All White**	*AFDC*	*HR*	*All Other**
"I wanted a private physician"	6.7	—	5.1	15.6	9.11	4.3
"It is closer to where I live"	23.3	21.4	22.9	33.6	24.2	31.7
My friends/family go there"	2.2	—	1.7	0.8	3.0	1.2
"I didn't like the care I was getting"	10.0	3.6	8.5	12.5	—	9.9
I was assigned there by MediCap/RHN"	20.0	32.1	22.9	15.6	45.5	21.7
"Someone recommended it to me"	6.7	3.6	5.9	3.1	6.1	3.7
Other	31.1	39.3	33.0	18.8	12.1	17.4
Total	100	100	100	100	100	100
(N)	(90)	(28)	(118)	(128)	(33)	(161)

*$\chi^2 = 55.296$; $p = .0033$.

nonwhites switched because they wanted a private physician. Another 9 percent were dissatisfied with the care received. Significant ethnic differences exist in the reasons given for seeking a new site of care ($\chi^2 = 55.29$, $p < .003$). Some differences are apparent between the AFDC and the HR HMO members. Thirty-two percent of white HRs and 45 percent of "other" HRs claimed to have been assigned to their new source of care by MediCap or the HMO. Since many HR eligibles were frequent users of drug rehabilitation and mental health services, they were less likely than the AFDC eligibles to identify a primary care physician of their choice. More HRs would therefore perceive switching to a "new source" of primary care simply because they did not have such a source under fee-for-service. However, the total number of HRs is too small to assess the significance of the differences between their choices and those of the AFDC eligibles.

When Medicaid clients were surveyed prior to the implementation of the prepaid, managed care model, 38.5 percent indicated an interest in going elsewhere for care. However, only 12.8 percent were

actually expected to move to a new site of care (15). When the new program was implemented, 77 percent of those eligible chose to remain with their current source of care. For whites the most frequently offered reason for not changing care source was "I like the doctor(s) there" (34.4 percent) (Table 4). For nonwhites, "I have always gone there" was the most frequently given reason (27.2 percent); "I like the doctor(s) there" was a close second (26.9 percent). Significant ethnic differences in reasons given for remaining with the same source of care are apparent ($\chi^2 = 27.82$, $p = .0005$). Proximity to the site of care is more important for nonwhites than for whites. The quality of care seems to be of equal importance to both ethnic groups (17 percent of whites and 15 percent of nonwhites), while longstanding physician or site affiliation appears to have prompted more nonwhites to remain with the same source of care than whites (27 percent versus 24 percent). Differences between the AFDC and the HR members are difficult to assess due to the small sample size of the HRs.

SATISFACTION WITH CARE

The mandatory, prepaid program of managed care introduced in Monroe County necessitated rapid and often radical changes in the way Medicaid clients are generally perceived to seek health care. Under prepayment, HMO members are required to choose a primary care physician and to be "locked into" this relationship for a minimum

Table 4: Percent Distribution of Reasons Given by Those Who Did Not Change Their Source of Care upon Joining the HMO: By Ethnicity and Category of Medicaid Assistance ("Post-survey": Capitated/Managed Care)

Reasons for Not Changing Source of Care	*Ethnic Group*					
	White			*Other*		
	AFDC	*HR*	*All White**	*AFDC*	*HR*	*All Other**
"It is close to where I live"	15.7	28.3	17.6	22.9	34.4	24.9
"I like the doctor(s) there"	36.7	21.7	34.4	28.4	20.0	26.9
"I get good care there"	17.3	15.2	17.0	15.6	10.4	14.7
"I have always gone there"	22.2	30.4	23.5	27.5	25.6	27.2
All other reasons	8.1	4.4	7.5	5.6	9.6	6.3
Total	100	100	100	100	100	100
(N)	(248)	(46)	(294)	(582)	(125)	(707)

*$\chi^2 = 27.816$; $p = .0005$.

period of six months. All referrals and emergency room treatment must be preapproved by the primary doctor. Unlike most HMO members, the Medicaid-eligible members did not voluntarily select their participation in the program. All eligibles in the category of Medicaid-assistance AFDC and HR were required to join an HMO and to select a primary care doctor.

