ORIGINAL ARTICLES

Unmet Expectations for Care and the Patient-physician Relationship

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OBJECTIVE: To profile patients likely to have unmet expectations for care, examine the effects of such expectations, and investigate how physicians' responses to patients' requests affect the development of unfulfilled expectations.

DESIGN: Patient and physician questionnaires were administered before and after outpatient visits. A follow-up telephone survey was administered 2 weeks post visit.

SETTING: The offices of 45 family practice, internal medicine, and cardiology physicians.

PATIENTS: Nine hundred nine adults reporting a health problem or concern.

MEASUREMENTS AND MAIN RESULTS: Before their visits, patients rated their general health and trust in the index physician. After the visit, patients reported upon 8 types of unmet expectations and any request they made. Two weeks thereafter, patients rated their visit satisfaction, improvement, and intention to adhere to the physician's advice. They also reported any postvisit health system contacts. Overall, 11.6% of patients reported ≥1 unmet expectation. Visits in which a patient held an unmet expectation were rated by physicians as less satisfying and more effortful. At follow-up, patients who perceived an unmet expectation for care also reported less satisfaction with their visits, less improvement, and weaker intentions to adhere. Patients with an unmet expectation related to clinical resource allocation had more postvisit health system contacts. Unmet expectations were typically reported by a patient whose request for a resource was not fulfilled.

CONCLUSIONS: Unmet expectations adversely affect patients and physicians alike. Physicians' nonfulfillment of patients' requests plays a significant role in patients' beliefs that their physicians did not meet their expectations for care.

KEY WORDS: unmet expectations; residual expectations; patient satisfaction; adherence; physician-patient communication.

Patients' evaluations of their medical encounters and health care providers are made, at least in part, in reference to their expectations for care.[1–3] The clinician with an awareness of a patient's expectations is better able to satisfy the patient's justified desires and to initiate frank discussions about those expectations that are unrealistic, leading to more productive clinical negotiations.[4,5] Communication strategies for minimizing unmet expectations are well known,[6] but physicians all too often neglect to solicit their patients' expectations and concerns,[7,8] a failure that can adversely affect health outcomes.[9]

More is known about the prevalence of patients' desires for care[10] than about the occurrence of unmet expectations. Kravitz et al. found that 18% of the patients of a sample of internal medicine physicians had 1 or more unfulfilled expectations.[2] The most immediate postvisit nonfullfillment of expectations for care was for physical examination (5.5%), followed by laboratory testing (5.2%), referrals to specialists (5.0%), history taking (4.9%), physician preparation for the visit (4.3%), and prescription of medications (3.6%). Marple et al. examined the unmet expectations of patients with physical complaints 2 weeks after their visits; unmet expectations for tests and for referrals were held by 19% and 26% of patients, respectively. These unmet expectations were predictive of low patient satisfaction.[11] With some exceptions,[12,13] other studies have also found unmet expectations for care to be associated with lower patient satisfaction,[10,14–16] which is itself predictive of malpractice litigation, doctor-switching, and poor adherence to therapy.[17–21]

It has been argued that patients' requests can mediate the relationship between their expectations and physicians' clinical behaviors.[2] Patients' expression of expectations through requests is important because doctors often underestimate patients' desires for care.[22] Requests can lower the likelihood of having unmet expectations by securing from the physician desired resources or by

prompting the physician to explain to the patient why his or her expectations are unrealistic. In essence, requests make possible negotiations between patients and physicians about suitable courses of action,[5] and may foster request fulfillment, which can enhance patient satisfaction.[23,24]

Investigators need to be clear about what they mean by "expectation," a concept that has often been used inconsistently.[25] Kravitz has observed that some investigators have focused on what patients think will happen (probability expectations), whereas others have been concerned about what patients would like to happen (value expectations). These expectations have been examined in terms of both general expectations for care and visit-specific expectations, and with regard to the structure through which care is delivered, the process of care, and resulting outcomes.[4] Our focus is upon patients' visit-specific value expectations concerning the process of care.

To date, much of the research on patients' expectations has focused on the effects of unmet expectations in primary care contexts, emphasizing patient satisfaction. In this study, we extend past work in 4 ways. First, we compared the predictors and effects of unmet expectations across 3 specialties. Second, we assessed a wide array of patient, physician, and visit characteristics associated with unmet expectations. Third, we examined the impact of unmet expectations on physicians as well as on patients. Fourth, we investigated how patients' requests and physicians' fulfillment of those requests affect perceptions of care.

