Patient Characteristics and Experiences Associated With Trust in Specialist Physicians

Nancy L. Keating, MD, MPH; Tejal K. Gandhi, MD, MPH; E. John Orav, PhD; David W. Bates, MD, MSc; John Z. Ayanian, MD, MPP

Background: Nearly half of all medical visits are to specialist physicians, yet little is known about patients’ outpatient experiences with specialists or how patients’ characteristics and experiences are related to trust in specialist physicians.

Methods: We surveyed patients who had a new patient visit with a cardiologist, neurologist, nephrologist, gastroenterologist, or rheumatologist practicing in hospital-based practices (response rate, 73%; N=417) and inquired about their experiences with care and trust in the specialist physician. We used multivariable models to assess associations of patients’ characteristics and experiences with trust.

Results: Most patients reported good experiences, and 79% reported complete confidence and trust in the specialist. Black patients were less trusting than white patients (risk ratio [RR], 0.5; 95% confidence interval [CI], 0.2-0.8). Patients were more trusting if they reported that the consultant listened (RR, 1.8; 95% CI, 1.0-2.5), received as much information as they wanted (RR, 1.6; 95% CI, 1.1-1.9), were told what to do if problems or symptoms continued, got worse, or returned (RR, 1.4; 95% CI, 1.2-1.5), were involved in decisions as much as they wanted (RR, 1.5; 95% CI, 1.2-1.8), and spent as much time as they wanted with the specialist (RR, 1.8; 95% CI, 1.3-2.2).

Conclusions: Patients reported high levels of trust in specialist physicians after an initial visit. Several specific experiences were associated with higher trust, suggesting that efforts to improve patient-physician interactions may be successful at achieving trust. Such efforts should especially aim to optimize physicians’ interactions with black patients, who were less trusting of specialist physicians.

Arch Intern Med. 2004;164:1015-1020

Trust is an important component of strong patient-physician relationships. Patients with greater trust in their physicians are more satisfied with their care, more likely to adhere to their physicians’ recommendations, and less likely to change physicians. Although the factors that enable the development of a trusting relationship are not well understood, trust is believed to develop over time and increases with the duration of patient-physician relationships. Thus, trust likely is shaped by patients’ experiences and interactions with their physician.

For editorial comment see page 930

Most of the prior literature about trust has focused on trust in primary care providers among patients who have an ongoing relationship with their provider. However, nearly half of all medical visits are to specialists, and because the nature of the patient-physician relationship may differ for specialists compared with generalists, understanding factors associated with trust in specialists is important.

Patients seeing a specialist for a new visit usually have a specific problem or question to be addressed, and many of these patients will have just 1 visit with a particular specialist. If findings from primary care studies can be extended to specialty care, then establishing a trusting relationship at the first visit may contribute to greater patient satisfaction and greater adherence to the consultant’s recommendations. Even for patients who return for follow-up visits with the specialist, the first visit may be particularly important to establishing a trusting relationship. Patients with low trust at the start of the relationship may perceive future care more negatively, even when the care provided is excellent. Thus, maximizing trust at the start of a patient-physician relationship may be especially important.

In the present study, we sought to describe patients’ experiences during their initial visit with a medical specialist.
Patients' experiences with care during their visit to the consultant specialist.13-15 Response options were "yes, completely"; "yes, somewhat"; and "no." The asterisk indicates that an additional response option included "I did not ask any questions"; the dagger, an additional response option included "I did not have any problems or symptoms."

also examined patient characteristics and specific experiences during the office visit that were most strongly associated with greater trust in the specialist.

Sample and Patient Survey

We identified patients of faculty primary care physicians at one of 13 university-affiliated clinics who were scheduled for a new patient visit with a cardiologist, neurologist, nephrologist, gastroenterologist, or rheumatologist in hospital-based practices between September 1999 and March 2000. This study was part of an effort to assess the effect of a computerized referral letter on communication between primary care physicians and specialists;13 these specialties were chosen because they accounted for a large proportion of the specialty referrals from the practices. Visits were considered new if the patient had no visits with the specialist in the prior 24 months. We sampled all new patient visits to the above specialties during 3 consecutive weeks of each of the study months. Patients with more than 1 eligible visit to a specialist were sampled only once.

Trained interviewers contacted patients by telephone 1 to 2 weeks after their consultation to inquire about the visit, specifically identifying the visit date and the specialist by name. Interviewers asked patients whether the patient, their primary care physician, or another physician suggested the visit with the specialist. They also asked patients whether their health plan required them to have a referral or other type of approval from their primary care provider to see the specialist, and, if so, whether they had difficulty with the referral process.

We assessed experiences with the specific referral visit using 8 questions from the Picker-Commonwealth Survey of Patient-Centered Ambulatory Care, adapted from the Picker-Commonwealth Survey of Hospital Care.11-13 (Figure 1). Several of these questions have also been associated with trust in primary care relationships.16 These questions focused on communication between the patient and consultant, provision of information, participation in decisions, and respect for the patient. Response options to the questions included "yes, completely"; "yes, somewhat"; and "no." For analyses, these were categorized as "yes, completely" vs "yes, somewhat" or "no." Response of "yes, completely" were categorized as complete trust.