The Medicaid-eligible HMO members were asked (in statements with preformulated answers, and additional space for comments provided) what problems they had encountered in trying to obtain health care services within the previous six months. Difficulties with transportation were most commonly mentioned, by 10.6 percent of the respondents. Complaints about appointments were voiced by 9.8 percent, specifically, the long waiting time for routine checkups:

- "You have to wait a month to see him."
- "There is a three-month wait for [an] eye checkup."

The problems experienced with transportation among this population are not unique to the prepaid, managed care program. In the presurvey conducted before the program was implemented, transportation was also cited by the respondents as a serious access-to-care problem. Long waiting times for a checkup or a routine specialist referral were also not problems specific to this program or even to Medicaid. Another common complaint related to the patients' inability to see their primary care physician when ill. Approximately 7 percent of those surveyed were disappointed at not seeing their assigned physician every time they made a visit.

Unexpectedly, the process of referrals to specialists and restricted access to emergency room treatment were least often mentioned as problems. Only 5.8 percent reported dissatisfaction with the referral process (in which the primary care physician must be contacted first):

- "Getting referrals for other doctors is a hassle."
- "They run me all over the place to get referrals."

Dissatisfaction with access to an emergency room was voiced by 4.4 percent:

- "I had trouble reaching a doctor for a referral to the emergency room when my son had a high fever."
- "Last Christmas I called the doctor and he wouldn't see me, so I went to emergency on my own and I haven't used him yet and I don't plan to."

Five dimensions of patient satisfaction were examined in the post-survey (Ware and Snyder 1975; Ware et al. 1976; Aday, Andersen, and Fleming 1980). The scales addressed (1) convenience of services, (2) continuity of care, (3) humaneness of the doctors, (4) quality of care, and (5) general satisfaction. Only the latter three of the five dimensions has been examined in the pre-survey. In the analysis now presented, the continuity of care scale has been omitted because the scale's items call for factual rather than attitudinal responses.[3]

Table 5 presents data relevant to the respondents' satisfaction with various aspects of medical care. Four indexes of satisfaction were regressed in a simultaneous multiple-regression equation against groups of independent variables—age, ethnicity, education, source of primary care, gender, and category of Medicaid eligibility. The standardized regression coefficients indicate the direction of the relationship between the dimensions of satisfaction and the predictor variables.

Satisfaction appears to increase with age for the dimensions of general satisfaction and convenience of services ($p < .05$). No significant relationship was established between age of the respondents and the humaneness of doctors or the quality of care. Ethnicity was significantly correlated with the dimensions of quality ($p < .05$) and conve-

Table 5: Determinants of Satisfaction among HMO's Medicaid Members

Dimensions of Satisfaction	*Predictor Variables*					
	Age	*Ethnicity*	*Education*	*Source of Care*	*Gender*	*Category of Eligibility*
"Humaneness of doctors"						
Regression coefficient	0.01	-0.26	0.40**	-0.19	0.13	0.01
Standard error	0.01	0.19	0.17	0.22	0.27	0.24
"Quality of care"						
Regression coefficient	0.01	-0.35*	0.63**	-0.71**	0.29	-0.22
Standard error	0.01	0.19	0.18	0.23	0.28	0.24
"General satisfaction"						
Regression coefficient	0.01*	-0.04	-0.01	-0.03	0.04	0.05
Standard error	0.01	0.13	0.12	0.16	0.19	0.16
"Convenience of services"						
Regression coefficient	0.02*	-0.61**	0.43*	-1.36**	0.44	-0.17
Standard error	0.01	0.24	0.22	0.29	0.35	0.30

*$p < .05$.
**$p < .01$.

nience ($p < .001$). Nonwhites were less likely than whites to be satisfied with these dimensions of care. The level of education also appears to have been an important predictor. Those with a higher education level were more likely to be satisfied with the humaneness ($p < .001$), quality ($p < .001$), and convenience of care ($p < .05$). Respondents receiving primary care from office-based physicians were more likely than those affiliated with clinics to be satisfied with the quality of care and convenience of services ($p < .001$). There were no significant differences in evaluation between general satisfaction and humaneness of doctors by source of primary care. Additionally, differences in evaluation of satisfaction by gender and category of Medicaid eligibility were not statistically significant.

