

Customer Satisfaction with Patient Care: “Where’s the Beef?”

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ABSTRACT. *Study Objective:* This was an attempt to present an analysis of the literature examining objective information concerning the subject of customer service, as it applies to the current medical practice. Hopefully this information will be synthesized to generate a cogent approach to correlate customer service with quality.

Methods: Articles were obtained by an English language search of MEDLINE from January 1976 to July 2005. This computerized search was supplemented with literature from the author’s personal collection of peer reviewed articles on customer service in a medical setting. This information was presented in a qualitative fashion.

Results: There is a significant lack of objective data correlating customer service objectives, patient satisfaction, and quality of care. Patients present predominantly for the convenience of emergency department care. Specifics of satisfaction are directed to the timing, and amount of “caring.” Demographic correlates including symptom presentation, practice style, location, and physician issues directly impact on satisfaction. It is most helpful to develop a productive plan for the “difficult patient” emphasizing communication and empathy.

Conclusion: The current emergency medicine customer service dilemmas are a complex interaction of both patient and physician factors specifically targeting both efficiency and patient satisfaction. Awareness of these issues can help to maximize efficiency, minimize

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INTRODUCTION

A review of a recent customer service newsletter finds a theoretical analysis of the ideology, a plan for a practical approach and a strategy to monitor and improve customer oriented service an effective approach.¹ However the entire academic treatise provided is minimally substantiated—a reference to a book, but not a single research study or reference citation provided to corroborate the information for the reader.

Interestingly, we have taken this crucial aspect of health care delivery system, which is associated with significant positive and negative effects on all participants in the process and assigned it a secondary status. It has either been ignored it completely under the paternalistic “we know what is good for them” model or rushed headlong to a “maximal satisfaction without scientific guidance” approaching the “inmates taking over the prison” analogy.

When defining the quality of care it is crucial to consider both the “technical” quality stressing proper process and procedure; and “service” quality emphasizing the interpersonal aspects of care relying on trust, communication, mutuality of goals, and patient respect.² Ideally, we would all hope to avoid the “good technical outcome, poor service” experience.

Ideally, this as well as all other aspects of medical practice should be evidence-based in scientific principle and practice. However, since customer satisfaction is a relatively new area of interest, academic study is lacking and data available to formulate a logical approach to this problem is scant.

Hopefully, examination and monitoring of customer satisfaction, which serves as an ostensible marker for quality patient care, is not just a marketing tool, but a legitimate avenue to improve patient care.

THE ED PATIENT

Perhaps the most critical aspect of a rigorous analysis of achieving optimal customer satisfaction is to precisely define the population at hand. There is often a significant misunderstanding of the emergency department (ED) population formed by incorporating the bias of numerous false patient stereotypes.

Perhaps, the most common misconception is that of the ED "frequent flier" which most often is erroneously extrapolated from the experience of caring for the urban or rural poor, who have no other health care options. A "frequent use" profile was generated from a five-year 350,000 ED visit database which defines 4% of the patients, who are then responsible for 21% of the ED visits.³ This group was, more likely to be homeless, African-American, and on Medicaid presenting with alcohol issues and chronic medical conditions. There was, however, a decrease in this frequent use pattern of 38% after the first year.

Profiling of high frequency emergency department users compared with the use of other health care resources has been attempted by Hansagi analyzing over 47,349 patients.⁴ They found frequent users (> 4 visits per year) comprised only 4% of total emergency department patients accounting for 18% of emergency department visits. Overall, the frequent user cohort who made more primary care visits (72 vs. 57%), were more likely to be admitted (80 vs. 36%) and accompanied by higher mortality (standardized mortality ratio 1.55, 95% CI 1.26-1.90). Therefore, this does corroborates the frequent user, higher acuity premise that is commonly held.

It is often assumed that the ED is utilized inappropriately for minor illnesses by unsophisticated patients. A cohort of 325 patients who presented for minor illness found 82% had no chronic illness, and most had symptoms for less than 3 days (64%).⁵ This group was more often men, who are self-paying. Fewer Medicare patients chose the ED because of its convenience (24%), absence of a physician (22%), paying or an inability to have a prompt appointment (19%) with their regular provider compared with unassigned patients. However, they did feel that their symptoms of less than 24-hour duration where "emergencies" and warranted medical care.

The appropriateness of emergency department use has often been questioned by health care professionals. Explicit appropriateness criteria were used to review a 2,980 patient sample where 29.6% of ED visits were found to be "inappropriate."⁶ There were associations with being younger, not having transportation, seasonal timing, and diagnostic

groups of lower severity, as well as inappropriate hospital, patient and physician referral of "inappropriate" visits to the ED. Interestingly, some patients found greater trust placed in the hospital through the ED, than in other primary care resources available to them.

Likewise, patients seeking ED care for more minor complaints may actually be an adaptive strategy, and not necessarily a system failure characterized by abuse and "over-utilization." Bousay evaluated 948 patients presenting for ED care finding that the majority (93%) of patients had a primary care physician, but stated they were not educated (76%) regarding what office services (54%) may address their complaints instead of using the ED.⁷ The message is again clear—patients present for the convenience of the ED (55%), and only a minority (23%) because of the severity of illness.

Therefore, it would seem prudent to abandon the "sickest patients only" mindset to capitalize on the patient desire for convenience—addressing ease of access, diagnostics, and treatment. Over the last decade we have moved forward stressing versatility in handling minor "emergencies," in general emergency departments, as well as developing boutique care catering to pediatrics, sports, and occupational medicine needs.

SATISFACTION IN GENERAL

Likewise, it is necessary to define a general patient satisfaction benchmark in emergency medicine. This benchmark is elusive and certainly depends on geographic area, patient population, and economic resources.

The American College of Emergency Physicians (ACEP) through its management academy sponsored lecture found Culhane to suggest a 3-5 per 1,000 patient complaint rate in 1994.⁸ (See Table 1.) Definitive customer service improvement plans have been instituted by authors such as Mayer who demonstrated a 70% decrease in ED complaints (2.6-0.6 per 1,000) with an interventional plan.⁹ They suggested the only remaining complaints were due to "billing and waiting time" only. They also defined a compliment to complaint ratio of 5:1 referencing "anecdotal comments, e-mail, phone calls, and letters."

Although a meritable work, we would hope to more closely examine some issues raised. First, it is unlikely that benchmarking is valid with better performances by staff offset by frustrations with health care rationing systems. Second, it is unlikely during the study period that complaints

TABLE 1. Patient Satisfaction

Complaint Frequency	Incidence (per 1,000)
Culhane ⁸	3-5
Mayer ⁹	2.6
Dennis ²³	1.65-3.14
ED Overall Satisfaction	Incidence
Markson ¹²	70%
Carrasquillo ²⁶	52-71%
Marple ³⁰	56%
Primary Care	Incidence
Rubin ³¹	98%

Source: References 8, 9, 12, 23, 26, 30, 31.

were reduced to zero as implied by the “administrative cause” exclusion raising issues of bias in analysis. In addition, a re-examination at a later date to establish longevity of change citing the likelihood of the “Hawthorne effect” as results diminished when the staff no longer concentrates on their study intervention.¹⁰

Finally, the compliment rate seems very discrepant from other industry markers with written complaints usually far outnumbering compliments. It is difficult to factor verbal comments into the analysis, and should likely be excluded from the “compliment” category to observe a more accurate ratio.

The definitive review of patient satisfaction is an investigation performed by Trout who analyzed 16 studies to define significant methodological variability and several dominant factors associated with satisfaction include providing patient information, interpersonal factors, and perceived waiting times.¹¹ They suggested “standardization” in future work, but most importantly defines overall patient satisfaction to occur when the patient’s “own expectations for treatment and care are met or exceeded.”

