

Patient and Physician Satisfaction with an Outpatient Care Visit

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BACKGROUND. The purpose of this study was to identify factors contributing to patient and physician satisfaction during outpatient care visits, and to determine the degree to which physician and patient satisfaction are related.

METHODS. The sample (N=250) was drawn from the outpatient practice of the University of South Carolina Department of Family and Preventive Medicine. Opinions were obtained by self-administered written questionnaires for physicians and by interviews with patients conducted by second-year medical students.

RESULTS. Most encounters (88%) were satisfying for the physician. Resident physicians reported greater satisfaction than did faculty. Physicians were most satisfied with encounters in which they believed they had adequate time, were competent to address patient problems, and communicated successfully with the patient. Patient satisfaction was high (78% highly satisfied). Patients were more likely to be fully satisfied if they believed themselves to be in good health, did not wait long, and had health insurance. Unperceived patient dissatisfaction was associated with waiting time and a belief that the physician did not pay attention. No relationship was found between patient satisfaction and physician satisfaction.

CONCLUSIONS. The majority of patient care encounters were satisfying for both participants. The pervasive effect of waiting time on patient satisfaction emphasizes the need for careful scheduling. Lower satisfaction among faculty physicians should be explored to identify possible interventions to prevent physician burnout. Pressures from managed care organizations may decrease physician satisfaction if these take the form of reducing the time available for each patient or restricting physicians' ability to seek subspecialist consultation.

KEY WORDS. Physician-patient relations; patient satisfaction; physician's practice patterns; practice management; family practice. (*J Fam Pract* 1997; 45:418-425)

Satisfaction with an outpatient encounter influences whether a patient will remain with a practice and recommend it to others.¹ While numerous factors affect patient satisfaction, including financing and organization of care,^{2,3} waiting time,^{4,5} health status,⁶ and the patient's own expectations,⁷ the physician remains a key element in patient satisfaction. Among primary care patients, the physician's gender,^{8,9} practice behaviors such as providing health education and performing a physical examination,¹⁰ and interactive skills¹¹ have been shown to affect patient satisfaction.

Physician satisfaction is also important, both for retaining practitioners in the primary care arena and, possibly, for its influence on patient satisfaction. An earlier study within our practice found a gap between patient and physician perceptions and suggested that physician attitudes influence patient satisfaction.¹² Exploration of the literature linking physician and patient satisfaction yielded only one study examining physician and patient satisfaction with the same visit using a survey methodology. In that study, Rashid and colleagues¹³ found that while both patients and physicians were generally satisfied, in several areas their perception of the same visit diverged. These included physician assessment of patients' problems, ease of talking with the physician, receipt of instructions, and the overall benefit of the visit. The authors recommended that practices conduct similar surveys to improve quality of care.

The study reported here used paired patient and

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physician survey instruments to study patient and physician satisfaction with the same outpatient encounter. We hypothesized that patient and physician satisfaction would interact, such that episodes leaving physicians more satisfied would also be more satisfying for patients. In addition, by asking both general satisfaction questions and questions focusing on other elements of the visit, we hoped to explore contributing factors to patient and physician satisfaction with outpatient care episodes.

METHODS

Study site. Richland Family Practice Center (FPC) is the outpatient teaching unit of the University of South Carolina Department of Family and Preventive Medicine. The study population consisted of all patient and physician outpatient visits at the FPC during the month of July 1995. Only family medicine faculty and PGY-2 or PGY-3 residents provided patient care during July.

Sample. The sampling procedure followed the physical structure of the FPC, which is divided into five office and examination room suites. Continuity of patients and providers is maintained by assigning physicians and patients to a single suite. Two suites were used daily (one in the morning and one in the afternoon) to interview patients. After randomly assigning the first suite, suites were sequentially assigned for morning or afternoon interviewing. This resulted in each area being studied in both morning and afternoon, and on different days of the week. Sampling continued until 250 encounters had been logged.