Since the predictors applied in this regression equation do not explain general satisfaction, another regression was generated to regress general satisfaction on provider source and the remaining satisfaction dimensions. There is no significant relationship between provider source and general satisfaction. There is, however, a significant ($p < .0001$) relationship between general satisfaction and other satisfaction dimensions.

Table 6 presents data comparing the evaluations of the various dimensions of satisfaction collected during the fee-for-service period and under the prepaid, managed care program. In terms of general satisfaction there appear to be no differences in the informants' evaluation between fee-for-service and the prepaid care systems. However, those in prepaid care expressed significantly lower levels of dissatisfaction with the humaneness of doctors ($p < .01$), and with quality of care ($p < .01$), than did those under the fee-for-service system.

Clearly, not every respondent was satisfied with being an HMO member. Some resented the constraints placed upon them by mandatory enrollment and the requirements of HMO membership[4]:

- "I don't like prepaid plans unless you have flexibility to see specialists you want to go to. If I were working and they offered it [I] wouldn't take it."
- "I like Medicaid (fee-for-service) better. I feel you can get better care."
- "I don't think I am treated well. I have to call my doctor before I can do anything."

However, overall, 90 percent of those interviewed agreed or strongly agreed with the statement: "I am very satisfied with the medical care I receive." Seventy-six percent agreed or strongly agreed that

Table 6: Comparison of Satisfaction Scores in the Fee-for-Service and the Prepaid Groups Adjusted for Sample Differences

	"Pre-survey": Fee-for-Service			*"Post-survey": Capitated/Managed Care*		
Satisfaction	*D.Score*§	*Mean*	*SD*†	*D.Score*§	*Mean*	*SD*†
"Humaneness of doctors"**	42	2.6	0.9	35	2.9	0.7
"Quality of care"**	49	2.9	0.9	40	3.1	0.9
"General satisfaction"	29	2.6	1.0	32	2.6	0.9
"Convenience of services"	NA	NA	NA	45	2.8	1.0
Sample Size (N)	(483)			(540)		

**$p < .01$.

†SD = standard deviation.

§D.Scores represent percent of the population more dissatisfied than the median. The higher the score the more dissatisfied the group was with the particular dimension of care. On the other hand, the higher the means the greater the satisfaction.

the care they had recently received from doctors was "just about perfect." In terms of the convenience of services, 79 percent agreed that "if I have a medical question I can reach someone for help without any problem." Those surveyed almost uniformly felt that they were being treated well by the medical personnel—89 percent agreed or strongly agreed that "doctors respect their patients' feelings."

When answers to these and other statements are compared using the two surveys, the level of satisfaction with care received is uniformly greater under the prepaid, managed care program than under the fee-for-service Medicaid.[5]

There are many possible reasons for this apparently higher level of satisfaction with the new program. The managed care system offers many tangible gains to members, for example, broader access to private primary care physicians and specialists. In the words of some MediCap/HMO members:

> "I know I am getting the best of care, and I can choose my own doctors."
>
> "It's 100 percent better. Before I couldn't go to certain doctors. It was always a hassle."
>
> "You don't have to worry about paying for it, especially when you need a specialist."

Other benefits of the HMO system for Medicaid eligibles may be less tangible but have a broader appeal and are no less important. It

quickly became apparent, from the many comments volunteered by the respondents, that membership in an HMO offers the Medicaid population a sense of belonging and a socially acceptable way of getting health care services:

> "I didn't like to go to clinics. On HMO I could go to the doctor and [he/she] never knew I was on welfare. HMO is acceptable, not Medicaid."
>
> "I feel more like a better part of society than when I was on Medicaid."
>
> "I like it [the program] better. I would not go back to Medicaid for anything."