Therefore, from an operational perspective it is crucial to define reasonable goals and objectives, so that patient expectations are not discrepant from that which is feasible in the representative emergency department by benchmarking to the standard of care.

Likewise, it would be helpful to define who is "satisfied" with their care in other medical areas. Interestingly, a study specifically looking at a particular disease treatment strategy in over 5,000 patients found that overall as many as 30% were dissatisfied with their care.¹² This tended to correlate with poorer disease control, patient-provider communication problems, or difficulty with their medication due to compliance or knowledge deficits.

This reveals baseline dissatisfaction with particular health care issues, some of which are out of the provider's control. Likewise, the satisfaction benchmarking is obviously not 100%, as assumed in most "objective" rating scales, but in the 70-80% range, not truly approaching perfection.

DISSATISFACTION

The study of satisfaction begins with examining potential causes of dissatisfaction.¹³ Susan Keane Baker, who authored *Managing Patient Expectations: The Art of Finding and Keeping Loyal Patients*, offered this tongue-in-cheek advice on what "not to do to retain your patients."¹⁴ This information is crucial, as consultants suggest that it costs five times more to attract a new patient than to retain an old one.

First, you should welcome interruptions. Second, set up patients to be wrong. Third, consider internet research a personal affront. Fourth, make patients wait. Fifth, ignore privacy. Sixth, make the patients feel inferior. Seventh, keep the relationship impersonal. Eighth, have a rude and callous staff. Ninth, keep staff in the dark. Tenth, design confusing bills. Eleventh, cut back on cleaning services.

Obviously, attending to these issues in a comprehensive proactive planned approach will avoid much of the potential customer service difficulties. However, if a complaint is generated try to verify validity and respond objectively. First, listen without interrupting. Second, formulate your response. Third, tell the patients what is next. Fourth, invite patient feedback and encourage staff participation.

SPECIFICS OF SATISFACTION

An examination of the specifics of the ED encounter allows us to hone in on the patient issues that matter most. Bursch performed a telephone survey of 258 ED patients.¹⁵ He defined five variables directly related to

satisfaction including (1) waiting before being cared for, (2) degree of nurse caring, (3) staff organization, (4) the degree of physician caring, and (5) the amount of information provided by nursing staff.

This trend concerning communication appears to be significant. Bjorvell evaluated 187 patients and found only 14% had received specific information concerning their care, while 20% were partially informed, but the majority (66%) received no information concerning the visit.¹⁶ The overall ED evaluation was viewed more positively ($p < 0.001$) by those who received the most information on arrival. However other factors such as respect ($p < 0.01$), general treatment, attitude, and information given later in the course ($p < 0.05$) were also helpful.

A more general overview was reported by Sun in a phone survey of 2,333 patients.¹⁷ Patients reported not receiving help when needed, poor explanation of the cause of the problem, not being told about wait time, not being told when to resume normal activity, poor explanation of test results, and not being told when to return to the ED. Higher satisfaction was noted in those with non-acute triage status, and by those receiving more frequent ED treatment. Lower satisfaction was noted in those who were younger, or African-American. However, in a subsequent analysis of the questionnaire, black race was not an overall predictor of satisfaction in the mail survey.¹⁸ They concluded that willingness to return was strongly predicted (OR 2.601; 95% CI 2.292-2.951) by overall satisfaction with the ED visit.

An interesting issue raised is the accuracy of emergency department personnel at estimating patient satisfaction. Boudreaux evaluated 1,139 patients to find that emergency department personnel consistently estimated average patient satisfaction scores lower than actual scores across 19 of 22 indicators, as well as gross overestimation, almost double the patient length of stay (5.7 vs. 3.5 hours).¹⁹

It is evident that proactive patient communication is the basis for a positive interaction and can be accomplished by all health care staff without much extra effort.

DEMOGRAPHIC PROFILE

It may be useful to characterize a demographic profile that may have an association with customer satisfaction. One issue raised has been the personal influence on race and ethnicity on ED use and satisfaction. Baker evaluated 1,049 ambulatory patients presenting with non-emergency problems with more frequent use defined as two or more ED visits

during the previous three months, and found this profile more commonly in African-Americans (19.0%), followed by whites (13.5%) and Hispanic patients (11.4%) ($p = 0.01$).²⁰ However, multivariate analysis determined the presence of older age, health insurance coverage, a regular source of care was less likely to be associated with ED use. As well, difficulty in obtaining transportation to physicians' office was associated, but discounted race and ethnicity as determining factors for more frequent ED use. Clearly, it is important to not misinterpret demographic factors as they are often markers for lack of resources.

Race and gender correlates should be used to optimize the patient relationship. Cooper-Patrick performed an analysis of race correlates to suggest African-American patients rated their visits significantly less participatory with the doctor than whites even when adjusting for other variables, but were more satisfied in race concordant patient-physician relationships.²¹ Therefore, being sensitive to cross-cultural communications may involve patients to a greater degree in their own care improving satisfaction and outcome as well.

Interestingly, female patients trusted female physicians to a greater degree rating them superior in amount of time spent and concern shown.²² However, male patients exhibited no gender correlates in physician evaluation and satisfaction. This may warrant caution in interpersonal relations, especially with female patients.

Another issue raised is the association between income and complaint frequency. Dennis evaluated 277,210 patients to not only define a complaint frequency of 1.65-3.14 per 1,000 visits, as well as a highly significant association between income and complaint frequency in direct proportion ($p = 0.0000058$).²³ Clearly, as a group, those residing in higher income areas designated by zip code analysis generate more patient complaints, warranting both an understanding of this benchmark to set reasonable expectations and define an improvement plan.

Additional issues raised, include the influence of patient education on satisfaction. Fiscella presented a survey of 100 primary care physicians and 5,000 patients to define a group of patients with lesser education, whose cumulative health appeared to be adversely impacted. When controlling for other variables, it is not that lesser quality care is provided to the poor, but that their other adverse life style issues are dominant worsening their medical overall outcome.²⁴ However, they did find that satisfaction improved with educational status. Thus, the poor who are prone to adverse health issues may be less satisfied with their care as well.

Another factor is related to the patient's self-worth. A large component of the elite athletes' self-worth is related to their athletic competence,

which decreases with age.²⁵ This perception of self-worth was lacking in non-athletes. Often this poses a wish for a higher level of emergency care desired by a self-perceived athlete, manifested as a request for advanced diagnostics and referrals, even if not necessarily warranted.

Finally, cultural diversity issues such as the impact of language barrier on patient satisfaction has been defined in the ED. Carrasquillo evaluated 2,333 patients noting 15% were not primary English-speaking with only 52% expressing overall satisfaction; compared with 71% satisfaction level in English-speaking patients even after controlling for other variables.²⁶ Speakers who use English as a second language were more likely to also report problems with care, communication, and testing during their visit.

Clearly, it is prudent to define the demographic factors that are associated with decreased patient satisfaction, and subsequently a higher likelihood of complaints, that are ostensibly related to patient care. Ideally, early intervention can prevent the administrative difficulties associated with unfounded complaints or help to improve processes and personal when they are substantiated.

SYMPTOM PRESENTATION

The vast array of presenting symptoms should be analyzed to define a high-risk group of complaints that may be prone to poor disease resolution with adverse impact on customer satisfaction. Kroenke's evaluation of 1,000 medical outpatients found only 16% of symptoms were associated with a documented organic cause, while 10% were presumed to be of overt psychological origin leaving 75% of complaints unexplained.²⁷

Further analysis by this group suggested 10% of their symptoms were chronic with the most common presentations including joint pain (37%), back pain (31%), headaches (25%), chest pain (25%), arm or leg pain (24%), abdominal pain (24%), fatigue (24%), and dizziness (23%).²⁸ Most patients (84%) felt their symptoms were major, in that they interfered with routine activities or caused them to seek care. Interestingly, one-third of the symptoms were felt to be due to a psychiatric cause or were unexplained with a twofold increase in lifetime risk of developing a psychiatric disorder.