Scale Design. Work done by Ware and Snyder¹⁴ suggested that patient satisfaction with an episode of outpatient care has four principal dimensions: physician conduct, availability of services, continuity or convenience of care, and access to care. Our research focused on satisfaction with physician conduct, with particular attention given to technical and interpersonal skills. Sources reviewed during the design of the instrument included the patient satisfaction studies cited above, two of which used instruments developed in conjunction with the Medical Outcomes Study,¹² the work of Stump and associates,¹⁵ which compared scales from the Patient Satisfaction Questionnaire, the Medical Outcomes Study, and the American Board of Internal Medicine, and the patient/physician satisfaction study by

Rashid and associates.¹³ Attitude questions employed a 5-point Likert scale as recommended by Ware and Hays,¹⁶ with responses ranging from "strongly agree" through "strongly disagree." Scales are shown in Table 1. A matrix listing patient and physician questionnaire items, the underlying concept addressed by each, and various phrasings used by prior surveys to address this concept is available from the authors.

TABLE 1

Survey Items for Combined Scales Administered to Physicians and Patients to Determine Physician and Patient Satisfaction with Outpatient Care

Physician Scale

The patient understood my explanations and recommendations.

I found this patient easy to interact with.

The patient seemed satisfied with the visit.

I was able to spend enough time with the patient during this visit without feeling rushed.

I felt comfortable dealing with this patient's problems.

General Satisfaction Scale Item:

I left the exam room feeling satisfied with the encounter.

Patient Scale

The doctor seemed to pay attention as I described my condition or problem.

The doctor handled me carefully during the exam.

The doctor made me feel as if I could talk about any type of problem.

The doctor gave me clear explanations of what was happening during the exam.

The doctor seemed rushed during the visit.

The doctor explained what to expect with my problem.

The doctor spent enough time with me.

The doctor seemed unsure while examining me.

I understand how my health insurance works.

General Satisfaction Scale Item:

How satisfied are you with the care you just received?

Other Patient Items

How long did you have to wait before seeing the doctor?
15-30 minutes, 30-44 minutes, 45-59 minutes, more than 1 hour

Overall, how would you describe your health?

Very poor, poor, fair, good, excellent

TABLE 2

Demographic Characteristics of Physicians and Patients

	Male, n	Female, n	Total, n
Physicians	16	11	27
Race			
White	14	8	22
Black or other	2	3	5
Educational status			
PGY-2	5	5	10
PGY-3	7	4	11
Faculty	4	2	6
Patients	69	181	250
Race			
White	21	55	76
Black or other	44	121	165
Not stated	4	5	9
Age			
1 - 18 years	10	18	28
19 - 40 years	25	68	93
41-64 years	24	61	85
≥ 65 years	10	34	44

Acquiescence response set (ARS), the tendency of respondents consistently to check a single answer to all questions regardless of logic, can bias survey results.^{17,18} To check for the presence of ARS bias in the patient sample, we compared answers to “the doctor seemed rushed during the visit” with those for “the doctor spent enough time with me.” While these questions do not measure identical concepts, both address the amount of time the physician spent with the patient. Of 215 patients responding to both questions, 174 (80.9%) gave answers that were logically concordant (eg, “strongly agree” with enough time and “strongly disagree” with rushed). If one expands the concordant category to include responses differing by only one scale point, then 208 (96.7%) responses are logical. It thus appears unlikely that significant ARS bias was present in the patient survey. Because ARS has been associated with low education in past studies, it was not deemed necessary to include a check for bias in the physician study.

Survey method. Physician and patient reaction to the encounter was obtained by written questionnaires self-administered by physicians and questionnaires administered by an interviewer to patients. Second-year medical students (all female) were assigned to carry out the survey. The students entered the assigned area and placed physician survey forms on all charts of patients being seen that morning or afternoon. Physicians were instructed in the purpose of the survey and how to complete the form at a conference prior to initiation of the study. All 250 encounters were documented by the physician. Ten PGY-2 residents, 11 PGY-3 residents, and 6 faculty physicians were sampled for at least one encounter, with individual physicians documenting from 1 through 26 encounters. PGY-2 physicians documented an average of 7 encounters; PGY-3 physicians, 8 encounters; and faculty, 15 encounters. Physician characteristics are presented in Table 2.

