

Patient Expectations Regarding Eye Care

Focus Group Results

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Background: Increasing emphasis on patient-centered care and other recent developments should make patient expectations increasingly important in ophthalmology. Motivated by the pivotal role of patient expectations in quality-of-care assessments and by the limited knowledge about patients' expectations regarding eye care, we initiated a pilot study using focus groups to determine a relevant set of concerns that patients express as expectations.

Methods: A total of 6 focus groups were conducted with patients at Duke University Eye Center (Durham, NC). Focus groups ranged in size from 4 to 10 people. The average group size was 6.

Results: Content analysis of transcripts from the 6 focus groups yielded 22 areas of expectations for eye care, which were classified into 5 categories: communica-

tion, interpersonal manner, physician's skill, logistics, and other. The 6 areas that appeared to be of greatest importance to focus group participants were the following: (1) honesty, (2) information about diagnosis and prognosis, (3) explanation in clear language, (4) ophthalmologist's experience and reputation, (5) empathy, and (6) listening and addressing concerns.

Conclusions: In general, ophthalmology patients in the focus groups emphasized expectations related to communication and interpersonal manner. In contrast to previous studies with primary care patients, however, ophthalmology patients expressed few expectations for technical interventions, such as medication prescriptions, physical examination, or diagnostic testing.

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HISTORICALLY, medicine has been primarily physician centered; however, to an increasing extent, physicians and health administrators have begun to incorporate patients' perspectives into health care.¹ Patient-centered care, at its core, is health care that is responsive to patients' wants, needs, and preferences.² Moreover, the rise of consumerism and dramatic increases in patients' level of education have contributed to greater patient demand for information and involvement and rising expectations.³ The patient-centered care movement can also be linked to related major trends in medicine during the past decade. The shift toward continuous quality improvement, which gained momentum in the 1990s, places meeting patient expectations at the core of medicine's mission.⁴ Furthermore, the growing integrative medicine movement insists on patients being active participants in their health care.⁵

As such, there has been a growing body of literature regarding patient expectations during the past 2 decades. How-

ever, most of this research has been conducted in primary care settings. Little is known about patient expectations of ophthalmologists and eye care. The ophthalmology literature that does exist has focused primarily on expectations regarding surgical outcomes, such as patients' expectations for cataract surgery.⁶ However, recent developments should make patient expectations increasingly important in ophthalmology. First, the dramatic rise in the number of refractive surgeries performed in the United States has drawn increasing numbers of patients to the field of ophthalmology for elective procedures for non-sight-threatening conditions.⁷ Second, increased competition in the eye care market has led to a greater appreciation for the need to understand patient desires.^{8,9}

To learn more about patients' expectations for eye care, we initiated a pilot study using focus groups to determine a relevant set of concerns that patients express as expectations. Motivated by the pivotal role of patient expectations in quality-of-care assessments and by the limited knowledge about patients' expectations for eye

care, we have undertaken a study designed to answer several fundamental questions:

What do patients look for when choosing an eye doctor?

What do patients expect their eye doctor to do during an eye appointment?

What kinds of information do patients expect to receive during an eye appointment?

What kinds of things make patients want to change eye doctors?

METHODS

We first reviewed the literature on patient expectations between 1966 and 2002. The initial MEDLINE search terms were the following: (title words: *expectations* or *desires* or *requests*) and (Medical Subject Headings: *consumer satisfaction* or *patient satisfaction* or *physician-patient relations*). We also examined review article reference lists for potentially relevant studies. We then reviewed and analyzed the existing literature.

In general, value expectations, which refer to patients' desires, hopes, or wishes concerning clinical events, are the dominant model.^{10,11} However, the existing literature contains substantial discrepancies in the ways that expectations are measured, and no standardized assessment instrument currently exists for measuring patients' expectations.^{12,13} Disagreements over the most appropriate methods for measuring patient expectations have been a barrier to more refined understanding.¹⁴

Throughout the literature on expectations, mostly conducted in primary care settings, the 10 most commonly addressed areas of patient expectations and requests are as follows:

- Medical information
- Medication/prescription
- Counseling/psychosocial support
- Diagnostic testing
- Referral
- Physical examination
- Health advice
- Outcome of surgery or treatment
- Therapeutic listening
- Waiting time

We then used these areas as initial starting points for our qualitative study to create the script for our focus groups.