It is the common and not rare symptoms that account for substantial patient disability and health services utilization. Kroenke evaluated another group of 500 patients with fatigue (33%) and back pain (32%) as

the presenting complaints.²⁹ The presentation complex found 34% of patients to be asymptomatic or presenting with a single symptom, while 33% had 2 or 3 symptoms and 33% had more than 4 symptoms. The majority (79%) of these symptoms was chronic, and had been previously reported to a physician. The response to therapy was 80% for those with pain syndromes or gastrointestinal complaints, while only 39% of those with fatigue, dyspnea, dizziness, insomnia, sexual dysfunction, depression, and anxiety reported any relief, whatsoever.

An additional layer of complexity is imposed analyzing the prospect of the patient's concerns about their presenting complaints. Marple evaluated 328 adult outpatients to suggest that over half (55%) of patients present with some type of pain, followed by upper respiratory complaints in 22% and nonspecific complaints in 23%.³⁰ Questioning patients in regards to their concerns found that two-thirds were worried that their symptoms represented serious illness, and 62% reported impairment in their usual activities. There was a discrepancy noted between the patient who had hoped for a prescription (78%), diagnostic testing (46%) and being provided a referral (41%) compared with the group where the physician perceived symptoms as less serious, and frequently did not order anticipated tests or referrals. Although symptoms improved in 78% of patients at two-week follow-up, only half (56%) of patients were satisfied with their care if tests or expected prescriptions were not made available. This suggests that residual concerns and expectations were the strongest correlates to satisfaction, even more so than recovery from the illness.

Interestingly, individual symptoms failed to resolve by time of hospital discharge approximately 25-50% of the time.²⁹ The three most prominent predictors of failure to respond include shorter length of stay, severity of symptoms on admission and total number of systems involved. Patient satisfaction was associated with total symptom severity seen at discharge, as well as the degree of symptomatic improvement.

Establishing realistic goals for symptom improvement based on number, complexity, and severity of complaints may be helpful in improving the customer satisfaction benchmark.

PRACTICE SETTING

Satisfaction benchmarks from other primary care disciplines may be useful in helping to characterize customer satisfaction in emergency medicine. Rubin evaluated 17,671 adult outpatients suggesting that 55% rated

their visit as "Excellent," 32% "Very good," and 2% "Fair to poor."³¹ Clearly, perceived personal service during the visit have positive effects on outcome. Patients of solo practitioners were more likely (64%) to rate their visit "Excellent" compared with multispecialty group (48%) or HMO patients (49%) ($p < 0.001$). Patients of solo practitioners rated all aspects of their care better than HMO patients, most markedly appointment waits (64 vs. 40%) and telephone access (64 vs. 33%) were judged to be superior. Fee-for-service patients rate their service more highly than HMO patients in all aspects of their care. Physicians with the lowest rating are four times more likely to have been left by patients within the following six months (17 vs. 5%) ($p < 0.001$) than those with better ratings.

The ability to make personal choices in health care is crucially important. Schmittiel surveyed 10,203 respondents and found that those who chose their personal physician were 16-20% more likely to rate their care as excellent or very good, than those who were assigned to a physician.³² A logistic regression model then found that choosing one's physician was the single predictor most strongly related to having to highest level of overall satisfaction (OR 2.18, 95% CI 1.95, 2.42).

Therefore, it is understandable why ED patients may be generally less satisfied with their care at a baseline—lack of physician choice and control. These factors can be incorporated to develop a more personalized ED care model to eliminate the "Fast Food" mentality of emergency medicine. Patients are much less likely to complain about "their" physician than "the generic ED doctor."

PATIENT CONCERNS

Often times, there is a discrepancy between the presenting complaint and concerns offered by the patient, and that predicted by the physician. Bergh performed an interim analysis to suggest that patients expressed a mean of 6.5 diagnostic possibilities compared with 2.8 potential diagnosis in the physician's differential diagnoses.³³ This illustrates the fact that patients often have idiosyncratic unpredictable diagnostic concerns often expressed indirectly and founded in prior experiences with family illness.

Patients often have unvoiced agendas regarding their presentations for primary illness. Barry evaluated 35 patients in which only 4 (11%) patients voiced all their concerns.³⁴ The most common unvoiced agenda items includes worries about the possible diagnosis, patient thoughts

about what is wrong, medicine side effects, or not wanting a prescription. This disconnect between expectation and outcome was found in 100% of complaints resulting in misunderstanding, unwanted prescriptions, medication, and treatment non-compliance.

Bell evaluated 909 patients where 9% had at least one unvoiced desire—specifically for specialty physician referral (16.5%) and physical therapy (8.2%).³⁵ Those with unvoiced desires tended to be young, uneducated, unmarried, and less likely to trust the physician. This behavior was associated with a decreased likelihood of symptom improvement, and less positive evaluation of physician and the visit.

The ability for physicians to predict the patient's reason for the health care visit was evaluated by Boland in 458 patients.³⁶ Agreement was excellent with only 20% disagreement found which was more common with female gender, multiple complaints, and previous evaluations which was for the same complaint, which were independent predictors of low agreement. Interestingly, this discrepancy between the physician's understanding of the reason for the patient's visit and the patient's actual chief complaint was not associated with patient satisfaction.

Patients often present subtle clues to a hidden agenda during the physician interaction creating an opportunity to demonstrate understanding. Levinson evaluated 116 routine primary care and surgical office visits to find clues to an unstated concern presented in 52% with a mean of 2.6 issues in primary care and in 53% with 1.9 in surgical visits.³⁷ Most issues were initiated by patients (70%), with most (76%) indicated by emotional clues related to psychological concerns about illness. There appeared to be an effect on efficiency, where missed emotional clues had patients directing a longer office visit, until these issues are uncovered.

This raises the issue of physician effectiveness in eliciting the reason for the visit. Marvel analyzed 264 patient interviews in family physician offices where the solicited patient concerns was identified in 75% of cases.³⁸ However, the patient's initial statement of concern was only completed in 28% of cases and usually redirected by the physician after a mean period of 23 seconds. Interestingly those patients only required an additional six seconds to complete their concerns, if left to their own devices without the physician's intrusion. Late arising concerns were more common (15-35%) in those cases when the initial concerns were not solicited by the physician and found more commonly (44% vs. 22%) in those physicians with primary care training only compared with those having fellowship training as well.

It appears that a goal directed process to determine the patients unstated agenda is clearly beneficial to the patient care encounter improv-

ing both efficiency, as the patient demands less time in the visit, as well as improving satisfaction as the "real reason" for the visit is uncovered and addressed.

IMPACT OF THE PHYSICIAN

There are certainly issues that are specifically physician related that have an impact in improving customer satisfaction. Classically, there are four models to describe the physician-patient relationship³⁹ (Table 2). First, the "paternalistic model" ensures that patients receive the interventions that best promote their health and well-being with the physician acting as a guardian. Second, the "informative model" finds the physician a competent technical expert, who provides relevant information for the patient to make the correct decision. Third, the "interpretive model" finds the physician a counselor or advisor who attempts to elucidate the values the patient actually wants. Finally, the deliberative model enables the physician to act as a teacher to help the patient determine their best choices by eliciting desirable values. Ideally, the accomplished physician may use all approaches based on the patient encounter to individualize care to the particular scenario.

