Factors Associated with Patient Evaluation of Health Care

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The purpose of this paper is to study the relationships among patient characteristics, characteristics of a health care encounter, and patients' evaluation of that encounter. On the basis of 1739 patient-provider encounters in eleven ambulatory care settings, three relatively independent correlates of patient satisfaction were found: age; community satisfaction; and the nature and degree of continuity of care which characterized the visit. Patients' sex, marital status, religion, and the number and kind of services provided were not related to the evaluations patients made. Greatest differences in patient satisfaction were from setting to setting, and these differences probably can be attributed to the types of patients which they recruit or service (i.e., age, level of community satisfaction) and setting policy and procedures regarding continuity of care.

In spite of the fact that many social scientists and most physicians have questioned the validity and significance of evaluations patients make of their medical experiences, several recent studies have demonstrated their importance. Alpert et al. (1970) has noted that changing attitudes and satisfactions with medical care are not only worthwhile goals in themselves, but have some very practical consequences. One of those consequences has been reported by Francis, Korsch, and Morris (1969) who found that patients highly satisfied with their last visit to the doctor were significantly more likely to follow the doctor's orders than patients who were dissatisfied. In terms of the validity of patient assessments of care, Kisch and Reeder (1969) found that the client's appraisal of physician performance was highly correlated with professional criteria for assessing competent professional performance. Finally, Reeder (1972) has pointed out how the growth of consumerism in American society has begun to affect the traditional doctor-patient relationship. Patients as "consumers" in the medical care system are becoming increasingly powerful to the extent that their needs and satisfactions can no longer be neglected by either physician "providers" or by social scientists.

Published studies of patient satisfaction seem to fall into three general categories: (1) studies of satisfaction among group health plan members or satisfaction with group health insurance cov-

erage; (2) satisfaction with physicians in general or with specified doctor visits in particular, and (3) satisfaction with new non-physician providers of health care.

The first group of studies shows much similarity in findings, greatest satisfaction being with the technical standards of health care and less satisfaction with the doctor-patient relationship itself (Weinerman, 1964). Anderson and Sheatsley (1959) and Freidson (1961) both found that patients seeing solo practitioners on a fee-for-service basis elicited more satisfaction than patients seeing physician members of group practice. Similar to the earliest report of patient satisfaction (Koos, 1955), complaints with physicians in group practice involved the lack of personal interest, insufficient explanation of the patient's condition by the doctor, complaints about house calls, and waiting time. However, more recent studies of this type have found very high levels of satisfaction among members. Bashshur et al. (1967) found that 78 percent of the union workers studied liked their plan, and Gerst et al. (1969) found that 77 percent of the government employees studied were satisfied with their coverage. In examining factors associated with the levels of satisfaction expressed, Bashshur found that the patient's education, income, and race were not related. However, satisfaction was higher among the married than among singles and among those with longer employment. Gerst also found that singles were significantly less satisfied than married members, but also found that higher income and educational levels were directly related with higher levels of satisfaction. Older people and males were somewhat more satisfied than their counterparts but not significantly so.

Similar to the first group of studies, the studies of attitudes toward doctors or doctor visits also show high percentages of patients satisfied with the care they receive. Francis et al. (1969) found that 76 percent of the outpatient visits studied resulted in high patient satisfaction. Deisher et al. (1965) in a questionnaire survey of mothers' opinions found that 95–98 percent were very satisfied with the pediatric care their children were receiving in terms of doctor interest, examination time, and the doctor's willingness to receive phone calls. Mothers were less satisfied with fees, house calls, and waiting time, but less than 5 percent indicated high dissatisfaction with any of these aspects. Alpert et al. (1970) in a study of three groups of low-income families who utilized an emergency clinic between 1964 and 1968 measured

satisfaction with last doctor visit using both general and specific questions. All groups expressed high levels of satisfaction with the doctor giving enough time and being easy to talk to (75–78 percent). The only major source of dissatisfaction involved waiting. Finally, Hulka et al. (1971) studied satisfaction with medical care in a low-income population on three dimensions: professional competence, personal qualities, and cost-convenience. Although all three were found to correlate significantly with each other, satisfaction with personal qualities of doctors was greatest and satisfaction with cost-convenience the least. No differences in satisfaction levels were found in relationship to age, race, sex, census tract, marital status, time in the community, or health status. However, for their low-income sample it was found that as family size increased, satisfaction decreased, and as education and occupational status increased, satisfaction increased.