We also assessed communication (1) between primary care physicians and patients prior to the consultation by asking patients if their primary care physician had provided enough information about what to expect during the visit and (2) between primary care physicians and specialists by asking patients whether the specialist was aware of the reason for their visit prior to the visit.

To measure trust in the consultant, we asked patients, "Did you have confidence and trust in Dr (consultant)?" Responses were "yes, completely"; "yes, somewhat"; and "no." Responses of "yes, completely" were categorized as complete trust.

Patients also provided demographic information including race and ethnicity, education, and current health status (excellent, very good, good, fair, or poor). We obtained each patient's age, sex, and insurance status (fee for service, Medicare, Medicaid, capitated health maintenance organization product, noncapitated health maintenance organization, and point of service plan) from administrative data. The study protocol was approved by the Brigham and Women's Hospital Human Research Committee, Boston, Mass.

Of the 625 patients sampled, 46 were not eligible (because they never saw the specialist, did not speak English, or were too sick to participate), 65 declined participation, and 90 were not contacted because their phone was disconnected or there was no answer after 8 calls. The response rate among patients not known to be ineligible was 73% (424/579). Respondents were more likely than nonrespondents to be female (76% vs 68%, P = .05) but did not differ by age. The final sample included 424 patients of 57 primary care providers who saw 92 different specialists. We excluded 7 patients who did not respond to the question about trust.

Statistical Analyses

We used the χ² test to compare the proportion of respondents reporting complete trust by patient characteristics and experiences. We next used multivariable logistic regression to identify factors associated with trust. Independent variables included patient demographics that we considered important (age, sex, race, education, health status, and insurance status), physician specialty, the 8 Picker-Commonwealth questions about experiences with the consultant (Figure), the 2 variables related to communication prior to the referral visit (whether the primary care provider had given the patient enough information about what to expect at the visit and whether the specialist was aware of the reason for the visit), and 2 questions about the referral process that we hypothesized might be related to patients' experiences and trust (whether the patient needed a referral from their primary care provider and whether the patient had problems with the referral paperwork and/or approval process). Patient characteristics were categorized as listed in Table 1. We used the likelihood ratio test to test the overall association between multilevel variables and trust. Indicator variables were created for 7 patients who responded "I did not ask any questions" to the experience about getting answers they could understand and for 29 patients who responded "I had no problems or symptoms" to the experience about telling what to do if problems or symptoms continued, returned, or came back.

We included a large number of variables in our model to capture the important factors associated with trust as well as potential confounders. To assess for collinearity, we also used a backwards stepwise procedure to explore the stability of the coefficients, removing variables that were not statistically significant and whose removal did not affect the other β coefficients. Because the coefficients remained stable and the main results did not differ, we present only our original model. In additional analyses, we also adjusted for whether this was the first visit for a given problem or symptom and for satisfaction with the primary care provider (to control for the possibility that some patients may be less trusting and less satisfied overall). Analyses were conducted using SAS statistical software version 6.12 (SAS Institute, Inc, Cary, NC). We used generalized
estimating equations for logistic regression models to account for clustering at the level of the specialist, and we converted adjusted odds ratios to risk ratios to more accurately reflect the relative risk. \( P < .05 \) was considered statistically significant.

RESULTS

The mean age of the sample was 50 years, and 74% were white, 76% were women, and 56% were college graduates (Table 1). Overall, 59% of patients reported that this was their first visit to any specialist for their current problem or symptom. Most patients (63%) reported that the visit was suggested by their primary care physician. Most patients (62%) reported that they needed a referral from their primary care physician; however, only 27% of those patients (18% of all patients) reported having any problems with the referral process. About half of patients (51%) were scheduled for a follow-up visit with the specialist.

EXPERIENCES

Patients generally had good experiences with the consultant during their referral visit (Table 2). Most patients reported that they were given enough time to explain the reason for their visit (87%), the consultant listened to what they had to say (88%), the consultant gave them answers they could understand (87%), and they spent as much time with the specialist as they wanted (85%). Seventy-five percent of patients reported that they got as much medical information as they wanted, and 78% of patients were involved in decisions as much as they wanted. Fewer patients reported that they were told what to do if symptoms continued, got worse, or did not improve (64%) and that their primary care physician was involved in decisions about their care as much as they wanted (62%). Sixty-six percent of patients reported that the specialist was aware of the reason for their visit prior to the visit, and 72% reported that their primary care physician gave them enough information about what to expect from the visit (Table 2).

TRUST

Most patients (79%) reported that they had complete confidence and trust in the specialist. In bivariate analyses, black and Hispanic patients were less trusting than white and other (primarily Asian) patients (\( P = .005 \); Table 1). Patients reporting good, fair, or poor health status were less trusting than patients with excellent or very good health status (\( P = .003 \)). Women were less trusting than men, although this finding was of borderline statistical significance (\( P = .08 \)).