After the study was approved by the institutional review board, focus group participants were recruited from among patients waiting for eye appointments at the Duke University Eye Center (Durham, NC). Patients were identified by means of daily appointment schedules. Researchers approached patients in the eye center waiting areas and requested their participation in future focus groups. If patients expressed willingness to participate, we obtained their contact information as well as their primary diagnosis and their level of education. Patients were then classified into 1 of 4 categories based on their primary diagnosis and level of education. We contacted interested participants by telephone to schedule them for a focus group.

For this study, patients were classified as having either potentially irreversible blinding or nonblinding eye conditions and as either lower or higher socioeconomic status, using education as a proxy. Blinding eye diseases included diagnoses such as glaucoma, age-related macular degeneration, and diabetic retinopathy, among others. Patients classified as having nonblinding eye disease included patients with well eyes, refractive errors, and cataract, among others. Individuals who had pursued any post-secondary education were classified as higher socioeconomic status, and those who did not pursue education beyond high school were classified as lower socioeconomic status.

A total of 6 focus groups were conducted at Duke University Eye Center. We conducted 1 group with patients with lower socioeconomic status and nonblinding eye disease, 1 group with patients with higher socioeconomic status and nonblinding eye disease, 2 groups with patients with lower socioeconomic status and blinding eye disease, and 2 groups with patients with higher socioeconomic status and blinding eye disease. We obtained informed consent from all focus group participants before the start of each group.

The script for the groups was based on the review of the literature and the results of initial patient interviews. However, participants were given ample opportunity to deviate from the script to explore other issues related to their expectations regarding eye care. In addition, at the end of each group session, participants were presented with a copy of the Patient Concerns Form¹⁵ and asked to identify items that they thought were important when they visited their ophthalmologist.

Focus groups ranged in size from 4 to 10 people. The average group size was 6. A total of 38 patients participated in the focus groups. Of these 38 patients, 25 were women and 13 were men. Twenty-eight of the 38 patients lived locally in the Research Triangle area of North Carolina, but 10 patients lived remotely and traveled a substantial distance, up to 160 km in some cases, to visit their ophthalmologist at Duke. A variety of diagnoses were represented in the groups. Patients' primary diagnoses included the following: 14 patients had some form of glaucoma, 4 had a cataract or had previously had cataract surgery, 4 had well eyes and visited the eye center only for routine eye examinations, 3 had refractive errors, 2 had suspected glaucoma, 2 had diabetic retinopathy, and 1 had age-related macular degeneration. In addition, 8 patients had less common eye diseases, which included complete lacrimal duct obstruction, choroidal melanoma, thyroid ophthalmopathy, posttraumatic retinal detachment, squamous cell cancer of the eyelid, optic neuropathy, Fuchs dystrophy after corneal transplantation, and corneal dystrophy.

All 6 focus groups were moderated by one of the authors (A.G.D.). All focus groups were recorded by means of 2 microcassette tape recorders to ensure clarity and accuracy of transcriptions. The interviews were subsequently transcribed into word-processing software. Focus group participants were compensated \$20 for their time and transportation expenses.

Two of the authors (A.G.D. and P.P.L.) reviewed the transcripts of the focus groups and analyzed them for content and key concepts. The results presented are based on consistent patterns of responses obtained from 6 focus groups representing a variety of ophthalmology patients. The results are based around findings that had the strongest, broadest-based support from participants in our groups, as well as unique areas, even if mentioned by only 1 person. The primary purpose of the research was to help provide the range of issues that might be explored in subsequent quantitative research.

RESULTS

One hundred twenty-two single-spaced pages of original data transcribed from the 6 focus groups yielded 22 areas of expectations for eye care expressed by focus group participants. These areas were not mutually exclusive, and many patient comments could be classified in multiple ways. We classified the 22 areas of patients' expectations into 5 categories: communication, interpersonal manner, physician's skill, logistics, and other (**Table 1**). We used content analysis of the groups to evaluate the number of separate instances in which focus group participants cited individual areas of expectations. On the

Table 1. Categories and Areas of Patients' Expectations for Eye Care*

A. Communication
• Honesty (1)
• Information about diagnosis and prognosis (2)
• Explanation in clear language (3)
• Listening/addressing concerns (6)
• Information about medications (10)
• Information about holistic medicine (12)
• Discussion of family history (18)
B. Interpersonal manner
• Empathy (5)
• Personal connection (7)
• Courtesy (11)
• Professionalism (13)
• Encouragement/reassurance (19)
• Patience (21)
C. Physician's skill
• Experience/reputation (4)
• Outcomes (14)
• Competence (15)
• Access to advances in eye care (20)
D. Logistics
• Waiting time (9)
• Coordination of care (17)
• Appointment access (22)
E. Other
• Time with physician (8)
• Referral (16)

*The overall ranking of each expectation area based on frequency is noted in parentheses.

basis of this content analysis, the 6 areas of expectations that appeared to be of greatest importance to focus group participants were the following: (1) honesty, (2) information about diagnosis and prognosis, (3) explanation in clear language, (4) experience or reputation, (5) empathy, and (6) listening and addressing concerns. Examples of participant comments in each of these 6 areas are given in **Table 2**. Focus group participants also raised 16 additional areas of expectations regarding eye care. Examples of participant comments in each of these 16 additional expectations areas are given in **Table 3**.