Finally, the third and most recent group of studies have examined patients' satisfaction with and acceptance of new health practitioners such as physician assistants and nurse practitioners. Spitzer (1974), for example, reports that there have been very few instances of rejection of nurse-practitioner services by patients. Ninety-six percent of the patients who saw a nurse practitioner were satisfied with the health services they received as compared with 97 percent who saw a physician. Similarly, Day et al. (1970) reported that 95 percent of their sample of mothers expressed satisfaction with their contact with a pediatric nurse practitioner. Finally, Nelson et al. (1974) report that patient acceptance of physician assistants they studied was extremely high, with 89 percent assessing the Medex studied as "very competent," 83 percent as "sure of himself," and 86 percent as "very professional in his manner." In looking at the effects of age, sex, and social class on the attitudes patients expressed, Nelson found that younger patients consistently perceived the Medex to be less technically competent than did older patients, but Nelson reported no other significant differences between patient characteristics and evaluations of competency.

From this brief review, several basic points become evident: (1) a number of techniques have been used to measure satisfaction with health care (single items, attitude scales, open-ended items, etc.); (2) a number of different populations have been studied (i.e., patient populations, union members, clinic utilizers, low-income residents); and (3) a number of different objects of satisfaction have been evaluated (i.e., last doctor visit, doctors in

general, health plans, health insurance, new health professions). Yet, in spite of these diversities, several uniformities are apparent:

(1) All studies found high levels of patient satisfaction.

(2) There is a lack of consistent findings between social or cultural factors and patient satisfactions.

(3) Specific characteristics of the medical encounter have not been identified or examined in relationship to levels of satisfaction expressed by patients.

The Purpose of the Present Study

Since the recent growth of consumerism in the health care field may have had some impact on the perceptions, attitudes, and feelings of patients, there seems to be a need to evaluate the current status of satisfaction among patients within different kinds of ambulatory health care settings. Therefore, the purpose of the present investigation will be twofold:

(1) to ascertain levels of patient satisfaction employing multiple criteria that are meaningful and important to patients and yet acceptable to providers of health care.

(2) to analyze the relationships among patient characteristics, characteristics of the health care encounter, and patient satisfaction with that encounter.

As such, patient satisfaction is conceptualized as an outcome variable, being a product of the social, cultural, and psychological character of the patient on the one hand and certain aspects of the delivery of care on the other. Of course, in the larger perspective, patient satisfaction is probably an intervening variable, being antecedent to such outcomes as patient compliance, recovery, or wellness.

Method

The Sample and Design

The data presented in this report were collected in eleven Southern California ambulatory health care settings: two solo-practitioner general practices; two university student health centers; two health department community health clinics; one large private group practice; two outpatient clinics affiliated with small hospitals; one large

county outpatient clinic; and one large clinic of a prepaid HMO. The settings were not randomly selected but chosen because of entree in connection with the training and preceptorship of a nurse practitioner program at UCLA. Thus, although the settings are probably typical of family or general ambulatory care settings in Southern California, caution must be exercised in making generalizations.

In each of the settings, all patient visits were studied during a period of one five-day work week. As the patients arrived at each setting, they were greeted by a member of the UCLA research team who explained the study and asked them to complete an anonymous questionnaire in either English or Spanish.[1] At this time, a number-coded encounter form which was to be completed by all health care providers (physicians, nurses, nurse practitioners) was attached to the patient's chart and the number entered on the top of the patient's questionnaire. Patients were asked to read over their questionnaires and to complete and return them to the UCLA representative after they had received treatment. This system permitted an analysis of who provided care, what was provided, and how the care was evaluated by the patient. Thus, the encounter form allowed us to determine the type or types of providers. However, since some patients were examined or treated by both a nurse and a physician, there were separate sets of questions to evaluate the services of each on the patient questionnaire. Rates of response varied from 80–99 percent, with few patient refusals. Non-responses were generally in large settings where patients could leave without turning in their questionnaire or where some providers failed to complete encounter forms. The total number of complete patient-provider encounters which is the basis of this report is 1,739.