DISCUSSION

In June 1985, the Monroe County MediCap plan began to enroll all of the county's AFDC and HR Medicaid eligibles in a mandatory program of managed care. The mandatory nature of the program caused some concern initially, especially over the issue of access to care and potential consumer dissatisfaction with the program. The fears of freedom of choice restriction were somewhat lessened here because among the participating HMOs all of the traditional Medicaid providers were still available to serve the Medicaid population. The eligible members were free to choose their primary care physician and/or the health center. They were, however, required to become members of an HMO, and the Medicaid fee-for-service care was no longer available.

The requirements of managed care and HMO enrollment dramatically altered the manner in which most Medicaid beneficiaries obtained health care. Members were locked into a relationship with a primary care physician for at least six months, self-referrals to specialists were no longer allowed, and emergency room treatment had to be preauthorized. When these preconditions were imposed on a population that in the past had been described in the literature as "passive," "docile" (Spitz 1979), and with "negative attitudes" toward seeking medical care (Kravitz 1975; Dutton 1978; Rundall and Wheeler 1979), visions of discontent and dissatisfaction with care abounded.

In this study, data from two survey interviews with Medicaid eligibles in Monroe County are compared. The first ("pre") survey was conducted prior to the implementation of the prepaid, managed care program and is described in detail elsewhere (Temkin-Greener 1986). In the second ("post") survey, interviews were conducted with

Medicaid eligibles who had at least six months of experience with the new program. In both surveys the choice of providers and the consumers' satisfaction with care were examined.

The results of the postsurvey indicate that 23 percent of those eligible for HMO enrollment changed to a new source of care upon enrollment. This figure is substantially higher than that reported for a national sample of respondents, where only 15 percent ever considered changing their usual source of care (Aday, Andersen, and Fleming 1980). The results seem to indicate that too much has been made of the presumed unwillingness of indigents to change to a "better" source of care (Olendzki 1975; Kassanoff 1979; Susser and Watson 1971). It appears that the Medicaid poor share the middle-class perception that care provided in a private physician's office is of "better quality." Given an option under the managed care system to choose a privately practicing primary care physician, whites tripled their affiliation with office-based doctors, while nonwhites doubled theirs.

Patient satisfaction is an important validator of quality of care as it reflects both the process and outcomes of care. Several constructs have been recognized as different yet related components of satisfaction with health care.

Patient satisfaction variables can be viewed in terms of access to care, continuity of care, convenience of care, physical environment, and quality of care (Ware 1981). Quality may be viewed as the "process" of care, and as "humaneness" (the art) of care. In the surveys, the constructs of convenience, general satisfaction, quality, continuity, and humaneness of doctors were evaluated using a 29-item scale. The results demonstrate higher levels of consumer satisfaction with humaneness of doctors and with the quality of care among the Medicaid HMO members than previously documented under fee-for-service Medicaid. No differences between the prepaid and fee-for-service systems are apparent for the dimension of general satisfaction.

The scale items comprising the dimension of general satisfaction reflect on the outcome of medical care. One explanation may be that consumers' evaluation of general care is not changing because their perception of outcomes of care remains the same. After all, most of them continue to receive care from the same physicians and/or institutions as they did under fee-for-service. While their health may not be suffering, it probably has not improved either in their short time under managed care.

The process of care, however, has been altered, as has the consumers' evaluation of that process. Some examples of statements used in the survey relating to the constructs of humaneness and quality are:

"Doctors always treat their patients with respect"; "Sometimes doctors make patients feel foolish"; "The medical problems I have had in the past are ignored when I seek care for a new problem"; and "Doctors don't advise patients about ways to avoid illness or injury." The evaluations of humaneness and quality appear to reflect the respondents' perceptions that the process of receiving care from an HMO is different, no longer second-class, and better than it was under fee-for-service Medicaid:

> "The letters HMO do seem to make the difference—people are nicer to you. I don't feel like I am a lower grade person."
>
> "To me it means I can honestly receive the care I am entitled to—the best care."
>
> "More freedom to go to [the] doctor of your choice. I feel more comfortable with my doctor. It's better than Medicaid clinics."
>
> "When I was on Medicaid I felt especially uncomfortable. Now I don't feel that way."

This study demonstrates that mandatory, prepaid managed care programs for Medicaid eligibles need not result in decreased access to care nor in increased consumer dissatisfaction. On the contrary, the results show greater access to private office physicians and greater consumer satisfaction with the process of care received. Consumers' assessment of the humaneness of their doctors and the quality of the care they receive has been more positive under the prepaid, managed care program in Monroe County than it was under the fee-for-service system of Medicaid.