At the end of each focus group session, patients were presented with copies of the Patient Concerns Form¹⁵ and asked to verbally identify items of particular importance to them when they visit their ophthalmologist. The 3 items most frequently identified as important were a desire to know more about the problem (identified by all 6 groups), a desire to discuss medications (identified by 5 groups), and a desire to do tests to find out what is wrong (identified by 5 groups). Other items that were identified by multiple groups included a desire for relief of physical discomfort or symptoms (identified by 3 groups), a desire to receive test results (identified by 2 groups), a desire to tell the eye doctor ideas or concerns about the problem (identified by 2 groups), and a desire to be comforted (identified by 2 groups).

COMMENT

This pilot study used focus groups with ophthalmology patients at Duke University Eye Center to build an un-

derstanding of patient expectations regarding eye care. Focus groups capitalize on communication between participants to generate data.¹⁶ Open-ended questions encourage focus group participants to explore issues of importance to them, in their own vocabulary, pursuing their own priorities.¹⁶ Because of these unique characteristics, focus group interviews served as a robust method of gathering information on patients' expectations for eye care. Focus groups are *not* meant to be representative of the entire population of interest; rather, focus groups are intended to provide insights about the psychological and sociologic characteristics of population subgroups.¹⁷

This pilot study has produced a total of 22 areas of patient expectations for eye care, classified into 5 categories. The majority of expectations expressed fell into the communication and interpersonal manner categories. In contrast, there were few expectations expressed for tangible actions on the part of the ophthalmologist. Focus group participants most commonly cited expectations related to communication. Interestingly, the expectation cited most frequently throughout the focus groups was a desire for honesty from the ophthalmologist. Honesty was not only the most frequently cited expectation among focus group participants as a whole but also the most frequently expressed expectation area among all subgroups as well. Content analysis of focus group transcripts demonstrated that men and women, participants with lower and higher socioeconomic status, and patients with nonblinding and potentially blinding eye diseases all rated honesty more frequently than any other area of expectations. Patients also placed particular emphasis on receiving information regarding diagnosis and prognosis and receiving explanations in clear language. All subgroups rated information regarding diagnosis and prognosis among the top 5 areas of expectations, and all subgroups, except for male participants, rated explanation in clear language among the top 5 as well.

Focus group participants' emphasis on communication is consistent with the shift in medicine toward patient-centered care and with previous studies demonstrating that patients have high expectations for medical information.^{1,18-22} Ophthalmology patients in the study appeared to expect a fairly high level of involvement in their eye care. In general, medical information enables patients to participate in medical decision making; hence, patients have high expectations for information. Individual patients may differ with respect to the amount of detail they wish to receive, their ability to comprehend medical information, and their desired degree of involvement in medical decisions; however, focus group participants expressed a nearly universal expectation for honest communication regarding diagnosis, prognosis, risks of procedures, treatment options, and other elements of care. These findings are supported by a previous study of ophthalmology patients, which found that communication of medical information regarding diagnosis, prognosis, and treatment was a significant determinant of patient satisfaction.²² There is also growing evidence that physician-patient communication and higher levels of patient involvement in care are linked to better clinical outcomes.^{23,24}

Table 2. Examples of Most Frequently Identified Expectations

Expectation	Example
1. Honesty (communication category)	"The one thing I look for more than anything: honesty. I just want [the eye doctor] to be straightforward." (Focus group 6, participant 3)
2. Information about diagnosis and prognosis (communication category)	"Give me a name, what's wrong with me, that's why I'm there." (Focus group 1, participant 1)
3. Explanation in clear language (communication category)	"Explain it to me so I can understand it. You know, some doctors use the big, big words, and I have to say, 'Well I'm sorry, I didn't understand that.' Please break it down so I can understand it. That's very, very important to, to me." (Focus group 1, participant 1)
4. Experience/reputation (physician's skill category)	"I would like to know what school the doctor went to and the years of experience . . . how many surgeries . . ." (Focus group 3, participant 1)
5. Empathy (interpersonal manner category)	"[The eye doctor] probably has your best interests at heart, but you look at his demeanor and sometimes it turns people off and they won't talk to him as much and be as open with him. Let [the doctors] have a human side to them, it makes it a lot easier on the patient." (Focus group 1, participant 5)
6. Listening/addressing concerns (communication category)	"When I come to see the doctor, he always has time to listen to me and to answer any questions that I may have, and I do have them. That's what I look for in a doctor." (Focus group 6, participant 6)

