

## Patient Desire and Reasons for Specialist Referral in a Gatekeeper-Model Managed Care Plan

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### **Abstract**

**Objective:** To describe patient desire and reasons for specialist referrals in a gatekeeper-model managed care plan.

**Study Design:** Cross-sectional prospective study.

**Patients and Methods:** We developed a patient questionnaire to gather demographic data and to gauge patients' desire for specialist referral and their reasons for seeking such referral. The survey was administered at 2 sites—an ambulatory care facility of a university hospital and an internal medicine clinic in a suburban ambulatory care site. Patients asked to complete the questionnaire at the university hospital site were enrolled in a gatekeeper-model managed care plan (called CU Gold); those seen at the internal medicine clinic were enrolled in a group-model health maintenance organization. Patients were asked to complete the 1-page questionnaire in the waiting room before being seen by their primary care physician.

**Results:** Among the 860 CU Gold patients who met the inclusion criteria during the 3-month study period (September to December 1997), 112 (13%) reported a definite desire to see a specialist and 274 (32%) indicated a possible desire to see a specialist

at the time of their primary care visit. Compared with the CU Gold patients, significantly fewer patients in the health maintenance organization indicated a definite desire to see a specialist (3% versus 13%), but a similar percentage expressed a possible desire to see a specialist (30% versus 32%). The difference in definite desire for referral between the 2 groups could not be explained by patient or primary care physician characteristics. The principal health concerns for which patients sought referral were musculoskeletal, genitourinary or gynecologic, or dermatologic problems. Need for reassurance (cited by 67% of patients), seeing a specialist before (56%), and believing the primary care physician lacked expertise (49%) were the primary reasons patients sought referral. Seventy-four percent of patients referred by their primary care provider and 54% of those not referred agreed it was a good idea to see their primary care physician first before seeing a specialist.

**Conclusions:** Patients have a significant desire for specialist referral, driven by their need for reassurance, previous specialist referral, and belief that their primary care physician does not have the requisite expertise. Patients' expectations for referral varied significantly, depending on the healthcare system (academic primary care clinic or health maintenance organization) in which they were enrolled.

(*Am J Manag Care* 2000;6:669-678)

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This study was funded by the Board of Directors of University Hospital, Denver, CO. Additional monetary support and supplies were provided by the Division of General Internal Medicine at the University of Colorado Health Sciences Center.

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Currently more than 60 million people in the United States are enrolled in a managed care health insurance program. Many managed care programs use a gatekeeper model in which primary care providers are responsible for authorizing

access to specialty, emergency, and hospital care. There has been significant discussion regarding the risks and benefits of such a restrictive system.<sup>1,2</sup> The assumptions underlying the gatekeeper model are that free access increases the risk of overtreatment, that limiting access to specialists can be done in a way that minimizes the risk of undertreatment while maintaining patient satisfaction, and that limiting access conserves healthcare resources.<sup>1</sup> Indirect evidence supports the concept that gatekeeper models decrease the likelihood of overtreatment,<sup>1</sup> and 2 large studies have demonstrated that gatekeeper models modestly but significantly decrease costs.<sup>3,4</sup>

A primary function of primary care physicians in gatekeeper-model managed care systems is control of referrals to specialty care. Referral regulation by primary care providers has a considerable impact on physicians, their patients, and the physician-patient relationship.<sup>1-10</sup> Patients generally value their primary care physician as a source of first-contact care and a coordinator of referrals.<sup>6</sup> However, some data suggest that patients have a high level of referral expectation,<sup>11-18</sup> and failure to meet these expectations is associated with patient dissatisfaction and desire to change to another healthcare plan.<sup>7,16,19-21</sup> From the perspective of the primary care physician, many feel that patients view them as adversaries and that regulation of referrals negatively affects patient care and patient-physician communication.<sup>8,9,11</sup>

Some aspects of the gatekeeper system, such as the reasons why primary care physicians refer, have been discussed in the literature.<sup>5,20-25</sup> Other aspects of the referral process, however, such as the reasons why patients desire specialist referrals, remain unexplained. Moreover, few data are available on the factors that underlie variability in referral rates. In view of the importance of primary care physician control of specialist referrals in gatekeeper-model managed care systems, we undertook a study with 2 objectives in mind—to determine why patients sought a specialist referral and to identify factors that contribute to variability in referral rates.