To approach exiting patients, students stationed themselves adjacent to the checkout receptionist.

Patients who agreed to participate were led to a quiet spot for the interview. Interviewers gave patients a response card to help them select an appropriate response to each question. Patients who did not choose to spend additional time at the FPC or who were not intercepted at the exit (because the students were busy with other patients, for example) were interviewed by phone. Of the 250 patients approached for an interview, 188 (75.2%) were interviewed at the FPC, 28 (11.2%) were interviewed by phone, 12 (4.8%) declined to be interviewed, and 22 (8.8%) were unreachable by phone after three attempts. Thus the patient database consists of 216 interviews (86.4% response rate). The 34 nonrespondents did not differ significantly from respondents in sex, age, race, or insurance status (Table 2).

Analysis was conducted using SAS statistical software. Student's *t* was used to test for statistical significance in item scores; χ^2 was used to test categorical differences.

RESULTS

GENERAL PHYSICIAN SATISFACTION

Physicians expressed strong agreement with the general satisfaction statement, “I left the exam room feeling satisfied with the encounter,” 38% of the time (94/250 encounters), and simple agreement 50% of

TABLE 3

Effect of Physician Academic Position on Reported Satisfaction with a Patient Encounter

	Physician Academic Position		P Values*
	Resident	Faculty	
No. of encounters	163	87	
General satisfaction item, n (%)			
"I left the exam room feeling satisfied with the encounter."	84 (52)	10 (12)	<.001
Satisfaction scale items, n (%)			
"I found this patient easy to interact with."	97 (60)	33 (38)	.013
"The patient understood my explanations and recommendations."	80 (49)	13 (15)	<.001
"I felt comfortable dealing with this patient's problems."	83 (51)	21 (24)	<.001
"The patient seemed satisfied with the visit."	87 (53)	21 (24)	<.001
"I was able to spend enough time with the patient during this visit without feeling rushed."	86 (3)	9 (10)	<.001

*P values calculated using Fisher's exact test on a 2 x 2 table contrasting highest as compared with all other levels of satisfaction.

the time. Only 12% of encounters resulted in neutral or dissatisfied responses. While resident physicians reported themselves as fully satisfied on more than half (52%) of all encounters, faculty physicians were strongly satisfied only 12% of the time. Resident physicians reported greater satisfaction with all aspects of patient encounters than did faculty physicians (Table 3.) The effect of the difference in satisfaction between faculty and residents was so pervasive that all remaining analyses of physician attitude were performed within the same category, ie, all faculty or all residents.

Among residents, neither general physician satisfaction nor satisfaction with other elements of the encounter varied with physician gender. Analysis of physician satisfaction by physician race was limited to residents, since the sample did not contain any nonwhite faculty physicians. African American physicians did not report overall levels of satisfaction higher than their peers (data not shown); African American physicians were more likely to find the patient easy to talk to than were white physicians. Identical race (both physician and patient of same race) and both identical race and sex did not yield higher levels of resident physician satisfaction than absence of these variables.

Among faculty, female physicians were more likely than their male counterparts to express the highest level of overall satisfaction and were more satisfied with all elements of the encounter except time available (Table 4). Faculty physician satisfaction was not influenced by patient gender, but did vary when patient and physician were the same sex. Encounters involving physician and patient of the same sex offered the physician more overall satisfaction, resulted in the perception that the patient understands the physician's instructions, and involved problems that the physician was comfortable handling. Although their overall satisfaction did

not vary with patient race, faculty were more likely to find nonwhite patients easy to talk to (51% of encounters with nonwhite patients, compared with 24% of encounters with white patients, received the highest satisfaction score on this measure; $P = .021$), and to believe that the patient was satisfied with the encounter (36% of nonwhite encounters, compared with 12% of white encounters, received the highest rating in this measure; $P = .020$). Because all faculty physicians were white, comparisons based on physician and patient of the same race yielded similar findings. Complete race and gender congruence between patient and physician did not influence physician satisfaction.

Encounters described by the physician as "possibly serious or emergency" were less satisfying on all measures for resident physicians. For faculty physicians, satisfaction was not affected by perceived seriousness, because faculty rated all encounters as "routine."