Focus group participants also emphasized the importance of an ophthalmologist's interpersonal manner, particularly a sense of empathy and personal connection. These findings are consistent with evidence that a physician's affect toward patients is closely correlated with patient satisfaction.^{25,26} A previous literature review found that one of the most strongly supported relationships in the literature is the connection between "personal" care and high levels of satisfaction.²⁷ There is also some evidence that more personal care is associated with better communication and more patient involvement.²⁷ In the focus groups, patients with blinding eye diseases rated empathy higher than those with nonblinding diseases. This is not surprising. Interestingly, personal connection ranked next to last among expectations of participants with lower socioeconomic status, but personal connection rated second among those with higher socioeconomic status. This may be related to the shared socioeconomic status between patients with higher socioeconomic status and their ophthalmologists, but it is, nevertheless, a surprising finding.

In general, participants expressed few expectations for specific actions to be taken by the ophthalmologist. Our results are compatible with previous research findings that clinic employees, physicians, and administrators underestimate patient expectations for empathy but consistently overestimate expectations for tangible actions.^{28,29} However, this observation conflicts with studies from the primary care literature in which patient expectations and requests frequently included elements of the physical examination, diagnostic tests, referral, and new medication or treatment.³⁰ For example, one study found that one of the 3 most desired elements of care was "listen to my chest (lungs) with a stethoscope."³¹ Although ophthalmology patients in the focus groups did express expectations for referral, they did not express any analogous expectations for specific elements of the eye examination, medication, or testing. The observation that ophthalmology patients place greater emphasis on communication and interpersonal manner than technical interventions is consistent with a previous study, which found that patient satisfaction is more closely linked to patients' perceptions about whether

they received nontechnical interventions, such as education, than technical interventions, such as diagnostic tests.³² Patients' inability to effectively assess the technical quality of the eye care they receive may be part of the reason that focus group participants expressed few expectations for technical interventions. However, it does not explain discrepancies between the expectations of ophthalmology patients and primary care patients. One possibility is that ophthalmic medications, the eye examination, and ophthalmic testing may be less familiar to patients than corresponding elements of care in a primary care setting; thus, patients may have fewer expectations for these less familiar elements. In addition, the discrepancy might be attributed in part to the nature of the focus group discussions, which centered primarily around expectations for eye care in general. In contrast, most primary care studies have assessed patients' expectations at the time of a visit. It is possible that ophthalmology patients might express greater expectations for technical interventions in the setting of an individual visit; however, there was no evidence of this in the focus groups.

Although study participants generally prioritized nontechnical expectations, content analysis of the expectations expressed in the focus groups showed some differences according to sex, socioeconomic status, and condition type (blinding or nonblinding eye disease). Overall, expectations were fairly consistent across subgroups; however, there are additional differences worth highlighting.

Content analysis showed that female participants cited expectations for appointment access, experience or reputation, and explanation in clear language far more frequently than men did. Honesty was the most frequently cited expectation for both men and women. However, women rated both experience or reputation and explanation in clear language among their top 3 expectations, whereas men raised these expectations infrequently. The reason for this discrepancy is unclear. Male participants rated information about diagnosis and prognosis and empathy among their top 3 expectations.

Similarly, there were differences in some areas of expectations by socioeconomic status as well. Although no