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...METHODS ...

Our study was conducted primarily at a University Medical Group Practice site, which is an ambulatory care facility of a university hospital. This clinic is staffed by 16 general internists and provides general medical care for several managed

care plans, as well as for participants in other types of payment plans. The 16 physicians who saw study patients were aware of the research study but unaware of its objectives. The study was approved by the Colorado Multiple Institutional Review Board and conducted from September 22, 1997, through December 19, 1997.

All patients enrolled in a point-of-service gatekeeper-model managed care plan (called CU Gold) were asked to participate in the study by completing a questionnaire in the waiting room before seeing a primary care physician. In some cases, patients were also asked to complete a postvisit telephone questionnaire. The CU Gold plan allowed patients to self-refer to specialists for a substantially higher deductible and copayment but encouraged use of in-network services under the guidance of a gatekeeper physician. We did not include in this study patients who self-referred to specialty care and thus may have underestimated the percentage of patients desiring referral. Participants in the CU Gold plan were employees and family members of University Hospital, University Physicians Incorporated, and state employees employed by University Hospital and its affiliates. Approximately 5000 individuals were enrolled in the CU Gold plan and received their care at the study site during the study period. For all analyses, only data from the first visit during the study interval were used. Patients who visited more than once during the study period were not surveyed again.

A second study site was included during the last month of the study. This site was an internal medicine clinic in a suburban ambulatory care site in the same metropolitan area. It was operated by the group-model health maintenance organization Kaiser Permanente and staffed by approximately 11 internal medicine primary care physicians. An effort was made to enroll consecutively encountered patients at this site, but the number of patients who declined to complete the questionnaire was not tracked.

We included this second site for 2 reasons. First, we believed that including another study site with patients from an established managed care system would enhance the generalizability of our results. Second, we felt that including the selected second study site could help us meet our objective of identifying reasons for the variability in referral rates. In this regard, the members of the CU Gold plan who formed our principal study group had, until 6 months before our study began, been enrolled in a health plan that allowed open access for self-referral

Figure 1. Patient Questionnaire

**PATIENT QUESTIONNAIRE**

Please help us to improve the quality of our service to you by completing this form. This information is completely confidential and will NOT be shared with any of your care providers.

1. FORM X	2. Date _____
3. Set # _____	4. Med Asst _____
Interview Status:	
5. PT Ref <input type="checkbox"/>	No Show <input type="checkbox"/> Other <input type="checkbox"/>

6. Have you seen a regular care provider at this office before?  Yes  No

7. Is this appointment with your regular care provider?  Yes  No

8. How long have you known your regular care provider?  
 Never met  1 visit  Less than 1 year  More than 1 year

9. How would you rate your overall health?  
 Poor  Fair  Good  Very Good  Excellent

10. Are you or a family member a healthcare worker?  Yes  No

11. Do you need a referral to a specialist today?  Yes  Possibly  No

STOP here if your answer is NO! Please return this form to the manila envelope marked "PATIENT QUESTIONNAIRES" on the wall of the examination room. CONTINUE if your answer is YES or POSSIBLY.

12. Do you have more than one referral concern today?  Yes  No

13. Main referral concern (example, knee pain): \_\_\_\_\_

PLEASE PUT A CHECK IN THE BOX OF EACH ONE THAT APPLIES

14. I would feel more REASSURED seeing a specialist about this concern. ....

15. I believe that my regular care provider may not have EXPERTISE for this concern. ....

16. I believe that my regular care provider may not feel that my concern is IMPORTANT. ....

17. I have seen a specialist BEFORE for this or a similar concern. ....

18. FAMILY MEMBERS or FRIENDS have suggested I see a specialist. ....

19. I have ALREADY DISCUSSED this concern with a provider in this clinic and the concern persists. ...

20. Other (please describe): \_\_\_\_\_

PLEASE PUT A CHECK IN THE BOX OF THE BEST ANSWER.