ACKNOWLEDGMENTS

We are grateful to Dr. Reuben Gabriel and Dr. Klaus Roghmann of the University of Rochester for their helpful comments and suggestions.

NOTES

1. In August 1987, after six months of negotiations, the Rochester Health Network and affiliated providers withdrew from the program claiming financial losses. Group Health remained in the program and was joined by two former RHN affiliates. With RHN's withdrawal the program ceased to be mandatory. The voluntary Medicaid program in Monroe County con-

tinues to operate with close to 9,000 AFDC and HR Medicaid beneficiaries.

2. MediCap members were given three weeks to select a provider. If no selection was made during that time, MediCap staff assigned members to providers. The assignment was to be guided by the proximity of the member's residence to the provider's office. According to MediCap's estimates, approximately 1 percent of members were assigned in this manner. The data from the survey indicate that 22 percent of members feel they were assigned to a provider.
3. The continuity scale called for agreement or disagreement with the statement "I see the same doctor just about every time I go for medical care," and with its opposite, "I hardly ever see the same doctor when I go for medical care." Eighty-one percent of respondents agreed or strongly agreed with the first statement, while 13.3 percent agreed or strongly agreed with the latter statement.
4. Respondents were encouraged to express their satisfaction or dissatisfaction with the program in their own words. Each questionnaire was reviewed for such responses, which were then grouped together. Examples of the most commonly held views are presented here.
5. Detailed answers to all scale items will be provided by the authors on request.

REFERENCES

Aday, A., R. Andersen, and G. Fleming. *Health Care in the US: Equitable for Whom?* Newbury Park, CA: Sage Publications, 1980.

Bice T., D. Rabin, B. Starfield, and K. White. "Economic Class and Use of Physician Services." *Medical Care* 11, no. 4 (1973): 287–96.

Davies, A. R., J. Ware, R. Brook, J. Peterson, and J. Newhouse. "Consumer Acceptance of Prepaid and Fee-for-Service Medical Care: Results from a Randomized Controlled Trial." *Health Services Research* 21, no 3 (August 1986): 429–52.

Dutton, D. "Explaining the Low Use of Services by the Poor: Costs, Attitudes or Delivery System?" *American Sociological Review* 43, no. 3 (June 1978): 348–68.

Freeborn, D. K. "Health Status, Socioeconomic Status, and Utilization of Outpatient Services for Members of a Prepaid Group Practice." *Medical Care* 15, no. 2 (1977): 115–28.

Freund, D. A. *Nationwide Evaluation of Medicaid Competition Demonstrations. Integrative Final Report.* Vol. 1. Research Triangle Park, NC: Center for Health Research, December 1988.

Freund, D. A., and E. Neuschler. "Overview of Medicaid Capitation and Case-management Initiatives." *Health Care Financing Review* Annual Supplement (1986): 21–29.

Friedman, E. "Easier Said Than Done." *Hospitals* 57, no. 19 (1983): 67–79.

Gaus, C. R., B. Cooper, and C. Hirschman. "Contrasts in HMO and Fee-for-Service Performance." *Social Security Bulletin* (May 1976): 3.

Gray, L. "Consumer Satisfaction with Physician Provided Services: A Panel Study." *Social Science and Medicine* 14A (1980); 65-73.

Greenlick, M. R., D. K. Freeborn, T. J. Colombo, J. A. Prussin, and E. W. Saward. "Comparing the Use of Medical Care Services by a Medically Indigent and a General Membership Population in a Comprehensive Prepaid Group Practice Program." *Medical Care* 10, no. 3 (1972): 187-200.

Grubb, C. T., and K. R. McLeroy. *Nationwide Evaluation of Medicaid Competition Demonstrations: Beneficiary Access and Consumer Satisfaction.* Vol. 6. Research Triangle Park, NC: Center for Health Research, May 31, 1988.