Table 3. Other Areas of Expectations Identified

Expectation	Example
Information about medications (communication category)	"I like to know, even though I may not understand it all the time, I like to know . . . what the medications are, what the side effects are, I like for all doctors to give me this information." (Focus group 6, participant 6)
Information about holistic medicine (communication category)	"I want the eye doctor to ask questions about my wholeness, about everything, not just the things that concern my eyes. Perhaps it's my diet maybe, maybe it's my exercise, the kinds of stresses that I'm under, things that I'm doing within my day that may have an effect on my vision . . . It's part of a more holistic treatment is what I'm looking for." (Focus group 2, participant 2)
Discussion of family history (communication category)	". . . your family history . . . when I was diagnosed last year with glaucoma . . . it wasn't until I went back home and started asking my one living relative if anybody had eye problems, and then remembering from her childhood, she said, 'Yes, I remember my great aunt who was blind.' You know, I think, oh, then there must have been something with genes . . . I think asking about your family history . . . those are things I look for." (Focus group 5, participant 5)
Personal connection (interpersonal manner category)	"I want the doctor to connect with me, to spend some time to get to know me as a patient. I found that very comforting . . . I expect that, because that gives me a degree of comfort that I can ask her, I can say something to her. You want to find out a little bit about me and put me at ease; I'm expecting that when I come into the office that you're going to treat me very humanely." (Focus group 2, participant 2)
Professionalism (interpersonal manner category)	"I want [the eye doctor] to be professional. I want them to be professional and efficient and to answer my questions and to be explanatory, all of those things . . . The only relationship I am establishing is a professional one of a patient and a doctor." (Focus group 2, participant 1)
Courtesy (interpersonal manner category)	"[Eye doctors and their staff] have been receptive, they've been kind, they've answered questions, they've been cordial when we come in and that's important." (Focus group 2, participant 2)
Encouragement/reassurance (interpersonal manner category)	"When I come and [the eye doctor] comes rolling into the room and takes a look at my eye and he says, 'You're beautiful.' And those 2 words take away worry, they tell me that my eye is coming along as it should, and everything looks good . . . just simple interpersonal stuff." (Focus group 5, participant 4)
Patience (interpersonal manner category)	". . . patience, that's a big, big, big thing with me . . . And I mean, I know everybody has a day or so where they may not have patience, but it kind of makes me feel comfortable if I feel like you kind of understand, kind of work with me a little bit until I get my nerves, because you know I get real jittery. So patience is the big one for me . . ." (Focus group 1, participant 3)
Competence (physician's skill category)	"The first thing for me is if I feel like [the eye doctor] doesn't know what he's talking about, that he isn't too sure . . . I mean if he questions himself . . . I'm like wait a minute, you're the eye doctor. I know some things you might not know, but you better have a little more confidence in what you're saying if you're talking to a patient. If [the eye doctor] is acting like he doesn't know what he's doing, then you're going to change your doctor right quick." (Focus group 1, participant 5)
Outcomes (physician's skill category)	"If [the eye doctor] wasn't helping me, I'd want a change." (Focus group 4, participant 2)
Access to advances in eye care (physician's skill category)	"You want [an eye doctor] who is involved in research or continues to go to conferences that deal with a specific problem. That, to me, that would make me want to stay because there's a little hope there that they're still continuing their education and trying to find answers to a lot of things that we don't have answers for." (Focus group 5, participant 5)
Waiting time (logistics category)	"It's a matter of communication. If you know that you're going to be tied up, then you can come out . . . and say 'The doctor is running behind schedule, he's going to be about 40 minutes late, can we reschedule you or is it all right, do you mind waiting?' You can give me the option, you know, so my day is not delayed, so I have some choices there, it's just common courtesy." (Focus group 2, participant 2)
Coordination of care (logistics category)	"I like the way they do it here, they go back and tell my family doctor and my doctor of orthopedics back in there what my situation has taken place and I like that. That makes me feel better." (Focus group 4, participant 2)
Appointment access (logistics category)	"You'd like to know that if you call, you could get in [to see the eye doctor] really quick . . . and not have to wait a week. Because you think, oh my gosh, what damage is happening to my eye during this week that I'm waiting to get in? So I think the immediacy of 'Yes, please come in the next morning,' or 'I'll squeeze you in.' That means a lot to me." (Focus group 5, participant 5)
Time with physician (other category)	"[The eye doctor] shouldn't be in a hurry. Don't talk real quick and prescribe things and then you're gone. I think you should be calm, take time, and listen to the patient. I think that's what we all want." (Focus group 2, participant 9)
Referral (other category)	"If you don't know, refer me to someone. That's very, very important to me, too." (Focus group 1, participant 1)

patients with lower socioeconomic status cited these expectations, patients with higher socioeconomic status expressed expectations in the following categories: access to advances in eye care, information about holistic medicine, and professionalism. Participants with lower socioeconomic status expressed expectations for referral, time with physician, and patience far more frequently than participants with higher socioeconomic status. The discrepancies in access to advances in eye care and holistic medicine are somewhat predictable. Participants with higher socioeconomic status were more likely to live outside of the immediate area and, as a result, may be more likely to expect cutting-edge diagnostic or therapeutic

techniques when traveling to a tertiary care center. Interest in holistic medicine is also typically more common among higher-income populations. On the other hand, it is logical that patients with less education would place greater emphasis on patience on the part of the ophthalmologist. Differences between the groups in other areas of expectations, however, do not have clear explanations.