21. I am WORRIED about this health concern:  
 strongly disagree  disagree  not sure  agree  strongly agree

22. Because of this health concern, I am UNABLE TO FUNCTION NORMALLY:  
 strongly disagree  disagree  not sure  agree  strongly agree

Please return this form to the manila envelope marked "PATIENT QUESTIONNAIRES" on the wall of the examination room.

to specialists. Comparisons of patients from the CU Gold plan (limited previous gatekeeper experience) and from the Kaiser plan (more extensive previous gatekeeper experience) provided an opportunity to compare referral rates from plans with distinct histories of referral patterns.

**Patient Questionnaire**

We developed a 1-page, self-administered questionnaire to gauge patients' attitudes toward and concerns about specialist referral (Figure 1). The questionnaire was reviewed by a professional survey consultant and extensively tested before implementation. Before completing the questionnaire, patients were told their responses would be confidential, would not be made known to their physician, and would be used to improve the quality of care provided.

Patients were asked to provide yes or no answers to 2 questions ("Have you seen a regular care provider at this office before?" and "Is this appointment with your regular care provider?"). Patients were also asked to indicate how long they had known their regular care provider, how they would rate their overall health, and whether they needed a referral to a specialist today. Some referral topics were excluded from study because self-referral without penalty was allowed for these services (eg, annual eye examination with an ophthalmologist and visits to a mental health specialist). Others were

excluded because of ongoing specialty care issues (pregnancy, cancer, AIDS, and other requests for continuing therapy). Urgent care and emergency room requests also were not studied.

Patients indicating a definite or possible need for specialist referral were asked to note whether they had more than one referral concern and to write down their main referral concern. These patients were also asked to note the reason(s) for wanting a referral, by choosing from a list of possibilities or providing a written description. We compiled the list of possible patient reasons for specialist referral from discussions with several experienced primary care physicians, review of published studies, and discussions with selected patients.<sup>12,16,19-21</sup> Finally, patients indicating a definite or possible need for specialist referral were asked about their anxiety level regarding the referral issue and self-perceived health status.

Patients indicating a possible or definite need for specialist referral who discussed this referral concern with their physician (as noted by the physician after each visit) were contacted by telephone 3 to 14 days after their visit. Patients were asked whether they had been referred to a specialist and to indicate whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with the statement "I think it is a good idea to see my regular care provider before being referred to a specialist."

**Statistical Analysis**

For questions related to overall health, we obtained a numerical score by assigning a score of 1 to "poor," 2 to "fair," 3 to "good," 4 to "very good," and 5 to "excellent." For statements regarding worry about a health concern, inability to function normally because of a health concern, and opinion regarding seeing a primary care provider before specialist referral, we assigned a score of 1 to "strongly disagree," 2 to "disagree," 3 to "not sure," 4 to "agree," and 5 to "strongly agree." Continuous variables were

**Table 1.** Demographic Characteristics

Variable	Patient Desire for Specialist Referral		
	No Desire (n = 471)	Possible (n = 277)	Definite (n = 112)
Mean age (y)	46.0	44.6	48.3*
Female (%)	68.1	59.9 <sup>†</sup>	65.2
Seen previously at this office (%)	70.6	65.2	64.9
Appointment is with primary care physician (%)	72.1	67.2	76.6
Self-ranking of overall health <sup>†</sup> (mean ± SEM)	3.7 ± 0.04	3.6 ± 0.05	3.6 ± 0.09

\*P < .05, possible versus definite groups.

<sup>†</sup>P < .05, possible versus no groups.

tested using Student's *t* test and analysis of variance, where appropriate; categorical variables were compared using the chi-square test. A *P* value of less than .05 was considered significant. We performed our analyses using SPSS-PC software version 4.2 (SPSS Inc, Chicago, IL).

...RESULTS ...