Characteristics of the encounter found *not* to influence physician satisfaction included the patient's source of payment, whether the patient was seeing his or her regular physician, and whether the visit was scheduled in advance. Patient's source of payment did not vary with physician status; resi-

TABLE 4

Influence of Faculty Physician Gender on Satisfaction with a Patient Encounter

Variable	Physician Gender		P Values*
	Male	Female	
Total no. of encounters	63	24	
General satisfaction item, n (%)			
"I left the exam room feeling satisfied with the encounter."	3 (5)	7 (29)	<.001
Satisfaction scale items, n (%)			
"I found this patient easy to interact with."	16 (25)	17 (71)	<.001
"The patient understood my explanations and recommendations."	2 (3)	11 (46)	<.001
"I felt comfortable dealing with this patient's problems."	8 (13)	13 (54)	<.001
"The patient seemed satisfied with the visit."	7 (11)	14 (58)	<.001
"I was able to spend enough time with the patient during this visit without feeling rushed."	4 (6)	5 (21)	NS

dents and faculty, for example, saw approximately the same number of patients with no payment source (8% and 12%, respectively).

GENERAL PATIENT SATISFACTION

General patient satisfaction was measured by the response to the question "How satisfied are you with the care you received today." Only one person of 216 was "very dissatisfied" (0.5%), while 3 (1%) were unsure, 43 (20%) described themselves as "satisfied," and 169 (78%) were "very satisfied." General patient satisfaction, measured by the proportion who were fully satisfied compared with those less than fully satisfied, was not influenced by respondent age, sex, race, patient-perceived seriousness of visit (routine, serious, or emergency), whether the visit had been scheduled in advance, or whether the patient saw his or her regular physician. Patients with no health insurance were least satisfied with the care they received, while those with private health insurance were most satisfied. Among patients with insurance from any source, differences in satisfaction were not statistically different across payment classes. Patients were also more likely to be fully satisfied if they believed themselves to be in good health and if they did not experience a long

wait (Table 5). General patient satisfaction was unaffected by physician characteristics (race, sex, or academic position, ie, faculty or resident) or by the interaction between patient and physician demographics (data not shown).

Findings for the other items on the scale measuring patient satisfaction parallel those for general satisfaction. The proportion of patients giving their physician the highest possible rating on each individual satisfaction measure ranged from 68% to 77% (data available from authors). Answers to a control question, "I understand how my health insurance works," were more neutral, with only 43%

offering complete agreement. While overall satisfaction was influenced by the patient's self-defined health and the time spent waiting for care, most ratings of physician performance were not. Patients in "fair" health were more likely than others to consider their physician "unsure while examining" them (61% assigning most favorable rating), while those in "very good" health were most satisfied on this element (86% giving most favorable rating).

Analysis of waiting time was limited by the survey wording, which set "15-30 minutes" as the shortest wait; only 23 patients waited longer than this. While patients with longer waits were generally less satisfied with their care across all items measured, in only two areas did these differences reach statistical significance. Patients who waited longer than 30 minutes were less likely to perceive their physician as having told them what to expect (41% assigning the highest ranking as compared with 71% among those with shorter waits) and less likely to believe the physician spent enough time with them (52% vs 76%).

MULTIVARIATE ANALYSIS OF PHYSICIAN AND PATIENT ATTITUDES

Physician satisfaction was measured along six

TABLE 5

Factors Influencing Overall Patient Satisfaction Exclusive of Physician Behavior

Variable	Level of Satisfaction		P Values*
	Low to Moderate n (%)	High n (%)	
Length of wait			
<30 minutes	34 (18)	159 (82)	
>30 minutes	13 (57)	10 (43)	<.0001
Self-described health			
Poor	9 (41)	13 (59)	
Fair	18 (32)	38 (68)	
Good	17 (19)	72 (81)	
Excellent	3 (6)	46 (94)	.001
If patient saw "regular" physician			
Yes	23 (17)	111 (83)	
No	23 (28)	58 (72)	NS
Payment source*			
Self-pay	8 (47)	9 (53)	
HMO	13 (25)	42 (75)	
Private insurance only	6 (12)	46 (89)	
Government (Medicare and Medicaid)	18 (22)	63 (78)	.022

*Excludes 18 persons with no information available and 5 persons handled through workmen's compensation.

plus five dimensions) and general patient satisfaction ($P=.548$). Reversing the analysis, there was no relationship between general patient satisfaction plus the other items and general physician satisfaction ($P=.377$).