METHODS

Settings and Recruitment of Physicians

This study is a component of a large-scale investigation of doctor-patient interaction carried out in the 2 largest health care systems in Sacramento, California—Kaiser-Permanente (KP), a group model HMO, and the University of California–Davis Medical Group (UCDMG), a multispecialty group practice with explicit utilization review. Physicians practicing family medicine, internal medicine, or cardiology were encouraged to participate in the study if they were delivering patient care 20 or more hours per week. Eligible physicians were recruited at Kaiser by mail and through interpersonal contact. At UCDMG, the group's Associate Medical Director identified appropriate practice sites and helped to recruit physicians from each site.

Patient Recruitment

English-speaking adults ($\geq$18 years old) were sampled from among patients scheduled to see a participating physician during rolling screening periods held from January through November 1999. Potentially eligible patients were identified from appointment lists obtained 1 to 2 days in advance of the visit. During the data collection period, 4,560 patients were randomly selected for phoning; after up to 3 phone calls per household (conducted over 1 to 2 evening sessions), 2,606 patient telephone contacts were made (contact rate, 57%). Patients were eligible for the study if they could complete a written questionnaire, were willing to provide written informed consent, and had a new or worsening problem or were at least "somewhat concerned" (>3 on a 1 to 5 scale) that they might have a serious, undiagnosed disease.[14] Among the 4,560 patients selected for phoning, 909 provided usable study data, 423 were eligible but not enrolled (including 161 refusals and 162 late withdrawals), 2,407 were of unknown eligibility, and 821 were confirmed ineligible. Of those confirmed ineligible, 69% had no new problem or significant health concern, 7% could not speak English, 16% had no doctor visit or did not intend to keep their appointment, and 7% had a mental or physical impairment that could interfere with survey completion. Among those contacted and for which eligibility could be determined ($n = 1,929$), 61.8% were eligible. Applying this rate to the population of patients for whom eligibility could not be determined ($n = 2,407$), the net response rate was 32.2% (i.e., 909/(909 + 423 + [.62 $\times$ 2,407]).[26] The cooperation rate (survey completion rate among those known to be eligible) was 68.2% (909/(909 + 423). Among enrollees, 98% completed 2-week telephone follow-up interviews. Patients received a $10 honorarium for completing the study.

Data Collection

Data were collected from patients at 4 points in time. Participating patients completed a brief telephone screening questionnaire administered 1 to 2 days prior to the index visit, a self-administered questionnaire before the index visit, a self-administered questionnaire immediately after the visit, and a telephone follow-up survey approximately 2 weeks after the visit. For 99.3% of patients, physicians completed a postvisit evaluation form.

Physicians' Postvisit Evaluations

Following each visit, the physician rated, on 2 single-item 5-point scales, how Demanding (effortful) and Satisfying the visit was in comparison with the typical visit (range, 1 to 5, with 5 equal to far more demanding/satisfying than typical). Visit Length was estimated in minutes by physicians immediately after the visit; such estimates have correlated highly with actual visit length in our research.[27] This estimate was used as a control variable in several analyses reported later.

Patients' Reports and Evaluations

Unmet Expectations. In the immediate postvisit questionnaire, a section modeled after the procedures of Kravitz et al.[2] was included that was introduced as follows:

> *When people go to the doctor, they usually bring some thoughts about how the doctor can be of the most help. Sometimes, however, the doctor may not be able or willing to do exactly what the patient wants. These next*

few questions are about things you felt were necessary for the doctor to do today but which (for whatever reason) didn't happen.

The checklist that followed included 3 items pertaining to: clinical data collection (failure to prepare for the visit, questions that should have been asked but were not, and parts of the physical examination that were not performed); allocation of clinical resources (diagnostic tests/x-rays that should have been ordered or performed but were not, new medications that should have been prescribed but were not, and specialist referrals that should have been made but were not); information and counseling (medical information that should have been given but was not and counseling that should have been provided but was not); and other matters (other things not mentioned that the patient felt were necessary for the doctor to do but which did not happen). For each of these 9 issues, patients indicated if they felt the physician had left something out (unmet expectation), had done everything possible (no unmet expectation), or were uncertain. These responses were recoded in the analyses reported later as follows: 0 = no unmet expectation/uncertain, 1 = unmet expectation.