Sometimes patient perceptions can be based on appearance issues alone. Colt evaluated both ED patients (190) and physicians (129) to suggest that 43% and 73%, respectively thought physician appearance influenced opinions of patients regarding medical care provided.⁴⁰ While 49% of patients believed ED physicians should wear white coats, only 18% disliked scrubs, but patients were more tolerant of casual dress than physicians. Interestingly, there was no effect of patient age, gender, or income; but specifically disliked were excessive jewelry, prominent ruffles, long fingernails, blue jeans, or sandals. Also, although physicians almost universally (96%) addressed physicians by surname or title, 43% of patients preferred their first names being used. The last issue is clearly contrary to the recommendations of unreferenced "customer service" treatises, suggesting this as a sign of disrespect to address the physician by their first name.

An interesting twist on the appearance issue is visual identification of the physician, minimizing the anonymity of the emergency department by posting a name and likeness. The presence of photos on the hospital wall increased correct identification of the physicians, as well as direct effects on customer satisfaction specifically focused on the way physicians answered their questions.⁴¹

TABLE 2. Models of Physician Patient Relationship

	Parentalistic	Informative	Interpretative	Deliberative
Descriptor	Parental	Scientific	Counselor	Friend
Goal	Intervention to protect health	Provide information for patient decision	Elucidate the values the patient wants	Articulate and persuasion of desirable values
Physician Role	Guardian	Technical Expert	Advisor	Teacher

Adapted from Reference 39.

Another misconception held amongst some physicians is the patients' desire to not expose them or their families to teaching discussion or clinical rounds. Actually, Lehman found in an analysis of 95 bedside and 87 conference room teaching presentations that parents felt physicians spent more time on rounds with a trainee audience (10 vs. 6 minutes, $p < 0.001$), and more favorably received their care when bedside presentations were used.⁴² However, there was an educational component with the more educated better able to appreciate terminology and understand complicated medicine or testing issues than those who had not completed high school. Therefore, it is helpful to tailor patient explanations to avoid complicated jargon to a less educated patient population.

However, care at teaching institutions may result in a prolonged length of stay. Gerbeaux reported on a series of 831 patients where the median length of stay decreased by 24% (110-79 minutes) without medical student "assistance."⁴³ Although the author suggested increased attending staffing as a remedy, it is most prudent to inform the patient of the possibility of additional delay based on training status.

Another source of patient dissatisfaction may be the unmet expectations associated with the physician's assessment process. Kravitz evaluated 688 internist office visits with 125 reported omissions of care based on a post visit questionnaire.⁴⁴ These failures were related to physician preparation (23%), history taking (26%), physical examination (30%), diagnostic testing (28%), medications prescriptions (19%), specialty referral (26%), and physician communication (15%). Unmet expectations were more strongly driven, however, by the patients' somatic symptoms including intensity, financial improvement, duration, and perceived seriousness (74%); perceived vulnerability to illness related to age, family history, personal lifestyle, or previously diagnosed conditions (50%);

past experiences, personal or familial with similar illnesses (42%), and knowledge acquired from physicians, friends, family, or the media (54%) rather than stated issues.

A simplistic analysis attempts to associate time spent with the physician with patient satisfaction. Lin conducted a prospective survey of 1,486 ambulatory visits to define decreased satisfaction if the visit was longer than expected, as well as the converse where satisfaction was higher if the visit took less time than expected. Interestingly, this satisfaction was irrespective of the actual time involved.⁴⁵ The physicians felt rushed in 10% of encounters, while only giving that appearance to patients in one-third (3%) of cases. However satisfaction was not adversely affected in either group. Therefore, satisfaction can be achieved as much by managing expectations as much as actual time spent with the patient.

Since patient expectations for care are derived from multiple sources their complexity should discourage simple "demand management" approaches. Thus, a patient who files an administrative complaint due to not receiving proper testing, or over the physician encounter may instead be worried about their smoking history or likelihood of cancer rather than the ostensible complaint put forth to the physician. The proper approach would be to confront and address the underlying patient concerns, not to just superficially deal with the "complaint" which is often unfounded and may be unresolvable without this inquiry. An empathetic approach to the patients' concerns may in fact defuse the issue more expeditiously than a logical, objective analysis, and help to facilitate the encounter.

WAITING TIME—MYTH VERSUS REALITY

It has been suggested that the time devoted by physicians to the patient encounter has decreased due to the financial pressure or an evolving health care system. The National Ambulatory Center for Health Statistics and the Socioeconomic Monitoring System Database was used to examine the length of office visit, which averaged 16.3-20.4 minutes, respectively in 1989, which actually increased between 1 and 2 minutes per office visit in 1998.⁴⁶ Contrary to expectations, the growth of managed care has not been associated with a reduction in length of office visits.

In emergency medicine a particularly contentious area between patients and health care facilities has been the wait prior to evaluation.

Bindman evaluated a series of 700 urban ED patients where 15% left without being seen (LWBS), which was directly related to an increase in waiting time.⁴⁷ Although only 4% of this group required subsequent hospitalization, 27% returned to the emergency department, and they were twice as likely to report their condition being worsened.

Since leaving without appropriate care categorized as the LWBS may impact adversely on customer service aspects of care, as well as resulting in an adverse outcome potentially, further analysis is necessary. Baker studied 397 public ED patients demonstrating no difference in wait between those who left (6.4 hours) and those who remained for evaluation (6.2 hours), nor any difference in chief complaint, triage nurse assessment, acuity ratings on self-reported health status.⁴⁸ The acuity of this group remained high however, with 46% of those who left were judged to need immediate attention with 29% needing care within 24-48 hours, and 11% who left required subsequent hospitalization and emergency surgery. This aberrant result with no influence of actual waiting time is probably due to a prolonged delay in care due to overcrowding depriving the poor and uninsured of needed care.

Since waiting time is most often used as the reason for premature patient departure, it would be useful to characterize the patient's ability to estimate this delay. Thompson evaluated 776 patients by telephone interview to discover that only 22% ($p = 0.0001$) of patients accurately predicted physician waiting time with a significant rate of time overestimation in a 2:1 ratio (50 vs. 28%).⁴⁹ Likewise, total waiting time measured from triage to departure was accurately estimated by only 37% of patients ($p < 0.0001$). However, fewer respondents overestimated (25%) than underestimated (39%), the total ED stay. Obviously, they concluded patients were poorly able to estimate waiting time.

In any event, the perception of wait will still impact on customer satisfaction. Thompson further analyzed 1,631 respondents to find that if the perception was waiting times were less than expected then overall satisfaction was higher ($p < 0.001$).⁵⁰ Here actually waiting time did not correlate with satisfaction, while information and ED staff communication qualities were important. Therefore, management strategies directed to aid managing perception of wait are as important as decreasing the wait itself.

This model is conceptualized as the "disconfirmation paradigm" where satisfaction is a function of the magnitude and direction of the difference between perceived and expected service. Thompson reported on a group of 1,574 ED patients, where they were least satisfied when waiting times were longer than expected, were relatively satisfied when

equal to expectations, and highly satisfied when shorter than expected ($p < 0.0001$) with a measure of effect strength of 0.32 (0-1), a moderate level association.⁵¹

These studies emphasize that patients are poorly able to predict waiting time and achieving satisfaction, which necessitated focusing on the perceived performance related to expectations, as well as improving actual waiting time.

ED COSTS-DIAGNOSTIC TESTING

The cost of emergency care is often factored into discussions of customer service. Williams evaluated the cost of care in 24,010 ED patients in 1997 with the average physician cost of \$64, facility (\$84), laboratory (\$21), and radiology (\$24) generating an average patient charge of \$209.⁵² Interestingly, the laboratory and radiology costs accounted for only 5% of non-urgent and 23% of the urgent ED visit cost, while the facility cost was predominant over the physician cost.