[1]The directions on the questionnaire were as follows: The people who have just given you medical care are interested in how they can do a better job. In order to help them find out, we at U.C.L.A. are asking you to fill out this survey about the care you just received. Your answers will be kept private so that you can feel free to answer the questions in a straightforward and honest way. Be sure to answer all of the questions on this page and the back page (page 4). You should answer questions on page 2 *only* if you saw a physician as part of your visit. Answer questions on page 3 if a nurse treated you today. If both a nurse and a doctor treated you today, answer all questions on pages 2 and 3. Finally, pay no attention to the numbers along the right-hand side of the page. They are for the computer.

Thank you very much for your help, and if you have any problems with the questions, ask for help.

Measurements: Patient Encounter Form

Although a number of different kinds of information were ascertained about each provider-patient encounter, the following three categories of characteristics will be discussed: (a) general characteristics of the visit, (b) services performed or provided, and (c) the disposition. The general characteristics of the visit include the provider's estimate of time spent with the patient, whether or not the patient had been seen before in the setting, whether or not he had seen the provider in a previous visit, and if he had, whether or not that visit concerned the same health problem. The services performed or provided include a general or limited history, a general or limited physical examination, lab tests, X rays, drug therapy, therapeutic listening or counseling, or advice concerning exercise, diet, or habits. Finally, the disposition of the visit involved whether or not follow-up was planned and, if so, whether the patient was to return at any time or at a specific time.

Measurements: Patient Characteristics

Seven patient characteristics were ascertained in the pencil-and-paper questionnaire: age, sex, race, marital status, educational background, religion in which the patient was raised, and, finally, the level of satisfaction with the community in which he was currently living.

Measurements: Patient Evaluations of Care (Satisfaction)

The first measure of patient evaluation of care to be analyzed in this report is a General Evaluation Index and is based upon responses to the following six items (scoring value in parenthesis):

1. Do you feel that the medical attention you received today is better than what most people get, about the same, or not as good? (3,2,1)
2. Regarding today's visit, do you feel that there were any tests or procedures used on you which were *not* necessary? (1,2)
3. Regarding today's visit, do you feel that *more* tests or procedures were necessary to understand your problem? (1,2)
4. Would you say that the medical care you received today was better than usual visits, about the same, or not as good? (3,2,1)
5. How well do you feel you understand your present medical condition? (Check one)

I understand very well (4)
I think I understand (3)
I am not sure I understand (2)
I don't understand very well (1)

6. Which of the following statements *best describe* your feelings about the person(s) who gave you medical care today? (Check one)

I would prefer to see the same person(s) again (3)
It wouldn't make much difference whether or not I saw the same person on my next visit (2)
I would prefer to see someone else (1)

On the basis of the sum of his responses to these six questions, each patient in the sample was assigned a quartile rank of 1 to 4, with 4 indicating the highest positive evaluation of care and 1 the lowest. Because of the skewed distribution of scores, the following classification resulted: Quartile 1 (Scores 8 – 13) 16 percent; Quartile 2 (Score of 14) 20 percent; Quartile 3 (Score of 15) 33 percent; and Quartile 4 (Scores 16 – 17) 31 percent.