Requests for Information and Action. Patients reported immediately after the index visit if they had asked the physician for medical information, 1 or more elements of the physical examination, a diagnostic test or procedure, new medications, a specialist referral, physical therapy and/or medical equipment, assistance with paperwork or forms, or any other kind of help. These request categories were clarified with examples in the postvisit questionnaire. When the patient reported making a request within 1 of these 8 categories, they subsequently checked 1 of 4 boxes: "I was given everything I asked for," "I was given some of what I asked for," "My request was ignored," or "My request was denied." For each of these 8 request foci, patients were placed into 1 of 3 categories: (1) request made/complete fulfillment; (2) request made/less than complete fulfillment (i.e., request was partially fulfilled, ignored, or denied); (3) no request made.

Patient Evaluations. Four outcome measures were taken during the follow-up phone interview with patients, conducted approximately 2 weeks after the index visit. (1) Patients rated their Satisfaction with the care they received on a widely used instrument composed of five 5-point agreement scales.[28] These items were averaged to create a Satisfaction score (Cronbach[29] α = 0.88; range, 1 to 5, with 5 equal to greatest satisfaction). (2) Patients made a direct rating of Symptom Improvement on a single 5-point scale (1 = much worse/5 = much better). (3) Adherence Intention was assessed at follow-up with an item that asked if they "intend to follow the advice" of the physician (range, 1 to 5, with 5 equal to strongest intention to adhere). (4) Health care utilization was assessed by asking patients if they had gone to an emergency department, been an overnight

hospital patient, made contact by phone or in person with the index physician, and had any contacts with another physician concerning the index visit problem since the visit 2 weeks earlier ("yes"/"no" response format). Their responses were used to create a Health System Contacts index that reflected the number of affirmative responses to these 4 questions (range, 0 to 4, with 4 equal to high utilization).

Two other sets of evaluations, assessed prior to the visit, were included for the purpose of statistical control. First, the variable General Health Perceptions was assessed with the SF-36 health survey items for this construct (α reliability, 0.81).[30] Second, we controlled for Trust in the physician because it has been observed that unmet expectations may be more likely to foster dissatisfaction when patient and physician do not have a quality relationship.[13] This variable was assessed by averaging responses on 9 items developed for this study on the basis of previous patient focus groups and pilot testing. The wording of some of the items was patterned after items appearing in 2 published scales.[31,32] These items asked patients to judge their level of trust in their physician's honesty, competency, and agency (the extent to which the physician acts in their interests at all times) on 5-point response scales (α reliability = 0.90, 5 = complete trust).[33] Trust could not be assessed for those 195 patients (21.5% of the sample) who had no prior experience with the index physician. We thus created a 4-category trust variable that classified patients into low, moderate, or high (relative) trust groups of nearly equal size or into a fourth category labeled "no prior relationship." These 4 categories were represented as 3 dummy-coded covariates in our analyses.

Statistical Analyses

Analyses were corrected for the clustering of patients within physicians using the Stata 6.0 svy procedures (Stata Corp., College Station, Tex) for complex surveys. In these analyses, the physician was identified as the cluster (primary sampling unit) and a 6-level stratification variable was created by crossing site (UCDMG, KP) with specialization (internal medicine, family practice, and cardiology). Probability weights were assigned to the patients in a cluster to account for differences among physicians in the number of patients enrolled in the study from their practice and the number of patients they see on a regular basis. Specifically, a weight was assigned to each patient within a cluster (i.e., physician practice) by (a) multiplying for each physician the number of patients seen weekly on an outpatient basis by sample size and (b) dividing this value by the product of the number of patients seen weekly by all physicians in the study and the number of patients enrolled in the study by the index physician. Observations obtained from very busy practices were thus given greater weight in the analyses. Weights produced by this method ranged from 0.18 to 1.90 (mean weight, 1.0).

RESULTS

Physician Characteristics

Among the 45 physicians enrolled in the study, 22 came from UCDMG (6 practice sites) and 23 were from Kaiser (5 practice sites). Eighteen were practicing internal medicine, 16 were involved in general/family practice, and 11 were cardiologists; 96% were board certified. The mean age was 44 years (SD 8.3), 69% were male, and 71% were white. Participants were involved in direct patient care an average of 39 hours per week (SD 11.7), had been affiliated with their current institution for an average of 8 years (SD 6.3), and had held their medical degrees an average of 17 years (SD 9.1).

Patient Characteristics

Among 909 patients completing baseline questionnaires, the mean age was 57 years (SD 15.3), 44% were male, and 81% were white. Seventy-seven percent reported completing at least some college, and 30% had at least a Bachelor's degree. Forty-five percent were currently employed at least part time, 60% were married, 19% reported household incomes less than $20,000, and 96% had health insurance. Slightly more patients came from Kaiser (51%) than from UCDMG (49%).