When the expectations expressed by patients with nonblinding and potentially blinding eye diseases were compared, differences were noted in 2 areas. Patients with potentially blinding diseases more frequently expressed expectations regarding appointment access and encour-

agement or reassurance. These differences make sense in light of the differences between the 2 groups. We would expect that patients with more threatening eye disease would be more concerned about rapid access to the ophthalmologist in the case of a problem and instilling hope and reassurance.

Despite some differences in the relative importance of expectation areas between subgroups, focus group participants as a whole expressed a relatively consistent set of expectations for eye care. However, previous studies from the primary care literature suggest that unmet expectations are common and that physicians often do not accurately recognize patients' expectations.^{20,31,33,34} Nevertheless, interventions that enhance physicians' knowledge of patients' expectations have been shown to significantly reduce unmet expectations.³⁵

Some authors have questioned the desirability of meeting patients' expectations and argued that such expectations are often unreasonable and unrealistic.^{4,36} However, patient expectations are one of the primary determinants of patient satisfaction.^{37,38} A number of studies have provided evidence that meeting patients' expectations is associated with greater patient satisfaction^{31,32,34,39,40} and that unmet expectations are associated with patient dissatisfaction.^{33,40,41} Patient satisfaction, in turn, is associated with increased patient compliance with medical recommendations,^{42,43} greater patient retention,^{44,45} lower rates of malpractice suits,⁴⁶⁻⁴⁸ greater collections and profitability,^{49,50} and increased patient referrals.⁴⁹ Thus, understanding and managing patient expectations has important implications for the measurement of quality of care, provision of health services, and financial viability of health care organizations.¹¹

There are several possible limitations to this research investigating patient expectations of eye care. One possible shortcoming is the small number of groups in this pilot study used to identify expectations for eye care. In addition, women outnumbered men in the focus groups by almost 2:1. Of those approached to participate in focus groups, men were slightly less likely to agree to participate. Given the larger number of women, subtle differences in the expectations between male and female participants may have influenced the course of the discussions. It is important to consider the setting as well. This research was conducted at a tertiary, academic eye center. Expectations among patients visiting a tertiary care center may be different from those of patients in community ophthalmology practices. However, it is worth noting that 15 of the 38 participants in this study were recruited from general ophthalmology clinics. Finally, the analysis of the focus group transcripts is a subjective process and is, therefore, open to bias on the part of the researchers. In this study, 2 investigators reviewed the transcripts, and the resulting organization of items is the result of agreement between the 2 investigators.

Our overall research approach has been to explore patients' expectations through qualitative research, model what we find, and then test the model through quantitative research. In this article we discuss key findings from our most recent qualitative research phase. We are exploring the research findings from the focus groups by means of quantitative analysis in an ongoing study.

Table 4. Summary of Patients' Expectations of Their Ophthalmologists

Communication	<ul style="list-style-type: none"> • Be honest, even when there is bad news • Provide explanations in clear, layperson language • Provide patients with specific information regarding their diagnosis and prognosis whenever possible • Discuss rationale for and possible side effects of all medications • Discuss the possible benefits of diet and healthy living on a patient's eye condition • Listen carefully to patients' concerns about their eyes • Discuss patients' family history of eye disease with them
Interpersonal manner	<ul style="list-style-type: none"> • Demonstrate empathy • Show that you know patients as people and understand their unique situations • Be friendly and courteous at all times • Be encouraging when progress is made and reassure patients when appropriate • Be friendly and courteous, but always remain professional • Be patient, particularly with new patients who may be unfamiliar with elements of the eye examination
Physician's skill	<ul style="list-style-type: none"> • Discuss your expertise managing a patient's type of eye condition • Demonstrate confidence in your abilities to manage a patient's condition • Show that you care about a patient's progress • Share information with patients about advances in eye care related to their condition
Logistics	<ul style="list-style-type: none"> • Stay on time, whenever possible. When unavoidable delays occur, explain the reason to waiting patients and give them the option of rescheduling or waiting • When patients have urgent concerns, find a way to see them as soon as possible • Communicate regularly with other providers caring for your patients
Other	<ul style="list-style-type: none"> • Try to avoid acting rushed when you are seeing a patient • Refer to an ophthalmologist with greater expertise if you are not confident in your ability to manage a patient's eye condition

CONCLUSIONS

Ophthalmology patients' expectations may vary among individuals. However, we have highlighted consistent areas of expectations for eye care expressed by focus group participants. Since one of the primary goals of studying patient expectations is to better meet these expectations, it is worth exploring what lessons we can take away from this investigation. We summarize patients' expectations of their ophthalmologists in **Table 4**.