The second measure of patient care to be discussed in this report is an Index of Satisfaction with Physician Care and is based upon responses to the following four items:

1. Would you say that the doctor spent more than enough time with you today, enough time, or not enough time? (3,2,1)

2. Do you feel that the doctor understood what was bothering you? (Check one)

understood very well (4)
understood somewhat (3)
didn't understand very well (2)
didn't understand at all (1)

3. How much interest and concern did the doctor show for you? Was the doctor: (Check one)

extremely concerned (6)
very concerned (5)
somewhat concerned (4)
somewhat unconcerned (3)
very unconcerned (2)
extremely unconcerned (1)

4. In general, how satisfied were you with today's contact with the doctor? (Check one)

extremely satisfied (6)
very satisfied (5)
somewhat satisfied (4)

somewhat dissatisfied	(3)
very dissatisfied	(2)
extremely dissatisfied	(1)

Again, each patient in the sample was assigned a quartile ranking on the basis of the sum of his responses to the four items above. A rank of 1 indicated the lowest level of satisfaction; a rank of 4 the highest. In this process, the following distribution resulted: Quartile 1 (Scores 6 – 14) 21 percent; Quartile 2 (Score of 15) 13 percent; Quartile 3 (Score of 16) 32 percent; and Quartile 4 (Scores 17 – 19) 34 percent.

The items in each index were chosen because they were thought to measure directly satisfaction with the care received or to reflect positive or negative aspects of a health care encounter. However, since no provision was made to weight the items within each index equally, the simple summation process employed has some systematic bias, giving greater weight to items with more answer categories.

Finally, it should be noted that because of the design of the patient questionnaire, the General Evaluation Index referred to attitudes regarding the entire visit; the Index of Satisfaction with Physicians referred only to encounters with a physician.[2] However, in examining the relationship between the two indices, a strong statistically significant correlation was found ($r = .57$ $p > 001$). Therefore, the analysis presented in this report should not be interpreted as advocating two distinct satisfaction dimensions. They were not combined into a single index because of the possible differences which may arise in their relationship to the independent variables under examination.

Results

Consistent with previous findings, patients generally evaluated the care they had received in a highly positive way. For example, with regard to patients' general evaluation, 97 percent felt the medical attention they received was about the same or better than what most people get, 98 percent felt their visit was about the same or better than usual visits, 98 percent did not feel that they were subjected to unnecessary tests, and 86 percent did not feel that more tests were necessary. Two thirds of the sample felt they un-

[2]In some settings, non-physicians also render care, and the relationship between type of provider and evaluation of care will be discussed elsewhere (Linn, 1975).

derstood their medical condition very well, 25 percent thought they did, but for 10 percent, lack of understanding was certainly an issue. Finally, 80 percent of the patients indicated that they would prefer to see the same providers of care again, 18 percent indicated apathy, and 2 percent preferred to see someone else.

With regard to satisfaction with physician care rendered, generally only 3–5 percent of patients indicated any clear dissatisfaction on the four questions. However, one needs to make a value judgment regarding whether the response of "somewhat concerned" (as opposed to alternative choices of very or extremely) represents an acceptable level of response for patients to make regarding their attitudes toward the interest and concern shown by the doctor. Similarly one also might argue that because of the importance of doctor-patient encounters, a response of "somewhat satisfied" really is not very good.

When the two indices constructed from these items were examined across the 11 medical settings studied, significant differences among patients were clearly observed. For example, the range of patients highly satisfied (third and fourth quartile scores) on the General Evaluation Index was 44–87 percent; the range on the Index of Satisfaction with physicians was 52–84 percent.[3]

Patient Characteristics and Satisfaction

In this regard, the religion in which patients were raised, their sex, and their marital status were not found to be significantly related to either measure of patient satisfaction. However, as can be seen in Table 1, the oldest patients were the most likely group to be satisfied on both measures. The least satisfied group of patients were the young adults, ages 18–24.

The second major finding in Table 1 indicates that patients who were more satisfied with living in their community were significantly more satisfied with their medical care. This most interesting finding suggests that perhaps patients who express dissatisfaction with care are more likely to express dissatisfaction with other aspects of their life than more "satisfied" patients do. Perhaps dissatisfied patients are dissatisfied people, and one significant factor in determining patient satisfaction is the general psychological predisposition or personality of the patient.