Prevalence of Unmet Expectations

In total, 11.6% of patients reported 1 or more unmet expectations. Table 1 reports the prevalence of unmet expectations, stratified by physician specialty. Approximately 8.3% of patients reported at least 1 unmet expectation concerning the physician's Clinical Data Collection activities. Specifically, 3.3% felt that the doctor did not fully prepare, 4.5% felt that the doctor left important questions unasked, and 3.6% said the doctor left out important parts of the physical exam (data not tabled). Regarding Clinical Resource Allocation, 3.5% of patients felt that the physician had failed to provide 1 or more important resources. Two percent thought that important diagnostic tests and procedures were not performed, 0.9% felt that new medications that should have been prescribed were not provided, and 1.6% believed that a needed specialist referral was not made (data not tabled). Approximately 5.3% of patients believed that important Medical Information or Counseling was not provided. A perceived failure to provide needed medical information was reported by 3.8% of patients and the provision of counseling was reported to have been omitted by 2.8% of patients (data not tabled). Approximately 3.9% of patients reported that Other expectations were not satisfied.

No differences were found across family practice, internal medicine, and cardiology in patients' reports of unmet expectations for care for the 3 aggregated categories of expectations reported in Table 1. Furthermore, there was no evidence that the prevalence of unmet expectations differed for the 2 systems of care investigated.

Precursors of Unmet Expectations

We examined the association of holding 1 or more unmet expectations and a variety of patient, provider, and system of care characteristics in a series of univariate analyses. After correcting for design effects and clustering of patients within physician practices, significant associations were found for patient age ($P = .003$), previsit general health perceptions ($P = .04$), and previsit trust ratings ($P = .0001$). When these 3 variables were entered into a multivariate logistic regression analyisis, only age and trust were significantly associated with holding an unmet expectation. Specifically, unmet expectations were especially likely to be reported by younger patients and by patients with low previsit trust in their physicians. No significant association was found in our univariate or ancillary multivariate analyses for patient gender, ethnicity, education, household income, marital status, visit length, physician specialty, physician gender, or system of care.

Outcomes

Patient and Physician Visit Evaluations. The effects of holding 1 or more unmet expectations are reported in Table 2. Those visits in which patients reported an unmet expectation were perceived by physicians as being more demanding and less satisfying. Patients who held an unmet expectation were less satisfied with the care received, reported less symptom improvement, and reported weaker intentions to adhere to the physician's advice. There was a nonsignificant tendency toward greater health system utilization among patients with an unmet expectation.

Table 1. Prevalence of Unmet Expectations Stratified by Practice Specialty

Expectation	Percent Answering in the Affirmative (±SE)				*P* Value
	Family Practice	Internal Medicine	Cardiology	Combined	
Collection of clinical data (preparation, examination, agenda solicitation)	7.8 (1.9)	9.6 (1.8)	5.5 (2.1)	8.3 (1.2)	.47
Allocation of clinical resources (tests, medications, referrals)	3.8 (1.3)	3.4 (1.0)	2.4 (1.4)	3.5 (0.7)	.81
Provision of information and counseling	5.1 (1.4)	5.5 (1.2)	5.3 (1.9)	5.3 (0.8)	.97
"Other" unmet expectations	4.5 (1.4)	3.6 (1.0)	2.3 (1.4)	3.9 (0.8)	.57

Table 2. Estimated Means for Outcome and Utilization Measures for Patients with No versus at Least 1 Unmet Expectation*

Outcome Measure	No Unmet Expectation (±SE)	≥1 Unmet Expectations (±SE)	*P* Value
Physicians' ratings (immediate postvisit)			
Demandingness of visit	3.18 (0.05)	3.34 (0.07)	.044
Satisfaction with the visit	3.29 (0.04)	2.96 (0.11)	.004
Patients' ratings (2 weeks postvisit)			
Satisfaction with care	4.25 (0.04)	3.39 (0.09)	.001
Symptom improvement	3.77 (0.05)	3.28 (0.13)	.001
Intention to adhere	4.51 (0.03)	3.98 (0.09)	.001
Health system contacts	0.37 (0.02)	0.52 (0.09)	.124

* Estimates and standard errors for reflect weighting and adjustments for design effects. Mean estimates have been adjusted for patient's age, gender, race, education, marital status, trust in the physician, and previsit general health perceptions; physician gender; specialty, and system of care.