The presence of either upper respiratory complaints or low back pain predicts that patients who perceived their need for these services adequately communicated this need to the physicians. Wilson found in an office based practice 37% for respiratory complaints and 26% that there was an incidence of radiology studies ordered for back pain.⁵³ Efforts to educate patients about the need or lack of indication for x-ray evaluation may improve both satisfaction and efficiency as waits are decreased.

The patient expectation of physicians ordering diagnostic tests has been purported to be associated with customer satisfaction. Froehlich studied 109 patients where 62% expected diagnostic testing, nearly as many as expected a medication or definitive diagnosis.⁵⁴ Multivariate analysis suggests provider humanism was the sole significant predictor of satisfaction (OR 6.4, 95% CI 1.6, 26.1); while expectation of testing was not associated whatsoever. The physician who spends the extra time to address interpersonal issues may obviate the need, time, and expense of unnecessary testing.

However, it is sometimes difficult to respond negatively to a request for an expensive un-indicated test. Gallagher reported on the experience of an HMO where a sham standardized patient presented with fatigue, no physical findings and a request to rule out multiple sclerosis.⁵⁵ There were approximately one-third of the physicians who agreed to testing—8% on the initial visit and 22% would potentially order on a future visit, while 53% agreed to a neurology referral as well. All doctors who refused to

provide testing suggested it was not medically indicated, but 19% also cited the test expense. Although most physicians were empathetic—23% discussing the fear of disease, and experience of friends (10%), a few dismissed concerns stating the patients were “paranoid.” Perhaps it is possible to practice cost conscious medicine by good communication to maintain patient satisfaction.

PRESCRIBING PRACTICE

The issue concerning the disconnect between the patient's expectation and the physician's perception of that expectation, warrants evaluation in the pharmacotherapy arena. Cockburn evaluated 336 patients, and found medication was prescribed for 50% of them in the visit. Although, the patient's actual expectation for medication was associated with a threefold increase in likelihood ratio, it was associated with a tenfold increase in likelihood if the physician thought the patient expected medication.⁵⁶ However, there was a concordance between the patient's and physician's expectation ($X^2 = 0.52$, $p = 0.001$).

Perhaps, the area with the greatest patient expectation for a prescribed medication is an upper respiratory syndrome complaint. Little evaluated 716 patients with sore throat and symptoms suggestive of pharyngitis and found more patients who were prescribed antibiotics (38 to 27%) returned for a revisit. Additionally, patient expectation was increased with antibiotic prescription during the previous year, duration of illness over five days, as well as previous visits for URI during which they had received antibiotics.⁵⁷ They recommend to avoid medicalizing a self-limiting illness, practitioners should avoid antibiotics if not indicated or offer a delayed prescription for those without improvement.

The obvious question is whether patients are more satisfied when expectations are met. Hamm found that 65% of those 113 patients with respiratory infection expected antibiotics,⁵⁸ although no association was found between satisfaction, and a prescription for antibiotics and patient satisfaction. However, there was an association between satisfaction and the patient's perception of physician's understanding, and time spent in the encounter.

The link can even be more attenuated between prescribing expectation, communication, and satisfaction. Mangione-Smith evaluated 295 patients to find that 50% of patients had a previsit expectation for antibiotics, but only 1% made a direct verbal request for medications.⁵⁹ However, physician's “perceived” an expectation for antibiotics 34% of the time

with an improvement in mean satisfaction score (76 vs. 59, $p < 0.05$) with an antibiotic contingency plan.

There is clearly a discrepancy between the actual and stated preference for prescription medications than can impact customer satisfaction adversely.

DISEASE SPECIFIC ISSUES

The type of illness may actually impact on the patient's desire to be involved in decision making. Mansell performed an analysis of 255 patients to find that patients wanted to share in decision making in major illness such as heart attack or cancer, but wanted less involvement in a hypothesized minor illness.⁶⁰ Past experience with heart disease seemed to predict increased desire for involvement, but this did not extrapolate to chronic disease, such as diabetes. Therefore, it may be beneficial to both efficacy and satisfaction to eliminate excessive discussion on therapeutic options for minor illness with patients.

Contrary to popular opinion it appeared that pain management did not necessarily contribute to patient satisfaction. Kelly evaluated 54 patients who rated their pain management as "Good" to "Very good" and found no correlation between satisfaction and initial discharge, change in pain score or verbal rating at discharge.⁶¹ They concluded that information concerning the quality of analgesia cannot be inferred from patient satisfaction surveys.

Likewise, it appears helpful to factor patient disease and subjective discomfort into our decision making to optimize care.

THE DIFFICULT PATIENT

The customer service issue often crystallizes around the so-called difficult patient occurring in as many as one in six of patient encounters. Jackson evaluated 500 walk-in patients determining that the 15% who were rated as difficult were more likely to have mental disorder (OR 2.4 95% CI, 1.3-4.6), more than five somatic symptoms (OR 1.4 1.1-1.8) and more severe symptoms (OR 1.6, 1.04-2.3).⁶² Difficult encounter patients had a poorer functional status, more unmet expectations ($p = 0.005$), less satisfaction with care ($p = 0.03$) and higher use of health services ($p < 0.001$). However, physicians with poorer psychosocial attitudes, as

reflected in the physician's belief scale, classified more encounters as difficult as well (23 vs. 8%, $p = 0.001$).

This issue has also been approached by attempts to relate psychosocial difficulties to non-emergent complaints. Pilossoph-Gelb's survey of 700 non-critical emergency department patients was performed where 52% met criteria for psychosocial difficulty featuring—acute psychosis (5%), illiteracy (20%), homelessness (6%), alcohol dependency (46%), drug dependency (9%), and depression (19%).⁶³ However, emergency department complaints were just as common in those with or without psychosocial difficulties.

The "difficult patient" scenario can often culminate in a discharge Against Medical Advice (AMA) result. Dubow reviewed 52 consecutive AMA patients suggesting that 82% left because they didn't agree with the management plan.⁶⁴ Interestingly, 70% stated they were "Satisfied" or "Very satisfied" with the physician interaction. This suggests that the AMA decision is often unfounded since the patient can not properly determine legal standards, nor is physician treatment an explanation for departure.

This complex series of interactions may result in patients sabotaging one's own medical care. Sansone evaluated 411 patients presenting for non-emergent care who cited self-sabotaging behavior in 6.6% of cases, specifically not seeking medical care when needed in 37%, or not taking medication as prescribed (25%).⁶⁵ There was a slight female predominance (26 vs. 17%) in medication non-compliance, while men were significantly more likely to not follow physician instructions resulting in a more prolonged illness (4.8 vs. 0.6%).

Negative experiences are not uncommon amongst physicians. Kristiansen reported the results of a questionnaire survey of 988 physicians, where 47% reported negative experiences.⁶⁶ (Table 3) They found that for sham patients scenarios it was almost twice as likely that a defensive posture was chosen by the physicians citing medicolegal issues resulting in a change in care for chest pain (44 vs. 30%) and headache (57 vs. 25%).

It is worrisome that patient threats can change the delivery of health care without scientific basis or rationale.

COMMUNICATION

The proverbial "holy grail" of customer satisfaction is better physician-patient communication. Concato utilized clinometric methods to

TABLE 3. Complaint or Negative Reaction From Patients

Practitioner	Threat or Negative Reaction (%)
General practice	58
Internal medicine	47
Surgical specialties	46
Community medicine	46
Psychiatry	43
Other	36
Laboratory specialties	29
Type of Complaint	Threat or Negative Reaction (%)
Unspecified	35
County Medical Officer, National Board of Health	20
Mass media report	15
Hospital administration, Local health authorities	12
Department head, public health office	9
Claim for financial compensation	7
Police notification	3

Adapted from Reference 66.

analyze 204 patients suggesting likes, dislikes and what they would like to see changed.⁶⁷ Issues directly related to the physician availability, professional performance, personal style, and communicative style stressing candor and clarity were paramount in satisfaction.