Also in bivariate analyses, each of the 8 specific experiences, 5 were associated with greater trust in the consultant: patients who spent as much time as they wanted with the specialist (RR, 1.8; 95% CI, 1.3-2.2), patients who reported that the consultant listened to what they had to say (RR, 1.8; 95% CI, 1.0-2.5), patients who got as much medical information as they wanted (RR, 1.6; 95% CI, 1.1-1.9), patients who were involved in decisions as much as they wanted (RR, 1.5; 95% CI, 1.2-1.8), and patients who were told what to do if their problems or symptoms continued, got worse, or returned (RR, 1.4; 95% CI, 1.2-1.5). Levels of trust did not differ for patients who reported that the specialist gave them enough time to explain the reason for their visit, involved their primary care physician as much as they wanted, or gave them answers to questions that they could understand.

We also found no association with trust for patients who reported that their primary care provider gave...
them enough information about what to expect prior to the visit or who reported that the specialist was aware of the visit prior to the visit, nor did we find an association between patients who needed a referral or had difficulty with the approval process (Table 3). Our findings did not change when, in additional analyses, we adjusted for whether this was the first visit to any specialist for the current problem or symptom or when we adjusted for satisfaction with the primary care provider.

**COMMENT**

We surveyed patients about experiences with referral visits and found that most patients reported very good experiences with care during their initial visit with a specialist. Moreover, nearly 80% of patients reported that they completely trusted the specialist when interviewed 1 to 2 weeks after their visit. In analyses that adjusted for patients’ characteristics and their reports of their experiences with the consultant, trust was higher for patients who reported that the specialist provided enough medical information; explained what to do if problems or symptoms continued, got worse, or came back; listened to what they had to say; and involved them in decisions as much as they wanted. Trust was also higher among patients who reported that they spent as much time as they wanted with the specialist.

Levels of trust were substantially lower for black patients compared with white patients, consistent with findings of 2 large studies of trust in primary care physicians and a study of patients with end-stage renal disease who reported their trust in their nephrologists. Black patients are also less likely than other patients to participate in medical research, a finding associated with distrust of medical research and the medical community, which may be rooted in experiences of black patients.
Patients who reported that the physician listened to what they had to say were also more trusting. Prior data demonstrate that physicians frequently interrupt their patients, a behavior that may be modifiable. In analyses adjusting for all of the patient experiences, we did not find greater trust among patients who reported they had enough time to explain the reason for their visit; however, this specific experience may be captured in the broader experience of having the physician listen to what they say.

We also found greater trust among patients who reported that they participated in decisions as much as they wanted. Patients’ vary in their preferences for participation in decisions and often have an actual role in decisions that is either more or less active than their desired role; however, patients whose actual role matches their desired role may be more satisfied with their treatment choices than other patients.

Patients who reported that they spent as much time as they wanted with the specialist were also more trusting. Recent data examining visit duration have found that patients reporting longer visits with their primary care physicians were more satisfied, particularly if the visit length exceeded their expected visit duration.

Some experiences, such as whether patients were involved in decisions as much as they wanted or spent as much time as they wanted with the specialist, are dependent on patients’ expectations and preferences. Other research suggests that unmet patient expectations may lead to less satisfaction with care. Whether identifying patients’ expectations and preferences about visit duration, decision making, or other elements of care and attempting to meet these expectations can improve outcomes such as trust is an important question for future study.

A previous study suggests that patients who reported difficulty obtaining referrals were less trusting of their primary care physicians. In our study, we examined only patients who actually had a visit to a specialist, but among that group, we did not find any difference in trust in the specialist for patients who needed a referral or reported problems obtaining the referral or other approval. We also did not find a relationship between type of insurance and trust.

In summary, we found that trust in specialist physicians after an initial visit was generally high, particu-
larly among non–African American patients and patients who reported that the consultant listened, provided enough information, told patients what to do if symptoms continued or worsened, included them in decisions as much as they wanted, and left patients feeling that they had as much time as they wanted. These data suggest that training physicians in communication skills may help them achieve higher levels of trust. Focused training can help improve physicians’ communication skills, however, whether improved communication skills translate to improved outcomes remains unclear. One study of a brief workshop designed to increase trust had no effect, and another study found that communication skills training did not improve patient satisfaction. Future research is necessary to determine how trust after an initial visit is related to trust over time and whether training physicians to identify patients’ expectations and improve interpersonal behaviors can enhance patients’ trust in their physicians. In addition, a better understanding of the causes of distrust among African American patients is important to optimizing interactions with such patients.

Accepted for publication March 21, 2003.

This study was supported by the Primary Care Research and Education Fund of Brigham and Women’s Hospital, Boston, Mass. Dr Keating is a recipient of a Doris Duke Clinical Scientist Award.

Dr Keating had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Corresponding author and reprints: Nancy L. Keating, MD, MPH, Department of Health Care Policy, Harvard Medical School, 180 Longwood Ave, Boston, MA 02115 (e-mail: keating@hcp.med.harvard.edu).

REFERENCES