We evaluated in a multivariate context the impact of clinical data collection, clinical resource allocation, and information/counseling on physicians' ratings of demandingness and satisfaction and patients' ratings of satisfaction, symptom improvement, intention to adhere, and health system contacts (data not tabled). Adjusting for patient, physician, and practice characteristics, physicians' demandingness ratings were not significantly predicted by any of the 3 unmet expectations variables; their satisfaction ratings were most positive for those visits in which patients reported no unmet expectation for clinical data collection (coeff: −0.260; *P* = .018) and information/counseling (coeff: −0.384; *P* = .02). Patients' satisfaction ratings were significantly lower when they reported an unmet expectation for clinical data collection (coeff: −0.734; *P* = .0001) and information/counseling (coeff: −0.447; *P* = .011). Patients' ratings of symptom improvement were most strongly associated with having no unmet expectation concerning clinical data collection (coeff: −0.471; *P* = .06). Intentions to adhere to the physician's advice was strongest among those patients who held no unmet expectation for information/counseling (coeff: −0.305; *P* = .056). Finally, patients were more likely to report postvisit health system contacts when they held an unmet expectation related to clinical resource allocation (coeff:−0.397, *P* = .014).

Mediating Role of Request Fulfillment

Holding an unmet expectation for a particular resource was strongly associated with having a request for that resource (Table 3). For example, 3.6% of patients who did not request medical information reported an unmet expectation for medical information, 1.1% of patients who requested medical information and felt that request had been fulfilled reported an unmet expectation for such information, and 19.8% of patients who felt that a request for medical information had not been fulfilled reported an unmet expectation for medical information. This pattern held for all 5 types of resources examined. Table 3 also reports the results of multivariate logistic analyses that

controlled for a wide range of other factors (see Table note for covariates). Once again, patients who had requested unsuccessfully a particular resource were much more likely to report an unmet expectation for that resource (all *P* values = .01 or lower).

DISCUSSION

This investigation expands our understanding of patients' unmet expectations for medical care in several ways. First, in this study of 3 distinct specialties, unmet expectations were reported by about 12% of patients. This estimate is lower than has been reported in other studies, but it is within the same general range as that reported by Kravitz et al.[2] and Marple et al.[11] Thus, unmet patient expectations in medical office settings, while not common, are also not rare. Consistent with previous research,[2] unmet expectations were seen more frequently among younger patients (who may harbor more expectations), unmarried patients (who may lack an accompanying medical advocate), and patients who lack trust in their physicians (who may be less likely to communicate their desires clearly or more likely to perceive shortcomings in the medical exchange). Clearly, efforts to address patients' expectations require a focus on the physician-patient relationship.

The comparatively low rate of unmet expectations in this study raises questions about the sensitivity of our measurement procedures. We do not believe that these results can be attributed to measurement insensitivity. Our measurement strategy, taken from Kravitz et al.,[2] prompts patients to reflect specifically upon the potential for unmet expectations in each of 9 realms of patient care. We believe it is more reasonable to suggest that discontented patients were less inclined to select themselves into this particular study, which would result in fewer reports of unmet expectations. In a similar vein, it is possible that physicians most competent in communicating with patients were more likely to volunteer for the study. If the patients of such physicians have fewer unmet expectations, then this selection bias would result in lower rates of unmet expectations for the patient sample as a whole.

Table 3. Prevalence of Unmet Expectations as a Function of Patients' Requests and Physicians' Fulfillment of Those Requests

Resource Requested	*n*	Cross-tabulations*		Logistic Regression Analysis[†]		
		With Unmet Expectation, %	*P* Value	Odds Ratio[†]	Confidence Interval	*P* Value
Medical information						
Did not request	298	3.6		1.0[‡]		
Requested/request fulfilled	484	1.1		0.32	0.13 to 0.80	.016
Requested/request not fulfilled	91	19.8	.0001	4.06	1.43 to 11.51	.010
Physical examination						
Did not request	385	3.5		1.0[‡]		
Requested/request fulfilled	436	1.8		0.60	0.23 to 1.78	.383
Requested/request not fulfilled	39	23.8	.0001	10.17	2.57 to 40.20	.002
Tests/procedures						
Did not request	547	1.4		1.0[‡]		
Requested/request fulfilled	281	0.1		0.09	0.01 to 0.97	.047
Requested/request not fulfilled	30	33.6	.0001	118.81	20.45 to 690.33	.001
New medications						
Did not request	641	0.3		1.0[‡]		
Requested/request fulfilled	194	1.3		10.08	1.10 to 91.94	.041
Requested/request not fulfilled	28	13.4	.0001	395.40	23.70 to 6596.08	.001
Specialist referral						
Did not request	703	0.9		1.0[‡]		
Requested/request fulfilled	135	2.6		5.30	0.82 to 34.20	.078
Requested/request not fulfilled	28	11.2	.0005	72.34	4.99 to 1049.55	.002