Patients clearly value good communication establishing trust and patient loyalty. Keating performed an analysis of 2,000 patients suggesting that 12% considered changing primary care physicians more commonly due to "poor communication."⁶⁸ However, they changed equally, as much if the physician did not order tests, procedures or referrals the patient thought were necessary.

The effect of emergency department information on patient satisfaction has been studied by Krishell in a convenience sample of 200 patients.⁶⁹ They found the most significant positive predictor of satisfaction was receiving adequate care plan information ($p < 0.0001$)—specifically the timing, ability to decrease anxiety, and physician explanation of treatment were helpful. There were other factors noted to be significant, such as physician skill and competence ($p = 0.01121$), concern and caring ($p = 0.0062$) and ease or convenience of care ($p = 0.0366$). These factors were predictive of the desire to return to that emergency department for care.

Although substantial resources have been invested in communication skills for clinicians little research has been done to monitor the effect on customer satisfaction. Brown evaluated an eight-hour interactive program providing communication skills training to 69 physicians.⁷⁰ Although participating clinicians' self-reported range of communication skills moderately improved, this did not result in an improvement in patient satisfaction scores. They concluded programs may need to be longer, more intensive, provide a broader skill range, and provide performance feedback.

An area of interest in the health care process is patient discharge, when an extra time investment by the physician is often helpful. Calkins did a dual survey of 99 patients and physicians to suggest that physicians reported spending more time discussing post-discharge care than patients thought they did ($p = 0.10$).⁷¹ They believed patients understood side effects better than they actually did (89 vs. 57%, $p < 0.001$), as well as believing significantly more patients understood when to resume activity (95 vs. 58%, $p < 0.001$).

Although the information is mixed it would seem prudent to invest additional time in the discharge process.

MANAGING THE DIFFICULT PATIENT

An issue contemplated, but not discussed has to do with the prospect of the patient overtly or covertly lying about their condition or circumstances. Elliot offered these reasons that patients don't tell the truth about their health, when some reasons can have dangerous repercussions.⁷²

The etiologies associated with lying include the patient. First, trying to disguise the real problem, such as occult drug or alcohol use. Second, denial concerning symptoms as can be found with cancer. Third, the lying may be a pathologic familiar coping mechanism used to avoid unpleasant situations such as a missed appointment. Fourth, the patient may embellish the truth in anticipation of secondary gain—a legal action or insurance claim. Fifth, there is an attempt to manipulate the physician to a secondary endpoint such as a pain medication request that really is for a family member. Sixth, the patient won't admit any wrongdoing in a socially inappropriate situation involving pregnancy risk or drug and alcohol use. Seventh, lies to avoid physician criticism, such as use of herbal medicines for medical conditions. Finally, the patient is not truthful about a previous doctor's care—either not acknowledging a previous visit for the same complaint to achieve a desired testing or prescription endpoint.

They offer a management strategy for a patient who lies to include the following. First, to not be bemused or irate in front of the patient encouraging them to lie again. Second, try to remain emotionally neutral while letting them know you need their full cooperation. Third, lying tends to be habitual so modify your future practice. Fourth, acknowledge the lie in a non-judgmental fashion to get past it to the real truth. Finally, if necessary you must confront an untruthful patient, but do it in the spirit of helping explaining that truth is essential in the doctor-patient relationship for their own benefit.

Profiling difficult patients may be helpful in a management strategy according to Dr. Peter T. Watson.⁷³ He defined the “dependent, clinging” patient who progresses through a seductive, flattering phase who eventually exhausts the physician with continual demands. An appropriate management strategy is, first, to set limits while reassuring a continued relationship. Second, the “entitled, demanding” patient can be angry or aggressive due to their powerlessness in the situation. A sense of empowerment is offered by including them as part of the team. Third, the “help-rejecting” patient, who is so fearful of losing their physician relationship that nothing will help. The plan should be to establish realistic outcome goals that may even be a bit pessimistic allowing some chance of success.

Likewise, Weiss has also described a profiling approach to assist the process of taming a difficult patient.⁷⁴ They described the “sour apple” who is never satisfied, often filing multiple unfounded administrative complaints. First, the approach would be to agree with the patient on some small issue, while maintaining proper focus on the major issues. Second, the “refusenik” who presents for care under protest, usually at the behest of a family member, often refuses subsequent testing or therapy. An effective maneuver here is to cajole the patient through the rest of the work-up using humor, appealing to pride or sympathy, or directing them to stop complaining.

Third, the “know-it-all” patient often benefits from the understanding that “a doctor’s job is to give you what you need, not what you want.” This meaning establishing limits that suggest you will provide the best care scenario, but may not be able to meet all their needs, leaving them free to use other health care resources. As this group may be particularly prone to litigation, they benefit from extensive documentation of every contact.

Fourth, the “anxiety ridden” patient can be reassured most by listening. Successful techniques include listening to the patient’s complaints

with some limits or well visit appoints to reach common ground, their state of good health.

Finally, "it is absurd to expect a physician to relate positively to every patient, and it is futile to try" according to David H. Jones, a practicing ophthalmologist for 25 years. He reserves the right to "fire" patients, and them to "fire" him.

Although this strategy is particularly applicable to an emergency medicine practice, this would be the process utilized in a primary care office. Jeffrey M. Kagan suggests a probationary period with a set of expectations with failure resulting in (1) a 30-day termination notice via certified mail with return address,⁷⁴ (2) refer to medical society or hospital for further care, (3) continue to offer emergency care, and (4) follow managed care instructions for termination of relationship.

THE EMERGENCY PHYSICIAN

Perhaps, the key to the patient encounter is establishing "emergency rapport."⁷⁵ The typical emergency department encounter is hindered by many obstacles inherent to the visit, and early establishment of rapport improves patient compliance and treatment outcomes. Rapport implies a working alliance between patient and physician enhanced by attending to social overtures, and using empathy in information transfer. This model dispels myths such as establishing patient rapport taking too much time, the need for tight interview control and the singular diagnosis endpoint of the interview.

Rosenzweig offered psychologists Bandler and Grinder's approach to the rapid emergency department encounter stressing: (1) pacing—adapting to the patient's speed of presentation, (2) anchoring—emphasizing key associations of the patient, such as their physician or a powerful medicine offered, and (3) reforming—suggesting contextual analysis to the patient allowing understanding of delay referencing triage and other patient needs.^{75, 76} However, most experienced practitioners would suggest a significant proportion of patients are refractory to the last intervention maintaining the importance of their condition, or time as opposed to conditions of other patients.

There are profiles of physician behavior that produce trust in patients. Thom evaluated 414 patients to find a significant association with trust ($p < 0.0001$) in those who demonstrated comfort and caring, competency, encouraging and answering questions, and offering explanations.⁷⁷ However, a specialty referral was associated with trust only among women

($R = 0.61$), more established ($R = 0.62$), and younger patients ($R = 0.63$). Behaviors that were judged to be least important were gentleness, discussing options, asking opinions, eye contact, and treating as an equal.