While most of the study results are relatively unsurprising, patients' desire for honesty in communication was central. Patients have many expectations of their ophthalmologists, particularly in the areas of communication and interpersonal manner. While most patients are not equipped to measure the technical quality of eye care, patients are fully qualified to evaluate their ophthalmologists' communication style and level of caring. In the environment of increasing emphasis on efficiency, it is important to remember the high priority that ophthalmology patients place on communication of medical information, explanation, listening, and personal connection.

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REFERENCES

- Laine C, Davidoff F. Patient-centered medicine: a professional evolution. *JAMA*. 1996;275:152-156.
- Gerteis M, Edgman-Levitan S, Daley J, Delbanco TL. *Through the Patient's Eyes: Understanding and Promoting Patient-Centered Care*. San Francisco, Calif: Jossey-Bass Inc; 1993.
- Neuberger J. The educated patient: new challenges for the medical profession. *J Intern Med*. 2000;247:6-10.
- Susman JL. Assessing consumer expectations and patient satisfaction: passing fad, mission impossible, or "just what the doctor ordered" [editorial]? *Arch Fam Med*. 1994;3:945-946.
- Snyderman R, Weil AT. Integrative medicine: bringing medicine back to its roots. *Arch Intern Med*. 2002;162:395-397.
- Tielsch JM, Steinberg EP, Cassard SD, et al. Preoperative functional expectations and postoperative outcomes among patients undergoing first eye cataract surgery. *Arch Ophthalmol*. 1995;113:1312-1318.
- McDonnell PJ. Refractive surgery. *Br J Ophthalmol*. 1999;83:1257-1260.
- Houtman DM. Managing patient expectations. *Int Ophthalmol Clin*. 2000;40:29-34.
- Maller BS. Market trends in refractive surgery. *Int Ophthalmol Clin*. 2000;40:11-19.
- Uhlmann RF, Inui TS, Carter WB. Patient requests and expectations: definitions and clinical applications. *Med Care*. 1984;22:681-685.
- Kravitz RL. Patients' expectations for medical care: an expanded formulation based on review of the literature. *Med Care Res Rev*. 1996;53:3-27.
- Peck BM, Asch DA, Goold SD, et al. Measuring patient expectations: does the instrument affect satisfaction or expectations? *Med Care*. 2001;39:100-108.
- Thompson AG, Sunol R. Expectations as determinants of patient satisfaction: concepts, theory and evidence. *Int J Qual Health Care*. 1995;7:127-141.
- Kravitz RL. Measuring patients' expectations and requests. *Ann Intern Med*. 2001;134:881-888.
- Hornberger J, Thom D, MaCurdy T. Effects of a self-administered previsit questionnaire to enhance awareness of patients' concerns in primary care. *J Gen Intern Med*. 1997;12:597-606.
- Kitzinger J. Qualitative research: introducing focus groups. *BMJ*. 1995;311:299-302.
- Basch CE. Focus group interview: an underutilized research technique for improving theory and practice in health education. *Health Educ Q*. 1987;14:411-448.
- Eisenthal S, Koopman C, Stoeckle JD. The nature of patients' requests for physicians' help. *Acad Med*. 1990;65:401-405.
- Price JH, Desmond SM, Losh DP. Patients' expectations of the family physician in health promotion. *Am J Prev Med*. 1991;7:33-39.
- Sanchez-Menegay C, Stalder H. Do physicians take into account patients' expectations? *J Gen Intern Med*. 1994;9:404-406.
- Zemencuk JK, Feightner JW, Hayward RA, Skarupski KA, Katz SJ. Patients' desires and expectations for medical care in primary care clinics. *J Gen Intern Med*. 1998;13:273-276.
- Trobe JD, Kraft R, Krischer JP. Doctor:patient communication in ophthalmic outpatient visits. *Ophthalmology*. 1983;90:51a-55a.
- Kaplan SH, Greenfield S, Ware JE Jr. Assessing the effects of physician-patient interactions on the outcomes of chronic disease [published correction appears in *Med Care*. 1989;27:679]. *Med Care*. 1989;27(suppl):S110-S127.
- Greenfield S, Kaplan SH, Ware JE Jr, Yano EM, Frank HJ. Patients' participation in medical care: effects on blood sugar control and quality of life in diabetes. *J Gen Intern Med*. 1988;3:448-457.