Of the 1033 CU Gold patients seen during our study period, 938 completed the questionnaire. Of these, 860 patients met the inclusion criteria and data from their visits were analyzed. We found that 471 patients (55%) indicated no need for a specialist referral at the time of the visit, 277 patients (32%) indicated a possible need for referral, and 112 patients (13%) indicated a definite need for referral. As shown in Table 1, we found minor demographic differences among these 3 groups.

Compared with patients expressing a possible need for specialist referral, a significantly greater percentage of patients indicating a definite need for referral had more than a single referral concern and more reasons for seeking referral (Table 2). However, patients expressing a definite need for referral did not differ significantly from those with a possible need for referral with regard to self-rating of their worry about their health concern or their inability to function normally because of the health concern.

**Patient Reasons for Seeking Specialist Referral**

Need for reassurance, having previously seen a

specialist for the health concern, and belief that the primary care physician did not have sufficient expertise to handle the concern were the main reasons CU Gold patients wanted a specialist referral (Table 3). The principal health concerns for which patients sought referral were musculoskeletal (cited by 23% of patients), genitourinary or gynecologic (13%), dermatologic (13%), gastrointestinal (9%), ear/nose/throat (6%), neurologic (4%), ophthalmologic (3%), cardiovascular (2%), pulmonary (2%), and miscellaneous (2%). Twenty percent of patients did not indicate a definite "system" categorization for referral.

**Table 2.** Comparison of Selected Variables

Variable	Patient Desire for Specialist Referral		
	Possible (n = 277)	Definite (n = 122)	<i>P</i>
More than one referral concern (%)	23.4	36.1	.014
More than one reason for seeking referral (%)	47.5	65.0	.006
Self-ranking of worry regarding referral issue* (mean ± SEM)	3.5 ± 0.06	3.6 ± 0.11	.25
Self-ranking of inability to function regarding referral issue* (mean ± SEM)	2.7 ± 0.08	2.6 ± 0.14	.50

\* Scored on a scale of 1 to 5, with 1 = strongly disagree, 2 = disagree, 3 = not sure, 4 = agree, and 5 = strongly agree.

**Table 3.** Primary Reasons Patients Sought Specialist Referral

Reason	Patient Desire for Referral		
	Possible (n = 277)	Definite (n = 112)	<i>P</i>
Reassurance (%)	48.0	67.0	.002
Have seen specialist before (%)	39.8	56.7	.008
Primary care provider does not have expertise (%)	26.5	49.5	< .001
Family or friend suggested specialist (%)	20.4	20.6	1.0
Discussed concern previously with primary care provider (%)	18.4	17.5	1.0
Primary care provider may not believe concern is important (%)	9.2	8.3	1.0