Finally, with regard to the findings concerning educational background and race, Table 1 indicates no significant relationship

[3]Because of the skewed distribution of scores, the third and fourth quartiles together constituted 64 percent of the scores on the General Evaluation Index, and 66 percent on the Index of Satisfaction with Physicians.

TABLE 1

Patient Characteristics and Satisfaction with Medical Care

Patient Characteristics	High General Satisfaction			High Satisfaction with Physician		
	%	*N*	*Total*	%	*N*	*Total*
Age						
⩾ 17 years	66	160	243	63	175	278
18-20	55	85	156	55	73	132
21-24	50	97	193	67	121	182
25-29	68	95	139	61	76	124
30-39	64	88	138	64	101	159
40-49	72	70	97	69	88	128
50-59	65	67	103	70	87	125
60 >	78	79	101	81	99	122
	X^2 $p < 001$			X^2 $p < 01$		
Race						
White	63	543	856	64	559	886
Black	68	67	98	75	80	106
Spanish	65	120	185	71	160	228
	X^2 NS			X^2 $p < 001$		
Educational Background						
Some grade school	65	46	71	77	66	86
Completed grade school	74	46	62	79	66	84
Some high school	60	120	201	71	153	218
Completed high school	61	156	256	59	169	286
Some vocational school	61	25	41	59	28	48
Completed vocational school	70	26	37	63	29	49
Some college	61	253	413	62	239	384
Completed college	64	94	147	64	82	128
	X^2 NS			X^2 $p < 05$		
Community Satisfaction						
Extremely satisfied	71	152	215	77	176	229
Very satisfied	64	307	478	68	337	494
Somewhat satisfied	57	209	366	61	239	394
Somewhat, very, or extremely dissatisfied	61	119	194	54	112	206
	X^2 $p < 05$			X^2 $p < 001$		

between the two variables and patients' general evaluation of care. However, patients with less formal education (some high school or less) were significantly more likely to be highly satisfied on the Index of Satisfaction with Physicians than patients with more education. Similarly, black and Spanish-speaking patients were more satisfied with the care the physicians rendered than white patients. Although these findings may only reflect the local situation in Los Angeles County, racial minorities and less educated people do not seem to be overly dissatisfied with the way in which physicians treat them; rather, they hold more favorable opinions than the white and educated majorities.

Patient Satisfaction and Characteristics of the Medical Encounter

Traditional studies of patient satisfaction generally examine the relationship between patient characteristics and evaluations of care. However, since satisfaction might not be determined by patient contingencies alone but may be affected by either services provided or policies within the health care setting, the present study is also concerned with the relationship between satisfaction and characteristics of the encounter being evaluated.

General characteristics Table 2 shows that there was no significant difference in satisfaction levels between new and old patients. However, patients who had been seen by their provider of care on a previous visit were significantly more satisfied with their care in general and with the doctor in particular than patients who saw a new provider. Similarly, patients who had been seen before by the same person for the same problem were significantly more likely to be satisfied than patients who saw a familiar provider but for a new

TABLE 2

Patient Satisfaction and the General Characteristics of the Patient Visit

General Characteristics of Doctor Visit	High General Satisfaction			High Satisfaction with Physician		
	%	*N*	*Total*	%	*N*	*Total*
First Visit to Setting						
Yes	62	69	111	66	71	107
No	63	652	1032	65	726	1117
	X^2 NS			X^2 NS		
First Visit to Provider						
Yes	57	192	338	60	193	321
No	67	485	720	68	535	789
	X^2 $p < 001$			X^2 $p < 01$		
First Visit to Familiar Provider for Present Problem						
Yes	67	145	218	60	149	248
No	69	360	520	71	397	560
	X^2 NS			X^2 $p < 02$		
Duration of Visit with Provider						
5 min. or less	67	209	311	63	210	334
6-10 min.	63	259	414	63	289	462
11-15 min.	63	131	209	69	160	231
16 min. or more	59	90	152	70	111	159
	X^2 $p < 05$			X^2 NS		

problem. Thus, although there is no difference in attitude between new and returning patients, among the latter group there seems to be strong evidence that they favor continuity of care. Highest levels of physician satisfaction were expressed by patients who had previously seen the same person for the same problem.