Health Care Financing Administration. *Nationwide Evaluation of Medicaid Competition Demonstrations.* Extramural Report. HCFA Publication no. 03236. Baltimore, MD: Office of Research and Demonstrations, September 1986.

Kassanoff, D. "Why Clinic Patients Shy Private Doctors." *Medical Economics* (9 June 1969); 229-46.

Kravitz, J. "The Relationship of Attitudes to Discretionary Physician and Dentist Use by Race and Income." In *Equity in Health Services.* Edited by R. Anderson. Cambridge, MA: Ballinger Press, 1975.

Like, R., and S. J. Zyzanski. "Patient Satisfaction with Clinical Encounter: Social-Psychological Determinants." *Social Science and Medicine* 24, no. 4 (1987): 351-57.

Luft, H. "Assessing the Evidence on HMO Performance." *Milbank Memorial Fund Quarterly* 58, no. 4 (1980): 501-36.

———. *Health Maintenance Organizations: Dimensions of Performance.* New York: Wiley-Interscience Publications, John Wiley & Sons, Inc., 1981.

Marquis, M., A. Davies, and J. Ware. "Patient Satisfaction and Change in Medical Care Provider: A Longitudinal Study." *Medical Care* 21, no. 8 (1983): 821-29.

Mechanic D., and R. Tessler. "Consumer Satisfaction with Prepaid Group Practice: A Comparative Study." *Journal of Health and Social Behavior* 16, no. 1 (March 1975): 95-113.

Merkel, W. T. "Physician Perception of Patient Satisfaction: Do Doctors Know Which Patients Are Satisfied?" *Medical Care* 22, no. 5 (1984): 453-59.

Murray, J. "A Comparison of Patient Satisfaction among Prepaid and Fee-for-Service Patients." *The Journal of Family Practice* 24, no. 2 (1987): 203-207.

Olendzki, M. "The Effect of Medicaid on Choice of Medical Facility. In *Medicaid: Lessons for National Health Insurance.* Edited by A. Spiegel and S. Podair. Rockville, MD: Aspen, 1975.

Rabin, D., T. Bice, and B. Starfield. "Use of Health Services by Baltimore Medicaid Recipients." *Medical Care* 12, no. 7 (1974): 561-70.

Rundall, T. G., and J. Wheeler. "The Effect of Income on Use of Preventive Care; an Evaluation of Alternative Explanations." *Journal of Health and Social Behavior* 20, no. 4 (1979): 397-406.

Spitz, B. "When a Solution Is Not a Solution: Medicaid and Health Maintenance Organizations." *Journal of Health Politics, Policy and Law* 3, no. 4 (1979): 497-519.

Susser, M., and W. Watson. *Sociology in Medicine.* London: Oxford University Press, 1971.

Temkin-Greener, H. "Medicaid Families under Managed Care: Anticipated Behavior." *Medical Care* 24 (1986): 721.

Temkin-Greener, H., J. E. Phillips, and D. Richardson. *Medicaid Program in Monroe County. Part I.* Report prepared for the MediCap Demonstration Project by Data Management Associates, December 1983.

Ware, J. E. *Development and Validation of Scales to Measure Patient Satisfaction with Health Care Services.* Vol. 1 of a Final Report prepared for the National Center for Health Services Research. Washington, DC: Department of Health, Education, and Welfare, 1976.

———. "How to Survey Patient Satisfaction?" *Drug Intelligence and Clinical Pharmacy* 15, no. 11 (November 1981): 892–99.

Ware, J. E., W. H. Rogers, A. R. Davies, G. A. Goldberg, J. P. Newhouse, R. H. Brook, E. B. Keeler, C. D. Sherbourne, and P. Camp. "Comparison of Health Outcomes at a Health Maintenance Organisation with Those of Fee-for-Service Care." *The Lancet* (3 May 1986): 1017–22.

Ware, J. E., and M. K. Snyder. "Dimensions of Patient Attitudes Regarding Doctors and Medical Care Services." *Medical Care* 13, no. 8 (August 1975): 669–82.

Zastowny, T., K. Roghmann, and A. Hengst. "Satisfaction with Medical Care: Replications and Theoretic Reevaluation." *Medical Care* 21, no. 3 (March 1983): 294–322.