### Variability in Patient Desire for Referral by Primary Care Physician

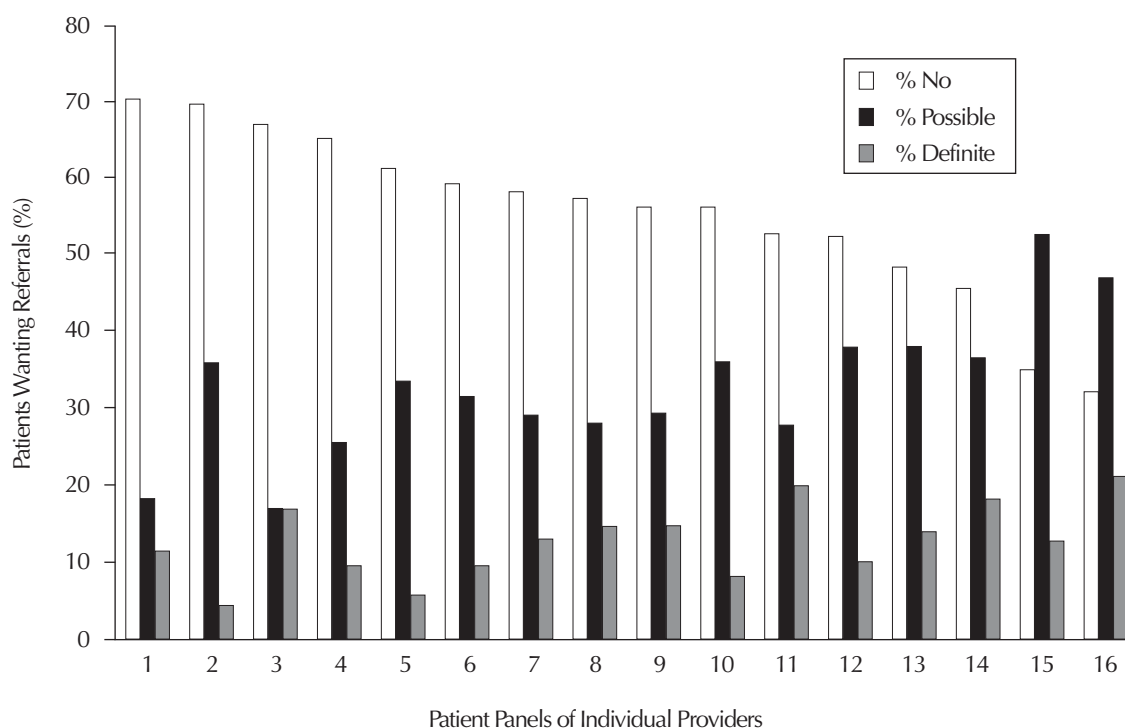
The percentage of CU Gold patients indicating no, possible, or definite desire for referral according to which of the 16 primary care providers they saw is shown in Figure 2. We found that patient desire for referral varied significantly when individual providers were compared ( $P < .05$ ). However, patient age or sex did not differ significantly according to the individual provider. We also found no significant association between patient desire for referral and primary care provider sex, years in practice, or clinic workload (data not shown).

### Variability in Patient Desire for Referral by Healthcare System

To determine whether our results could be generalized to other managed care populations, we compared the referral desires of the CU Gold patients with those of 162 patients enrolled in a health maintenance organization who were seen at a Kaiser Permanente ambulatory site. We found significant

between-group differences with regard to mean age (Kaiser, 54.8 years; CU Gold, 45.1 years;  $P < .0001$ ), sex (Kaiser, 33% female; CU Gold, 65.7% female;  $P < .001$ ), and whether the patient had been previously seen at the site (Kaiser, 81.5%; CU Gold, 68.1%;  $P < .001$ ). Compared with the CU Gold patients, the Kaiser patients were significantly less likely to indicate a definite need for referral (3% versus 13%) ( $P < .05$ ). However, the frequency with which the Kaiser and CU Gold patients indicated a possible need for referral was not significantly different (30% versus 32% respectively). The reasons for wanting a referral were similar in both groups—need for reassurance (54% of Kaiser patients versus 55% of CU Gold patients, primary care provider may not have expertise (37% versus 50%), have seen specialist previously (37% versus 57%), discussed previously with provider (25% versus 18%), and primary care provider may not feel concern is important (14% versus 8%). The Kaiser patients, however, were significantly more likely than the CU Gold patients to note that family or friends suggested they see a specialist

**Figure 2.** Percent of Patients Seeking Referral According to Individual Primary Care Provider



(45% versus 21%) ( $P < .002$ ). Also, Kaiser patients indicating a definite or possible need for specialist referral scored higher on the self-rated "unable to function normally" scale than did the CU Gold patients ( $3.4 \pm 0.1$  versus  $2.6 \pm 0.05$ ) ( $P < .0001$ ).

### Patient Opinion of Gatekeeper System

One hundred fifty patients discussed their possible or definite desire for a specialist referral with their primary care physician during their visit. We attempted to call each of these patients for a brief follow-up telephone interview. Of the 111 patients we were able to contact, 80 had been referred to a specialist by their primary care physician and 31 had not. Of those referred, 74% agreed or strongly agreed with the statement "it is a good idea to see my primary care physician before being referred to a specialist." Of those not referred, 54% agreed or strongly agreed with the statement.