Finally, the findings in Table 2 concerning estimated time spent with the patient indicate that patients who had shorter visits with the provider (five minutes or less) were significantly *more* satisfied on the General Evaluation Index than patients who had longer visits (16 minutes or more). However, although not statistically significant, the trends regarding satisfaction with the physician and duration of visit indicate the opposite. Thus, although greater time spent by the doctor with the patient results in greater patient satisfaction with that doctor, it nevertheless results in less overall satisfaction with the medical visit.

Services rendered The provider of care was asked to check those services that were provided to each patient from the following list: (1) a general or limited history; (2) a general or limited physical exam; (3) lab tests; (4) X rays; (5) drugs given or prescribed; (6) therapeutic listening; or (7) advice or counseling. In looking at the relationship between the provision of each service and both measures of patient satisfaction, only advice or counseling was found to be significantly related. More specifically, 71 percent of the patients who received advice or counseling had high scores on the General Evaluation Index as compared with 60 percent who did not receive any advice ($p < 01$). However, there was no significant difference between advice and satisfaction with the physician. Generally, then, almost none of the specific services provided to patients seemed to have any effect on their overall assessments of care.

Regarding this finding, it may be that what is really important is not specific services but the *number* that are provided to patients. However, when the number of services was examined in relationship to both measures of patient satisfaction, no statistically significant differences were found. Thus, in the present study, there seems to be little or no relationship between patients' satisfaction and either the number or kind of services provided to them.

Disposition of the visit The final aspect of the patient-practitioner encounter under examination is the disposition of the visit. Providers were given a list of possible dispositions and asked to

check all that applied to their decision. In looking at the relationship between patient satisfaction and the three most frequently checked dispositions (no follow-up, return at specific time, or return any time), it was found that patients who were given a scheduled return appointment were significantly more satisfied with their care in general and their interactions with physicians than patients who had no return appointment scheduled. Similarly, the trends on the Index of Physician Satisfaction suggested that patients who were told to return any time or for whom no follow-up was planned were less satisfied than patients with other dispositions.

The finding that patients are significantly more satisfied if they see the same doctor for the same problem and if a return visit is scheduled suggests a strong positive argument for continuity of care. To illustrate this finding more explicitly and for more precise analysis, each of the patient encounters has therefore been classified into one of the following six categories:

(1) familiar provider, familiar problem, return visit scheduled
(2) familiar provider, familiar problem, no return visit scheduled
(3) familiar provider, new problem, return visit scheduled
(4) familiar provider, new problem, no return visit scheduled
(5) new provider, return visit scheduled
(6) new provider, no return visit scheduled

In looking at the relationship between this classification and patient evaluations, Table 3 shows a statistically significant as-

TABLE 3

Patient Satisfaction and Continuity of Care

Continuity	High General Satisfaction			High Satisfaction with Physician		
	%	*N*	*Total*	*%*	*N*	*Total*
Same M.D., same problem, return visit	69	273	394	71	300	420
Same M.D., same problem, no return visit	69	87	126	69	97	140
Same M.D., new problem, return visit	71	61	86	63	64	101
Same M.D., new problem, no return visit	58	56	96	56	62	111
New M.D., return visit	61	90	147	65	89	137
New M.D., no return visit	52	98	187	56	101	180
		($p < 01$)			($p < 01$)	

sociation with both measures as well as some very interesting patterns. For example, patient evaluations are more favorable when patients see the same practitioner for the same (or familiar) problem, regardless of whether or not a return appointment is scheduled. However, among patients with new problems, the importance of the return visit for patient satisfaction emerges, with patients having return visits scheduled being more satisfied. Similarly, among patients whose visits were to new providers, satisfaction was greater when a return appointment was scheduled.

