

Patient-Satisfaction Data and Residents' Physician-Patient Skills

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This article identifies the variables that patients felt were a measure of physician competence or desirability, based on the patients' perceptions and opinions of the qualities that make up a "good" physician.

Once these variables were identified, a concise, valid, and reliable patient-satisfaction survey instrument was designed to be used in assessing patient satisfaction on an annual basis. The data obtained could then be used in the residency-training process to give residents feedback on their physician-patient relationships and to provide a source of needs-assessment data for the behavioral science portion of the curriculum in the family medicine residency program. This paper reports on the progress that has been made on the initial survey, which was performed to develop a reliable instrument.

Methods

The study was conducted at the Family Practice Center of the Medical College of Ohio as part of the residency training program. Nine second- and

third-year residents were rated by their patients using a patient-satisfaction questionnaire developed for this purpose. First-year residents were excluded from the study, as they did not have a sufficient number of patients at the time to obtain meaningful data.

The patients who received questionnaires were 18 years of age or older and had been seen at the center during the previous eight months. One further restriction was that only one member of a family receive a questionnaire. In the event that several members of a family were patients at the Family Practice Center, one was selected at random. These criteria resulted in a sample of 469 patients. The sample was 65 percent female and 35 percent male and divided into the following age categories: 18 to 29 years (52 percent), 30 to 39 years (23 percent), 40 to 49 years (7 percent), 50 to 59 years (8 percent), and 60 years and older (10 percent).

The patient-satisfaction questionnaire contained 29 items that measured three broad content areas: patient variables, physician variables, and practice variables. The patient variables requested such demographic information such as age and educational level. The physician variables measured aspects of the physician's interaction with the patient, such as "Did the physician spend enough time with you?" and "Does the physician explain your medical problem sufficiently?" The practice variables measured various aspects of the Family Practice Center, such as "How long is the wait?" or "How quickly can you get an appointment?" Each of the physician and practice variables was scored on a Likert-type scale that varied between three and six alternatives. Patient satisfaction was

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scored on a four-point Likert-type scale based on the patient's response to the question: "Overall, how satisfied are you with the care you receive at the Family Practice Center?"

The patient-satisfaction questionnaire was sent to 469 patients. Thirty-six were returned as undeliverable by the post office. The return rate for the remaining 433 patients was 49.0 percent.

Results

The distribution of ages of those responding appeared to be representative of the original sample ($\chi^2 = 9.29$, $df = 4$, $.05$, $P < .10$). However, relative to the original sample, women (73 percent) appear to be overrepresented among patients who responded ($\chi^2 = 5.73$, $df = 1$, $P < .025$). Women may simply be more willing to return a questionnaire of this type. However, since there was no control over who completed the questionnaire, it could be that questionnaires sent to husbands or sons were filled out by wives or mothers.

The racial mix of the respondents was 12 percent black, 85 percent white, and 3 percent other (Hispanic, Oriental, Asians). The educational level of the respondents was quite varied: some high school (22 percent), high school graduate (25 percent), some college (31 percent), college graduate (10 percent), and postgraduate (12 percent). Fifty-four percent of the respondents were employed.

In contrast to previous research¹⁻³ patient satisfaction was unrelated to age, race, educational level, and employment status in the present study. Although men were somewhat more satisfied than women ($r = .145$, $df = 201$, $P = .04$), the relationship was so weak as to be of little practical importance.

The patients' ratings of physician variables were submitted to a correlation analysis with patient satisfaction as the dependent variable. All physician variables were significantly related to satisfaction ($P < .0001$), with correlations ranging between .279 and .657. The internal consistency reliability of the physician variables subscale as measured by Cronbach's alpha was .90.

Since one of the purposes of the present study was to identify the "most important" physician

variables in determining the degree of patient satisfaction, the patients' ratings of physician variables were analyzed using stepwise regression analysis with patient satisfaction as a dependent variable. The four variables selected are listed in order of entry into the regression equation: "Was the physician concerned about the patient?" "Was treatment effective?" "Did the physician spend enough time with the patient?" and "Does the patient feel she/he can call the physician if needed?" The four variables accounted for approximately 56 percent of the variability in patient-satisfaction scores ($r = .753$, $F = 52.99$, $df = 4$, 162). The remaining physician variables did not sufficiently increase the variance accounted for by the regression equation to be included.

Comment

Based on this study, a revision of this instrument will be incorporated as part of the residents' annual evaluations. However, it is evident that more work must be done to determine the components of the construct "patient satisfaction." Use of this questionnaire will provide data for continuing this research and for assessing the validity of patient satisfaction as a measure of physician-patient skills.

References

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