### ...DISCUSSION ...

Our study provides data regarding patient desire for specialist referral in the context of 2 gatekeeper managed care systems. We found that 33% to 45% of patients in 2 ambulatory general internal medicine settings had either a definite (3% to 13%) or possible (30% to 32%) desire for referral to a specialist before seeing their primary care physician.

To compare our results with those of others, we extracted data from 6 published studies that, although not designed to explicitly study the referral process, provide information on ambulatory patient desire for specialist referral.<sup>12-16,20</sup> With a single exception,<sup>12</sup> these studies, which were derived from several settings and geographic locations, demonstrate a remarkably constant rate, ranging from 30% to 60%, of ambulatory general

medical patients' desire for specialist referral (Table 4). Taken together, our study and previous studies demonstrate that a substantial proportion of patients in a contemporary ambulatory medical practice seek a specialist referral. Recognition and explicit discussion of this patient desire by primary care providers could potentially have a significant clinical impact. For example, Marple et al<sup>16</sup> and Kerr et al<sup>20</sup> found that unmet residual desire for specialist referral was an independent correlate of diminished patient satisfaction with an ambulatory visit.

Our results provide new information regarding the reasons patients seek a specialist referral. A substantial percentage (32%) of patients had a possible referral concern, which might reflect patients' uncertainty as to the role of the primary care physician. The possible need for a referral might also account for the significant variation (30% difference) in studies that asked patients a yes or no question regarding referral desire. In our study, patients who believed most strongly about the need for specialist referral had more numerous referral concerns and more reasons for seeking referral.

**Table 4.** Patient Referral Expectations from Published Studies

Study	n	Year Conducted	Setting	Patient Referral Expectation
Webb & Lloyd <sup>12</sup>	1080	1989-90	North London, UK General practice	13%
Kravitz et al <sup>13</sup>	304	1991	Southern California, USA Academic general medicine	64%
Marple et al <sup>16</sup>	328	1992	Washington, DC, USA Military general medicine	53%
Kerr et al <sup>20</sup>	11,710	1993	California, USA Generalist practices	40%
Kravitz et al <sup>15</sup>	318	1994	Northern California, USA Academic general medicine	30% - 57%
Hornberger et al <sup>14</sup>	47	?	Northern California, USA Academic general medicine	50%
Lin et al (current study)	1033	1997	Denver, Colorado, USA Academic general medicine and private sector managed care	33% - 45%

The principal reason for seeking specialist referral was reassurance. This finding is not surprising given previously published data indicating that about 65% of patients seen in a primary care setting are concerned about the possibility of serious illness.<sup>16</sup> The second most common reason for seeking specialist referral was having previously seen a specialist for a similar concern. This suggests that patients' previous medical experience influences their subsequent desires and expectations. Tabenkin et al<sup>17</sup> noted that patients who previously had direct access to specialists were significantly more likely to prefer direct access than were patients in a managed care plan who had never had direct access to specialists. The third most commonly cited reason for desiring specialist referral was belief that the primary care physician did not have sufficient expertise to handle the health problem. In the Tabenkin et al study,<sup>17</sup> older patients and patients who were satisfied with and trusted their physician had significantly lower preference for direct access to specialists. Thus the patients in our study may have had an inaccurate impression of the primary care provider's expertise, had a lack of trust in their physician's ability to manage their health concern, or were not satisfied with their relationship with the physician.

We also identified the health concerns most often related to patients' desire for specialist referral. Musculoskeletal, genitourinary or gynecologic, dermatologic, gastrointestinal, and ear/nose/throat problems comprised about two thirds of the health concerns for which patients sought referral. Of these disorders, musculoskeletal problems made up nearly one fourth of patient referral concerns. Our ranking of the body system concerns underlying patients' desires for referral differs substantially from that reported in other primary care practices<sup>5,22,24,25</sup> and may be related to differences in the patient populations. For example, we excluded from our analyses eye, mental health, malignancy, and AIDS referral concerns. Regional or system differences in patient populations might also explain the discrepancy between our findings and those of others. In any case, identifying the most common reasons patients seek referral in each practice may point to potential educational interventions among the physicians of that practice.