- Hall JA, Roter DL, Katz NR. Meta-analysis of correlates of provider behavior in medical encounters. *Med Care*. 1988;26:657-675.
- Hall JA, Epstein AM, DeCiantis ML, McNeil BJ. Physicians' liking for their patients: more evidence for the role of affect in medical care. *Health Psychol*. 1993;12:140-146.
- Cleary PD, McNeil BJ. Patient satisfaction as an indicator of quality care. *Inquiry*. 1988;25:25-36.
- O'Connor SJ, Trinh HQ, Shewchuk RM. Perceptual gaps in understanding patient expectations for health care service quality. *Health Care Manage Rev*. 2000;25:7-23.
- O'Connor SJ, Shewchuk RM, Carney LW. The great gap: physicians' perceptions of patient service quality expectations fall short of reality. *J Health Care Mark*. 1994;14:32-38.
- Kravitz RL, Bell RA, Franz CE. A taxonomy of requests by patients (TORP): a new system for understanding clinical negotiation in office practice. *J Fam Pract*. 1999;48:872-878.
- Kravitz RL, Cope DW, Bhrany V, Leake B. Internal medicine patients' expectations for care during office visits. *J Gen Intern Med*. 1994;9:75-81.
- Brody DS, Miller SM, Lerman CE, Smith DG, Lazaro CG, Blum MJ. The relationship between patients' satisfaction with their physicians and perceptions about interventions they desired and received. *Med Care*. 1989;27:1027-1035.
- Marple RL, Kroenke K, Lucey CR, Wilder J, Lucas CA. Concerns and expectations in patients presenting with physical complaints: frequency, physician perceptions and actions, and 2-week outcome. *Arch Intern Med*. 1997;157:1482-1488.
- Rao JK, Weinberger M, Kroenke K. Visit-specific expectations and patient-centered outcomes: a literature review. *Arch Fam Med*. 2000;9:1148-1155.
- Jackson JL, Kroenke K, Chamberlin J. Effects of physician awareness of symptom-related expectations and mental disorders: a controlled trial. *Arch Fam Med*. 1999;8:135-142.
- The quality of care: how can it be assessed [letter]? *JAMA*. 1989;261:1151-1152.
- Linder-Pelz SU. Toward a theory of patient satisfaction. *Soc Sci Med*. 1982;16:577-582.
- Ford RC, Bach SA, Fottler MD. Methods of measuring patient satisfaction in health care organizations. *Health Care Manage Rev*. 1997;22:74-89.
- Like R, Zyzanski SJ. Patient satisfaction with the clinical encounter: social psychological determinants. *Soc Sci Med*. 1987;24:351-357.
- Williams S, Weinman J, Dale J, Newman S. Patient expectations: what do primary care patients want from the GP and how far does meeting expectations affect patient satisfaction? *Fam Pract*. 1995;12:193-201.
- Uhlmann RF, Inui TS, Pecoraro RE, Carter WB. Relationship of patient request fulfillment to compliance, glycemic control, and other health care outcomes in insulin-dependent diabetes. *J Gen Intern Med*. 1988;3:458-463.
- Sherbourne CD, Hays RD, Ordway L, DiMatteo MR, Kravitz RL. Antecedents of adherence to medical recommendations: results from the Medical Outcomes Study. *J Behav Med*. 1992;15:447-468.
- O'Brien MK, Petrie K, Raeburn J. Adherence to medication regimens: updating a complex medical issue. *Med Care Rev*. 1992;49:435-454.
- Marquis MS, Davies AR, Ware JE Jr. Patient satisfaction and change in medical care provider: a longitudinal study. *Med Care*. 1983;21:821-829.
- Ware JE Jr, Davies AR. Behavioral consequences of consumer dissatisfaction with medical care. *Eval Program Plann*. 1983;6:291-297.
- Levinson W, Roter DL, Mullooly JP, Dull VT, Frankel RM. Physician-patient communication: the relationship with malpractice claims among primary care physicians and surgeons. *JAMA*. 1997;277:553-559.
- Vaccarino JM. Malpractice: the problem in perspective. *JAMA*. 1977;238:861-863.
- Hickson GB, Federspiel CF, Pichert JW, Miller CS, Gauld-Jaeger J, Bost P. Patient complaints and malpractice risk. *JAMA*. 2002;287:2951-2957.
- Hart CW, Heskett JL, Sasser WE Jr. The profitable art of service recovery. *Harv Bus Rev*. 1990;68:148-156.
- Macharia WM, Leon G, Rowe BH, Stephenson BJ, Haynes RB. An overview of interventions to improve compliance with appointment keeping for medical services. *JAMA*. 1992;267:1813-1817.