

## Fulfillment of Patient Requests In a General Medicine Clinic

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**Abstract:** For initial visits to a longitudinal-care internal medicine clinic, we elicited patients' requests for problems to be addressed, measured patients' assessments of request fulfillment, and determined correlates of request fulfillment. Patients rated all requests as fulfilled in 62 of 71 cases (87 per cent). Fewer pre-encounter patient-reported problems, discretionary features of the doctor-patient encounter including more time spent eliciting history of present illness, and greater completeness of laboratory testing were associated with request fulfillment. (*Am J Public Health* 1984; 74:257-258.)

Measuring the extent to which patient requests are fulfilled in encounters with clinicians may provide useful information on the outcomes of medical care, whether such outcomes are characterized for purposes of research or clinical program management. Previous studies have demonstrated that elicitation and fulfillment of outpatients' requests and expectations are associated with improvement in several other health care outcomes including patient satisfaction,<sup>1-4</sup> symptom relief,<sup>1,2</sup> and compliance.<sup>2</sup> The relationships of request fulfillment with patient characteristics and the content of doctor-patient encounters have not been investigated. Identification of these relationships will be important to the use of request fulfillment as an outcome measure, and may prove useful in implementing and understanding effective medical care processes.

### Methods

This study took place during four months of 1977 at initial visits to the Medical Comprehensive Care Unit (MCCU), a longitudinal-care, general medicine clinic at the Seattle Veterans Administration Medicine Center (SVAMC). Study subjects were 71 consecutive patients (mean age  $\pm$  S.D. = 60.3  $\pm$  13.2 years, 96 per cent male) who completed self-administered health history questionnaires (SAHHQ).<sup>5</sup> These patients were referred either from other SVAMC clinics or inpatient services. Providers were seven MCCU staff board certified internists (39 patients) and nine internal medicine residents (32 patients). Just prior to meeting the physicians, patients completed a SAHHQ in which they were asked to list "health problems you feel should be dealt with today" (herein termed "requests").

By randomization the SAHHQs of 36 patients were shown to physicians and 35 were not. Immediately following the visit, patients circled each problem they felt had been

"dealt with" during the visit. Patients were divided into a "requests fulfilled" group (RF, N = 62, 87 per cent of patients) who indicated all requests had been addressed, and a "requests unfulfilled" group (RU, N = 9, 13 per cent of patients) who indicated one or more request had not been addressed.

Pre-encounter data, collected from patients' charts or SAHHQ, included patients' demographic status (age, sex, marital status, education), function (employment, disability), health care utilization (sources of care, number of clinic visits, number of hospitalizations), and patient-reported health status (number of health problems and number of complaints listed on SAHHQ review of systems). Encounter data collected included Roter Interactional Analysis<sup>6</sup> of audiotapes of the encounter,<sup>7</sup> length of history and physical examination, the physician's assessment of the reliability of the patient's history, and completeness of examination and laboratory testing scores.<sup>8</sup> The latter are weighted (for clinical importance) scores for database items included in the examination of outpatients.<sup>8</sup>

Following the visit, nonphysician research personnel were instructed to rate physician performance from the patient's perspective by listening to audiotapes and completing a reliable, valid satisfaction questionnaire.<sup>7</sup> Finally, clinic records were monitored to determine compliance with next scheduled MCCU appointment.

### Results

For all 71 patients, the mean visit length was 45.0  $\pm$  11.7 minutes. The mean number of self-reported problems was 3.4  $\pm$  1.6, and the mean number of requests was 2.1  $\pm$  1.1. Of 148 requests, 58 concerned symptoms (e.g., chest pain), 52 diseases (e.g., hypertension), 28 organs (e.g., "check out my heart"), 5 administrative matters (e.g., test results), and 5 diagnoses (e.g., "what's wrong with me?").

Statistically significant bivariate differences between RF and RU groups are shown in Table 1. Of pre-encounter variables, RF patients had fewer self-reported problems. Of encounter variables, RF patients had greater completeness of laboratory testing scores, spent more time discussing their histories of present illness, and were rated as more reliable historians. Audiotope observers rated RF patients' physicians as being more thorough and attentive. RF patients also made fewer requests, asked fewer questions during the encounter, and waited longer to ask their first question, but these findings were not statistically significant ( $p < .1$ ).

Neither type of request (e.g., symptom, disease, etc.) nor physician exposure to SAHHQ, however, were associated with request fulfillment. When controlled for number of problems by stepwise discriminant analysis, laboratory testing completeness—but not time spent discussing history of present illness—remained significantly associated with request fulfillment ( $p < .05$ ).

### Discussion

Request fulfillment is a potentially useful yet relatively neglected measure of health care outcome which could be

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TABLE 1—Differences between Requests Fulfilled and Requests Unfulfilled Patient Groups

	Fulfilled (N = 62)	Unfulfilled (N = 9)	
Number of patient reported problems	3.2 ± 1.5	5.1 ± 2.1	<.01*
Length of history of present illness interview (minutes)	17.9 ± 9.1	12.3 ± 4.4	<.01**
Laboratory test score (0, min.-50, max.)	39.7 ± 7.2	33.1 ± 10.5	<.05*
Physician ratings of patient's reliability as a historian (0 = poor, 5 = excellent)	4.1 ± 0.8	3.6 ± 0.7	=.05*
Observer ratings of physician's thoroughness (1, min.-5, max.)	3.9 ± 0.6	3.1 ± 1.0	<.01*
Observer ratings of physician's attentiveness (1, min.-5, max.)	3.8 ± 0.8	3.0 ± 1.0	<.025*

\*2-tailed t-test, pooled variance estimate.

\*\*2-tailed t-test, separate variance estimate.

simply assessed by clinicians and clinic managers in outpatient settings.<sup>3</sup> The results of this study suggest request fulfillment is itself related to several characteristics of patients and doctor-patient interactions.

Although these patients, on average, wished to have two-thirds of all self-reported health problems addressed at their initial visits, most apparently felt their problems were addressed. One measure of patients' perceptions of their health status—the number of self-reported health problems—predicted the likelihood of request fulfillment. It may be that patients with larger numbers of problems, and thus more requests, were less likely to have them all addressed within the time limits for initial appointments in this setting.

Our observations also suggest that the performance of laboratory tests may exert a powerful influence on patients' perceptions of medical care outcome. Although few patients in this sample specifically requested laboratory tests, greater use of tests correlated with patients' assessments of request fulfillment. While it is not known why tests were ordered or who (patients or physicians) initiated test ordering, our data are consistent with previous findings<sup>9</sup> that non-diagnostic laboratory tests are likely to improve other patient-perceived outcomes such as quality of care or functional recovery.

Our observations pertain only to first visits to a clinic designed for long-term care of a selected population. Problems not addressed at this visit could have been addressed at subsequent visits, and the effect of tests in the context of an established doctor-patient relationship may be different than at their first meeting. The first visit, however, may be particularly important to establishing doctor-patient relationships and subsequent agenda for care. In this light, it is provocative that a smaller proportion of RU than RF patients (78 per cent vs. 95 per cent) actually returned for subsequent scheduled appointments limiting the potential for addressing requests left unfulfilled at the initial visit.

Our data also suggest some patients were likely both to cite a larger number of requests and to elicit a less sympathetic and thorough response from his physician. This observation is potentially important and needs to be explored further.

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