Physicians' personal characteristics, their past experiences, values, attitudes, and biases are an area of interest. Novack proposed a core curriculum program to address perceived deficits in physician training addressing: (1) physicians' beliefs and attitudes, (2) feelings and emotional responses in patient care, (3) challenging clinical situations, and (4) physicians self-care to promote physician awareness of patient issues.⁷⁸

The acid test for this approach would be to link primary care performance to outcomes of care. Safran performed a cross-sectional observational study of 7,204 adults associating the physician's comprehensive "whole person" knowledge of patients and their trust in the physician.⁷⁹ A comparison of the physician services in the 95th to 5th percentile demonstrated improved adherence to the treatment regimen (44.0 vs. 17%, $p < 0.001$), as well as a striking improvement in patient satisfaction (87.5 vs. 0.4, $p < 0.001$). The leading correlates of self-reported health improvements were integration of care, thoroughness of physical examinations, communication, comprehensive knowledge of patients, and trust instilled ($p < 0.001$).

They concluded that patients' trust in their physician and physicians' knowledge of patients are leading correlates to predict outcome of care.

CONCLUSION

This area of medical study has only recently been addressed with rigorous evaluation. Clearly, we are at the point, in the health care process, where customer service should be one of the most important objectives.

However, some issues are clear. Patients retain the desire to have competence in their health care providers, as well as good service. It is crucial to define reasonable goals and objectives in patient care and service. There should be processes to meet or exceed these goals in all cases.

Likewise, unachievable objectives can be best shaped by education and understanding, to modify the patients' expectations to achieve reasonable benchmarks in the health care encounter.

REFERENCES

1. Case Studies in ED Customer Service: The Definition and Dimensions of Service Quality; 2001 Vol. 5 No. 2:1-8.
2. Daley J. A 58 year old woman dissatisfied with her care. *JAMA*. 2001;285:2629-2635.
3. Mandelberg JH, Kuhn RE, Kohn MA. Epidemiologic analysis of an urban, public emergency department's frequent users. *Acad Emerg Med*. 2000;7:637-646.
4. Hansagi H, Olsson M, Sjoberg S, Tomson Y, Goransson S. Frequent use of the hospital emergency department is indicative of high use of other health care services. *Ann Emerg Med* 2001 June;37:561-567.
5. Shesser R, Kirsch T, Smith J, Hirsch R. An analysis of emergency department use by patients with minor illnesses. *Ann Emerg Med*. July 1991;20:743-748.
6. Sempere-Selva T, Piero S, Sendra-Pina P, Martinez-Espin C, Lopez-Aguilera I. Inappropriate use of an accident and emergency department: Magnitude, associated factors, and reasons—an approach with explicit criteria. *Ann Emerg Med*. June 2001;37:568-579.
7. Boushy D, Dubinsky I. Primary care physician and patient factors that result in patients seeking emergency care in a hospital setting: The patient's perspective. *J Emerg Med*. 1999;17:405-412.
8. Culhane DE, Harding PJ. Quality in customers: Great expectations. Presented to the American College of Emergency Physicians Management Academy, Practice Management Committee; 1994; Boston, Massachusetts.
9. Mayer TA, Zimmermann PG. ED customer satisfaction survival skills: One hospital's experience. *J Emerg Nursing*. June 1999;25:187-191.
10. Roethlisberger, FJ, Dickson WJ. *Management and the Worker*. Boston, MA: Harvard University Press; 1939.
11. Trout A, Magnusson AR, Hedges J. Patient satisfaction investigations and the emergency department: What does the literature say? *Academic Emerg Med*. 2000;7:695-709.
12. Markson LE, Vollmer WM, Fitterman L, O'Connor E, Narayanan S, Berger M. Insight into patient dissatisfaction with asthma treatment. *Arch Intern Med*. 2001;161:379-384.
13. Grandinetti DA. Twelve surefire ways to lose patients. *Med Econ*. 2001;6:79-87.
14. Keane Baker S. *Managing patient expectations: The art of finding and keeping loyal patients*. Jossey-Bass, 1998.
15. Bursch B, Beezy J, Shaw R. Emergency department satisfaction: What matters most? *Ann Emerg Med*. March 1993;22:586-591.
16. Bjorvell H, Stieg J. Patients' perceptions of the health care received in an emergency department. *Ann Emerg Med*. July 1991;20:734-738.
17. Sun BC, Adams J, Orav EJ, Rucker DW, Brennan TA, Burstin HR. Determinants of patient satisfaction and willingness to return with emergency care. *Ann Emerg Med*. May 2000; 35:426-434.
18. Sun BC, Adams JG, Burstin HR. Validating a model of patient satisfaction with emergency care. *Ann Emerg Med*. November 2001;38:527-532.
19. Boudreaux ED, Ary R, Mandry C. Emergency department personnel accuracy at estimating patient satisfaction. *J Emerg Med*. 2000;19: 107-112.
20. Baker DW, Stevens CD, Brook RH. Determinants of emergency department use: Are race and ethnicity important? *Ann Emerg Med*. December 1996;28:677-682.

21. Cooper-Patrick L, Gallo JJ, Gonzales JJ, Thi Vu H, Powe NR, Nelson C, Ford DE. Race, gender, and partnership in the patient-physician relationship. *JAMA*. 1999;282:583-589.
22. Derosé KP, Hays RD, McCaffrey DF, Baker DW. Does physician gender affect satisfaction of men and women visiting the emergency department? *J Gen Intern Med*. 2001;16:218-226.
23. Dennis B, Overton DT, Schwartz LR, Strait M. Emergency department complaint frequency: Variation by patient median household income. *Ann Emerg Med*. June 1992;21:746-748.
24. Fiscella K, Franks P. Influence of patient education on profiles of physician practices. *Ann Intern Med*. 1999;131:745-751.
25. Saint-Phard D, Van Dorsten B, Marx RG, York K. Self-perceptions in elite collegiate female gymnasts, cross country runners, and track and field athletes. *Mayo Clin Proc*. 1999;74:770-774.
26. Carrasquillo O, Orav EJ, Brennan TA, Burstin HR. Impact of language barriers on patient satisfaction in an emergency department. *J Gen Intern Med*. 1999;14:82-87.
27. Kroenke K, Price RK. Symptoms in the community. *Arch Intern Med*. 1993;153:2474-2480.
28. Kroenke K, Arrington ME, Mangelsdorff AD. The prevalence of symptoms in medical outpatients and the adequacy of therapy. *Arch Intern Med*. 1990;150:1685-1689.
29. Kroenke K, Stump T, Clark DO, Callahan CM, McDonald CJ. Symptoms in Hospitalized Patients: Outcome and satisfaction with care. *Am J Med*. 1999;107:425-431.
30. Marple RL, Kroenke K, Lucey CR, Wilder J, Lucas CA. Concerns and expectations in patients presenting with physical complaints. *Arch Intern Med*. 1997;157:1482-1488.
31. Rubin HR, Gandek B, Rogers WH, Kosinski M, McHorney CA, Ware JE. Patients' rating of outpatient visits in different practice settings. *JAMA*. 1993;270:835-840.
32. Schmittdiel J, Selby JV, Grumbach K, Quesenberry CP. Choice of a personal physician and patient satisfaction in a health maintenance organization. *JAMA*. 1997;278:1596-1599.
33. Bergh KD. The patient's differential diagnosis: Unpredictable concerns in visits for acute cough. *J Fam Pract*. 1998;46:153-158.
34. Barry CA, Bradley CP, Britten N, Stevenson FA, Barber N. Patients' unvoiced agenda in general practice consultations: Qualitative study. *BMJ*. 2000;320:1246-1250.
35. Bell RA, Kravitz RL, Thom D, Krupat E, Azari R. Unsaid but not forgotten. *Arch Intern Med*. 2001;161:1977-1984.
36. Boland BJ, Scheitel SM, Wollan PC, Siverstein MD. Patient-physician agreement on reasons for ambulatory general medical examinations. *Mayo Clin Proc*. 1998;73:109-117.
37. Levinson W, Gorawara-Bhat R, Lamb J. A study of patient clues and physician responses in primary care and surgical settings. *JAMA*. 2000;284:1021-1027.
38. Marvel MK, Epstein RM, Flowers K, Beckman HB. Soliciting the patient's agenda: Have we improved? *JAMA*. 1999;281:283-287.
39. Emanuel EJ, Emanuel LL. Four models of the physician-patient relationship. *JAMA*. 1992;267:2221-2226.
40. Colt HG, Solot JA. Attitudes of patients and physicians regarding physician dress and demeanor in the emergency department. *Ann Emerg Med*. 1989;18:145-151.