We observed significant variability in patient desire for referral according to the individual primary care physician and the type of healthcare system. In previous studies, patient characteristics (patient sex and type of insurance plan) and physician char-

acteristics (physician sex and type of training) were found to significantly affect referral rates.<sup>22</sup> In our study, the variability in patient desire for referral was related to individual physicians and healthcare systems. We found no differences in patient characteristics or physician experience that could explain the variability in referral desire. Moreover, our data indicate reasonable physician-patient continuity for the patients enrolled in this study. Although further work is needed, our data are compatible with the idea that individual physician practice patterns or reputation may be a significant determinant of patient referral desire. Indeed, other fairly recent studies demonstrate considerable physician variability in referrals and resource utilization in response to encounters with standardized patients.<sup>26,27</sup>

With regard to healthcare system variability, we noted a modest but significantly lower frequency of definite referral desire when Kaiser patients were compared with CU Gold patients. We observed this lower patient referral desire despite evidence that the Kaiser patients were older and had lower functional scores. This curious finding may be due to patients' expectations set by previous visits. Perhaps the Kaiser patients had a longer relationship with their primary care provider, had more confidence in their physician, or had fewer expectations of seeing a specialist. Although the variability in referral desire related to primary care physician and healthcare system deserves further study to clarify its cause(s), our results and those of others<sup>22</sup> demonstrate the complexity of factors affecting patients' expectations regarding specialist referrals.

Another notable finding is that most of our patients who sought a specialist referral expressed positive feelings about the gatekeeper model, whether or not they were ultimately referred to a specialist. This result is somewhat surprising because the members of the CU Gold plan included in our study had direct access to specialists for several years before inception of the plan in January 1997. This finding also contrasts with those of previous studies. Tabenkin et al<sup>17</sup> reported that 62% of patients in a health maintenance organization managed care plan preferred direct access to specialists if they had had this privilege previously. Among those who had not had direct access, only 36% preferred direct access to specialists. Additionally, Owen et al<sup>18</sup> found that 87% of patients seeking care at a dermatology office described direct access to dermatologists as being very important to their healthcare. It is not clear what other factors influ-



ence patients' feelings about restricted access to specialists. Regional differences and perhaps medical sophistication in the academic clinic population are 2 possible influences. Together, our findings and those of Tabenkin et al<sup>17</sup> and Owen et al<sup>18</sup> are best summarized by the recent conclusions of Grumbach et al,<sup>6</sup> who analyzed data from more than 7700 patients in California. These authors concluded that patients value the first contact and coordinating role of primary care providers but that referral policies that are viewed as restrictive undermine patients' trust and confidence in their primary care physician.

Several factors are important to consider in interpreting our results. First, our study involved only 2 sites in a single geographic region and included a limited number of primary care physicians. Thus our results may not be generalizable. Second, the study instrument we used was created specifically for this study, and some aspects of the instrument, such as the questions about health status, have not been validated by comparison with established instruments. Third, in view of the disparity in the number of patients and the significant differences in patient characteristics at the 2 study sites, any conclusions derived from comparing the 2 sites should be viewed cautiously. Fourth, we excluded any patient who paid a higher copayment and self-referred for specialty care. Although we do not believe this represented a significant number of patients, failure to include these patients underestimates the level of overall patient referral concern.

In summary, we found that many ambulatory patients have a significant desire for specialist referral. This desire is driven by patients' need for reassurance, previous referrals for similar health problems, and belief that primary care providers do not have sufficient expertise to manage their concerns. We found significant variation among patients with respect to expectations for referral, which was not explained by physician or patient characteristics. Instead, this variation might result from differences in health-care systems that influence patient referral expectations. Greater awareness by primary care physicians of patient expectations and reasons for specialist referral might result in better management of specialist referrals while maintaining patient satisfaction.

#### Acknowledgments

We thank Mary Miller for secretarial support.

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