ACCURACY OF PHYSICIAN PERCEPTION OF PATIENT SATISFACTION

Physician perception of patient attitudes can be inaccurate, either over- or underestimating the patient's satisfaction. All visits for which the physician incorrectly gauged the patient's satisfaction were examined separately, sorted by whether the

patient was less satisfied ($n = 20$) or more satisfied ($n = 105$) than the physician believed. Two logistic regression analyses were performed to identify factors leading to a patient less happy than the physician thought. The first focused on patient attitude variables, physician academic position, patient's reported health status, waiting time, and whether the person responded to the questionnaire in person or by phone. The second used physician attitude variables (except for the scale item "The patient seemed satisfied with the visit," which was used to develop the discordance measure), physician academic position, patient's reported health status, patient waiting time, and phone response.

Examining patient attitudes, two variables significantly increased unperceived dissatisfaction: low satisfaction with the attention perceived to have been paid to the patient by the physician ($OR = 18.218$; $CI, 1.160$ to 286.172), and greater than half an hour waiting time ($OR = 6.254$; $CI, 1.479$ to 26.456). In the physician attitude model, unperceived dissatisfaction was again associated with waiting time greater than half an hour ($OR = 7.7280$; $CI, 1.228$ to 48.655). Unperceived dissatisfaction was reduced when the physician did not find the patient easy to interact with ($OR = 0.108$; $CI, 0.012$ to 0.997) and when the physician was not fully satisfied ($OR =$

dimensions: an overall measure of satisfaction and five potential contributing factors. To determine which factors contributed most to physician satisfaction, a multivariate logistic analysis examining all five factors was conducted. Because of the marked influence of physician academic position (whether faculty or resident) and physician gender (among faculty), these variables were also considered. All elements of the encounter with the exception of "easy to talk to" were found to contribute positively to overall physician satisfaction. Faculty physicians continued to report lower overall satisfaction, even with other elements of the encounter controlled.

In a logistic model including all patient attitude variables, only "the doctor told me what to expect" significantly reduced patient dissatisfaction (odds ratio $[OR] = 0.192$; confidence ratio $[CI], 0.054$ to 0.679 ; data available from authors). When the model was expanded to control for self-reported health, wait before being seen, and location of response (whether interview conducted onsite at the FPC or by telephone), no attitudinal statement was associated with overall patient satisfaction. Other things being equal, only the length of a patient's wait before being seen affected general satisfaction with care.

Logistic regression showed no significant relationship between physician satisfaction (general

0.084; CI, 0.011 to 0.660), suggesting that relatively unhappy physicians do not overestimate the satisfaction their patients report.

RESPONSE ISSUES AND POTENTIAL SOURCES OF BIAS

Among the 216 respondents, 188 were interviewed in the FPC immediately after their visit and 28 were contacted by phone. Phone and in-person respondents did not differ with regard to age, sex, race, whether they saw their regular physician, whether their visit was scheduled in advance, how long they waited before being seen, or the perceived seriousness of their visit. Patients contacted by phone did evaluate their care differently. On almost all satisfaction measures, phone respondents were significantly less pleased with the care that they received than were in-person respondents; they were also more likely to be in poor health. On a neutral question, "I understand my health insurance," telephone respondents did not differ from in-person respondents. In multivariate analysis, however, response locale was not a significant influence on satisfaction.

DISCUSSION

Physicians were satisfied with most (88%) patient encounters. Encounters in which the patient understood the physician's instructions and seemed satisfied, and in which the physician was comfortable addressing the patient's problems and had adequate time for the encounter, were more likely to be satisfying than others. Resident physicians were significantly more satisfied than faculty.