Patient Factors vs. Contingencies of the Visit

In brief review, three main factors were found to be significantly related to the evaluations patients made of their medical care: (1) age, (2) level of satisfaction with living in their community, and (3) the nature and degree of continuity of care which characterized their visit. In looking at these factors two at a time in relationship to both measures of satisfaction, with few exceptions the original relationships were sustained. Therefore, age, community satisfaction, and continuity of care seem to be three relatively independent correlates of patient satisfaction (or dissatisfaction) as well as the three most important correlates considered in this report.

Discussion and Summary

To review, the present study has confirmed the findings of previous studies: that patients are generally very satisfied with their medical care. When index scores were examined in relationship to other factors, the greatest differences occurred between settings. In order to account for these differences, characteristics of both patients and visits were examined with the following results:

(1) Neither measure of satisfaction was significantly related to patients' sex, marital status, or the religion in which they were raised.

(2) Patients with less education or from minority groups (black and Spanish-speaking) were significantly more likely to evaluate their physicians more positively than patients who were white or with more education. However, education and race were not significantly related to patients' scores on the General Evaluation Index.

(3) Generally, patients over 60 years and under 18 (often mothers' evaluations of their infants' or children's care) were significantly more satisfied with their medical encounters than patients in other age groups. Young adults (18–21 or 21–25) were

the least likely age group to be satisfied. Such differences probably reflect the different social and psychological needs of the age group.

(4) Patients who were more satisfied with living in their community were significantly more likely to be satisfied with their medical visit as well as their interactions with doctors than patients who were less satisfied with their community life. This finding represents a reconfirmation of a previously unpublished finding from a large household survey (Linn and Reeder, 1973) which found a relationship between satisfaction with last doctor visit and satisfaction with community life, facilities, and services. The interpretation of this finding in the present report is that the high correlation between evaluations of medical care and community life probably reflects a more general tendency to view one's world either positively or negatively. As such, perhaps dissatisfied patients are dissatisfied people, and that one major determinant of patient satisfaction is the cognitive style or personality of the patient.

(5) There was no significant difference in evaluations of care between new and old patients. However, among old patients, those who got to see the same provider were significantly more satisfied than those who saw someone new. Similarly, satisfaction with the physician was greatest among patients who saw the same doctor for a problem they had seen him about on a previous visit. Finally, patients were significantly more satisfied with their visits and doctors if a return appointment was scheduled. Together, these findings provide strong evidence that patients like continuity of care. Looked at in another way, it appears that patients are most satisfied when they are allowed to develop an expected, consistent, and structured relationship with a provider of care.

(6) With little exception, both the number and kind of services provided during the visit has little effect on patient evaluations of care or providers.

(7) When age, community satisfaction, and the nature and degree of continuity of care are examined in relationship to satisfaction, two variables at a time, the results indicate that the three factors are relatively independent sources of satisfaction.

Returning then to the question of why the greatest differences in satisfaction levels occurred between settings, additional examination of the data suggest that it is because of differences in patient characteristics and setting policies which characterize them. For example, the settings with the highest pa-

tient satisfaction levels generally provided greater continuity of care, had more patients with favorable community attitudes, and had more patients very young or very old. Similarly, settings with low levels of satisfaction had more patients who were young adults, scheduled few return visits, did not emphasize seeing the same provider each visit, and so on.[4]

Finally, the implications of these findings are that although in general patient satisfaction is already high, it probably will not be increased by providing more services to patients. Similarly, the experiences, needs, and attitudes related to certain age groups cannot easily be altered by health care providers, nor can the personality characteristics of certain patients be changed. However, policies within the health care system can be changed to favor continuity of care, so that patients can develop a continuing relationship with the same provider.

[4]Although it is probable that some differences in continuity of care may be related to differences in patients' medical problems, the data from apparently similar kinds of primary care settings in the present study suggests an alternative hypothesis: that in primary care settings, whether or not patients are asked to return at a specific time and whether or not they will see the same provider on their return is more likely to be a function of physician or setting policy than an attribute of the presenting complaint. This, of course, is something which needs to be pursued further.

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