* *Cross-tabulations based on Stata svytab procedure, correcting for design effects and clustering of patients within physician practices.*

[†] *Logistics analyses based on Stata svylog procedure. The dependent variable for each analysis was patients' reports of having an unmet expectation for the resource in question (0 = no unmet expectation, 1 = unmet expectation). Results have been corrected for design effects and clustering of patients within physician practices, and have been adjusted for the following covariates: patient's age, gender, race, education, marital status, trust in the physician, and previsit general health perceptions; physician gender; specialty, and system of care. Because of multicollinearity, visit length was dropped from the analysis for unmet expectations regarding tests and procedures, and trust was dropped from the analyses for unmet expectations regarding new medications and specialist referrals. (Odds ratios, confidence intervals, and P values have been omitted from the table for these control variables.)*

[‡] *Denotes reference category for this variable.*

The observed associations between different types of unmet expectations and specific outcomes reinforce previous studies and support the validity of our measures. For example, prior research has suggested that feeling understood is a key component of patient satisfaction.[34] Thus it is not surprising that in the current study, unmet expectations for clinical data collection (e.g., history taking) principally affected patients' visit satisfaction and perceptions of symptom improvement. Thorough history taking is presumably a prerequisite for a comprehensive understanding of the patient's situation. In a similar vein, physician counseling behaviors have been shown to affect patient adherence[35,36]; in our data, patients' adherence intentions were most affected by unmet expectations regarding the physician's provision of information. Finally, unmet expectations for clinical resources (e.g., tests, procedures, drugs, and referrals) were most strongly associated with subsequent health system contacts. This effect might be attributable to lingering questions about the physician's thoroughness or diagnostic accuracy.

Patients' unmet expectations affect physicians as well. Our findings indicate that visits in which patients held an unmet expectation were experienced by physicians to be less satisfying. We cannot speak to the questions of if and how physicians become aware of their patients' unfulfilled expectations. Unmet expectations also lead to more demanding visits. Attempts to explain to the patient why his or her expectations are unreasonable can be effortful, even in the absence of overt conflict.

Even after imposing extensive statistical controls, there was some indication that patients who leave their medical visits with unmet expectations fare more poorly. These patients reported less symptom improvement than patients with no unmet expectations. Furthermore, patients who held unmet expectations for clinical resource allocation reported more postvisit health system contacts than patients with no such unmet expectations. We cannot determine from our data if these contacts were justified on the basis of the patients' objective health situations, but the effect held even after controlling for previsit general health perceptions.

Finally, this study suggests that unmet expectations may stem directly from how physicians communicate with patients regarding their requests for help. Quite simply, patients with an unmet expectation for medical information or a particular type of clinical resource usually had asked (or thought they had asked) unsuccessfully for that information or resource. This finding suggests that when patients make requests based on expectations that are not realistic or medically valid, the physician needs to address

the underlying beliefs and worries that motivated the request in the first place.

This study is not without limitations. First, the study is based on patients' postvisit, direct ratings of unmet expectations. As a result, we do not know if these expectations were brought to the visit or emerged over the course of the visit. Second, we made no attempt to distinguish between unmet expectations that were reasonable and those that were not. Third, these results reflect patients' perceptions of the care they received rather than objective assessments of the appropriateness of physicians' actions. We defend our focus on the patient's viewpoint, noting that the patient's perceptions are often what is most significant.[37] Fourth, this investigation was carried out within a single managed care market in California, albeit at 11 geographic sites within 2 very different health care systems.

Patients' expectations provide the yardstick against which physicians' clinical activities are evaluated. Satisfying patients' perceived needs is a fundamental goal in medicine.[38] Physicians who take seriously the value of patient-centered health care need to make systematic efforts to solicit their patients' expectations and understand how these are driving the patients' desires for information and treatment, as well as their adherence to prescribed regimens. In this era of managed care, in which physicians' job performance evaluations are increasingly taking into account their patients' satisfaction reports, the physician who ignores a patient's expectations for care may do damage to the clinical relationship. Reasonable patient expectations need to be considered and unreasonable ones need to be denied with a full and compassionate discussion with the patient of his or her concerns.

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