41. Francis JJ, Pankratz VS, Huddleston JM. Patient satisfaction associated with correct identification of physicians photographs. *Mayo Clin Proc.* 2001;76:604-608.
42. Lehmann LS, Brancati FL, Chen MC, Roter D, Dobs AD. The effect of bedside case presentations on patients' perceptions of their medical care. *N Engl J Med.* 1997;336:1150-1155.
43. Gerbeaux P, Ledoray V, Liauthaud H, Torro D, Takun K, Thirree R, Nelh P, Jean P. Medical student effect on emergency department length of stay. *Ann Emerg Med.* 2001;37:275-278.
44. Kravitz RL, Callahan EJ, Paterniti D, Antonius D, Dunham M, Lewis CE. Prevalence and sources of patients' unmet expectations for care. *Ann Intern Med.* 1996;125:730-737.
45. Lin CT, Albertson GA, Schilling LM, Cyran EM, Anderson SN, Ware L, Anderson RJ. Is patients' perception of time spent with the physician a determinant of ambulatory patient satisfaction? *Arch Intern Med.* 2001;161:1437-1442.
46. Mechanic D, McAlpine DD, Rosenthal M. Are patients' office visits with physicians getting shorter? *N Engl J Med.* 2001;344:198-204.
47. Bindman AB, Grumbach K, Keane D, Rauch L, Luce JM. Consequences of queuing for care at a public hospital emergency department. *JAMA.* 1991;266:1091-1096.
48. Baker DW, Stevens CD, Brook RH. Patients who leave a public hospital emergency department without being seen by a physician. *JAMA.* 1991;266:1085-1090.
49. Thompson DA, Yarnold PR, Adams SL, Spacone AB. How accurate are waiting time perceptions of patients in the emergency department? *Ann Emerg Med.* 1996;28:652-656.
50. Thompson DA, Yarnold PR, Williams DR, Adams SL. Effects of actual waiting time, perceived waiting time, information delivery and expressive quality on patient satisfaction in the emergency department. *Ann Emerg Med.* 1996;28:657-665.
51. Thompson DA, Yarnold PR. Relating patient satisfaction to waiting time perceptions and expectations: the disconfirmation paradigm. *Acad Emerg Med.* 1995;2:1057-1062.
52. Williams RM. Distribution of emergency department costs. *Ann Emerg Med.* 1996;28:671-676.
53. Wilson IB, Dukes K, Greenfield S, Kaplan S, Hillman B. Patients' role in the use of radiology testing for common office practice complaints. *Arch Intern Med.* 2001;161:256-263.
54. Froehlich GW, Welch HG. Meeting walk-in patients' expectations for testing. *J Gen Intern Med.* 1996;11:470-474.
55. Gallagher TH, Lo B, Chesney M, Christensen K. How do physicians respond to patients' requests for costly, unindicated services? *J Gen Intern Med.* 1997;12:663-668.
56. Cockburn J, Pit S. Prescribing behavior in clinical practice: Patients' expectations and doctors' perceptions of patients' expectations—a questionnaire study. *BMJ.* 1997;315:520-523.
57. Little P, Gould C, Williamson I, Warner G, Gantley M, Kinmonth AL. Reattendance and complications in a randomized trial of prescribing strategies for sore throat: The medicalising effect of prescribing antibiotics. *BMJ.* 1997;315:350-352.
58. Hamm RM, Hicks RJ, Bembem DA. Antibiotics and respiratory infections: Are patients more satisfied when expectations are met? *J Fam Pract.* 1996;43:56-62.

59. Mangione-Smith R, McGlynn EA, Elliott MN, McDonald L, Franz CE, Kravitz RL. Parents of expectation for antibiotics, physician-parent communication and satisfaction. *Arch Pediatr Adolesc Med.* 2001;155:800-806.
60. Mansell D, Poses RM, Kazis L, Duefield CA. Clinical factors that influence patients' desire for participation in decisions about illness. *Arch Intern Med.* 2000;160:2991-2996.
61. Kelly AM. Patient satisfaction with pain management does not correlate with initial or discharge VAS pain score, verbal pain rating at discharge, or change in VAS score in the emergency department. *J Emerg Med.* 2000;19:113-116.
62. Jackson JL, Kroenke K. Difficult patient encounters in the ambulatory clinic. *Arch Intern Med.* 1999;159:1069-1075.
63. Pilossoph-Gelb S, Mower WR, Ajalo I, Yang SC. Psychosocial difficulties and emergency department use. *Acad Emerg Med.* 1997;4:589-592.
64. Dubow D, Propp D, Narasimhan K. Emergency department discharges against medical advice. *J Emerg Med.* 1992;10:513-516.
65. Sansone RA, Wiederman MW, Sansone LA, Mehnert-Kay S. Sabotaging one's own medical care. *Arch Fam Med.* 1997;6:583-586.
66. Kristiansen IS, Forde OH, Aasland O, Hotvedt R, Johnsen R, Forde R. Threats from patients and their effects on medical decision making: A cross-sectional, randomized trial. *Lancet.* 2001;357:1258-1261.
67. Concató J, Feinstein AR. Asking patients what they like: Overlooked attributes of patient satisfaction with primary care. *Am J Med.* 1997;102:399-406.
68. Keating NL, Green DC, Kao AC, Gazmararian JA, Wu VY, Cleary PD. How are patients' specific ambulatory care experiences related to trust, satisfaction and considering changing physicians? *J Gen Intern Med.* 2002;17:79-81.
69. Krishel S, Baraff LJ. Effect of emergency department information on patient satisfaction. *Ann Emerg Med.* 1993;22:568-572.
70. Brown JB, Boles M, Mullooly JP, Levinson W. Effect of clinician communication skills training on patient satisfaction. *Ann Intern Med.* 1999;131:822-829.
71. Calkins DR, Davis RB, Reiley P, Phillips RS, Pineo RL, Delbanco TL, Iezzoni LI. Patient-physician communication at hospital discharge and patients' understanding of the postdischarge treatment plan. *Arch Intern Med.* 1997;157:1026-1030.
72. Elliott PL. When your patient lies. *Med Economics.* 2002;2:95-98.
73. Kirn TF. Profiles help physicians manage difficult patients. *Intern Med News.* 2001;4:50.
74. Garfinkel Weiss, G. Taming the difficult patient. *Med Economics.* 2002;3:100-109.
75. Rosenzweig S. Emergency rapport. *J Emerg Med.* 1993;11:775-778.
76. Bandler G, Grinder J. *Frogs into princes: Neuro linguistic programming.* Moab, Utah: Real People Press; 1979.
77. Thom DH. Physician behaviors that predict patient trust. *J Fam Pract.* 2001;50:323-328.
78. Novack DH, Suchman AL, Clark W, Epstein RM, Najberg E, Kaplan C. Calibrating the physician. *JAMA.* 1997;278:502-509.
79. Safran DG, Taira DA, Rogers WH, Kosinski M, Ware JE, Tarlov AR. *J Fam Pract.* 1998;47:213-220.