Lower satisfaction among faculty physicians has four possible sources. Response bias among faculty, leading them uniformly to choose "satisfied," was deemed unlikely because faculty were "very satisfied" with some encounters, suggesting a considered assessment. Differences may stem from the enthusiasm of resident physicians, who are new to patient care. The pressures of an academic career may detract from the satisfaction faculty derive from patient care. Potentially most troubling, differences between resident and faculty physicians may be linked to professional experience. Faculty physicians have been practicing longer, in an environment that has seen profound changes; these changes, or simply burnout over time, could account for lower satisfaction.

High patient satisfaction, which led us to distinguish between "fully satisfied" and all other answers, was encouraging. Clinically, patient satisfaction influences the degree to which treatment recommendations are followed.⁷ In addition, emerging literature suggests that providers must aim for complete patient satisfaction; anything less may lead patients to change physicians.¹⁹ Analysis of low satisfaction levels among self-pay patients was impeded by the small number of such patients (n=17). We speculate that persons who pay the entire cost of their care are more sensitive than others to anything that appears to detract from the value they receive.

Our study did not confirm previous findings^{8,9} that patients were more satisfied with female physicians. Within a single clinic, where all physicians are encouraged to follow a similar practice style, gender differences may be less important. Similarly, racial differences may be eliminated when all physicians studied are in one practice.

Among physician behaviors, the scale item "The doctor told me what to expect" had a significant effect on overall patient satisfaction. When analysis included waiting time, perceived health status, and place of response as well as physician behavior, only waiting time significantly influenced satisfaction. Possible explanations for the small influence of physician behaviors include the scale used, which may not have addressed issues of greatest concern to patients, and the "halo effect," which may lead patients to rate an encounter similarly on all dimensions. Alternatively, the dissatisfying effect of waiting may be so pervasive that good physician care cannot make up for it. If this is correct, physicians should ensure that their scheduling is patient friendly.²⁰

Physicians must work to identify patients who are unhappy with their care, since patients are not likely to complain to their doctor.⁴ In our study, dissatisfied patients did not always communicate their dissatisfaction; roughly two of every five were not identified by their physician. Patient factors associated with unperceived dissatisfaction included waiting time and a perception that the physician did not pay attention during the visit.

Persons surveyed at home were less satisfied than those interviewed at the FPC. This difference may be an artifact. Respondents at home, without a response card, may have been more general in their answers. Alternatively, respondents who did

not wait for an interview were less satisfied. Since telephone respondents did not differ when asked a neutral question regarding health insurance, we believe that refusal to participate in the survey is an index of dissatisfaction, and that the lower scores reported by telephone respondents reflect their dissatisfaction.

Survey instruments are important tools for quantifying patient satisfaction across possible areas of improvement and tracking change over time. Vague statements, such as "doctors respect their patient's feelings," should be avoided in favor of questions specific to an episode of care.²¹ Several excellent guides for satisfaction surveys are available, including materials developed by the Canadian Medical Association²² and the American Academy of Family Physicians (AAFP).²³ The AAFP guide includes a sample survey based on the 12-item patient satisfaction scale developed for the Medical Outcomes Study,²⁴ which could be expanded to address a specific practice.

The current study had several limitations. First, while the number of encounters studied was reasonable (250), the number of resident (27) and faculty physicians (6) involved was small. Lower satisfaction among faculty could be attributable to individual idiosyncrasies. Second, questions for physicians and patients were similar, but not identical; concepts measured among patients and physicians may not be fully comparable. Third, physicians knew that patients would be interviewed and this may have modified their behavior.

CONCLUSIONS

Physicians need to understand their patients, both to do good (providing care that is understood and acted on by the patient) and to do well (retaining patients in a competitive environment). Our findings suggest that careful observation, including periodic satisfaction surveys, is needed to identify areas of dissatisfaction. The study also suggests that physicians enjoy encounters in which they have adequate time, feel competent to address patient problems, and believe that they have communicated successfully with the patient. Changes in the organization of medical care that reduce the time available for each patient or severely restrict physicians' ability to seek subspecialist consultation may decrease

physician satisfaction and contribute to physician burnout.

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