Resolving the Gatekeeper Conundrum
What Patients Value in Primary Care and Referrals to Specialists

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HIGH-QUALITY PRIMARY CARE IS the foundation of effective and efficient health care systems. Essential elements of the practice of primary care include accessibility as the first-contact point of entry to the health care system, continuity, comprehensiveness, coordination of referrals, and understanding of the family and community context of health.1-6 Managed care organizations in the United States have tended to emphasize 2 of these tasks: providing first-contact care and coordinating referrals. Physicians performing these tasks are often referred to as "gatekeepers."7,8 This term frequently has pejorative connotations in the United States due to concerns that the cost-containment imperatives of managed care encourage primary care physicians to restrict rather than facilitate access to specialists and other referral services. In 1997, almost half of all privately insured patients in major metropolitan regions throughout the United States were in "gatekeeping arrangements in which their primary care physician controls their access to specialists."9 The role of managed care gatekeepers in the United States has been especially contentious because of the use of economic incentives that may financially reward primary care physicians for thrifty use of referral and hospital services.10,11

Context Few data are available regarding how patients view the role of primary care physicians as "gatekeepers" in managed care systems.

Objective To determine the extent to which patients value the role of their primary care physicians as first-contact care providers and coordinators of referrals, whether patients perceive that their primary care physicians impede access to specialists, and whether problems in gaining access to specialists are associated with a reduction in patients’ trust and confidence in their primary care physicians.

Design, Setting, and Patients Cross-sectional survey mailed in the fall of 1997 to 12,707 adult patients who were members of managed care plans and received care from 10 large physician groups in California. The response rate among eligible patients was 71%. A total of 7,718 patients (mean age, 66.7 years; 32% female) were eligible for analysis.

Main Outcome Measures Questionnaire items addressed 3 main topics: (1) patient attitudes toward the first-contact and coordinating role of their primary care physicians, (2) patients’ ratings of their primary care physicians (trust and confidence in and satisfaction with), and (3) patient perceptions of barriers to specialty referrals. Referral barriers were analyzed as predictors of patients’ ratings of their physicians.

Results Almost all patients valued the role of a primary care physician as a source of first-contact care (94%) and coordinator of referrals (89%). Depending on the specific medical problem, 75% to 91% of patients preferred to seek care initially from their primary care physicians rather than specialists. Twenty-three percent reported that their primary care physicians or medical groups interfered with their ability to see specialists. Patients who had difficulty obtaining referrals were more likely to report low trust (adjusted odds ratio [OR], 2.7; 95% confidence interval [CI], 2.1-3.5), low confidence (OR, 2.2; 95% CI, 1.6-2.9), and low satisfaction (OR, 3.3; 95% CI, 2.6-4.2) with their primary care physicians.

Conclusions Patients value the first-contact and coordinating role of primary care physicians. However, managed care policies that emphasize primary care physicians as gatekeepers impeding access to specialists undermine patients’ trust and confidence in their primary care physicians.

JAMA. 1999;282:261-266 www.jama.com

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A recent study found that dissatisfaction with access to specialty care was the strongest predictor of patients’ intention to leave managed care plans. Concern about restricted access to specialists and other referral services has contributed to a mounting public backlash against managed care. Public confidence in primary care physicians in the United States may become a casualty of this backlash if patients come to view primary care physicians as mere instruments for impeding access to specialists. Some managed care plans have reacted to the backlash by offering policies that allow patients direct access to specialists. Legislative proposals at both the national and state levels, commonly referred to as patient bills of rights, often feature regulations to permit patients to circumvent their primary care physicians when seeking specialty services. Critics of these proposals worry that direct access measures may undermine the beneficial aspects of primary care physicians as coordinators of specialty services.

Limited research suggests that primary care physicians themselves have considerable ambivalence about their role as gatekeepers in managed care systems. However, little is known about how patients view the role of primary care physicians as coordinators of care. We investigated patient attitudes toward the involvement of their primary care physicians in access to specialty care. Our specific objectives were to determine the extent to which patients valued the role of their primary care physicians as first-contact providers and coordinators of referral services, whether patients perceived that their primary care physicians or medical groups impeded access to specialty care in managed care systems, and whether problems in gaining access to specialty care were associated with a reduction in patients’ trust and confidence in their primary care physicians.

**METHODS**

Data for this study derived from a cross-sectional survey in the fall of 1997 of patients in managed care plans who received their care from 1 of several large medical groups in California. The study was conducted as part of a broader project investigating patient, physician, and organizational factors associated with specialty referrals for patients with 1 of 3 medical conditions (congestive heart failure, benign prostatic hypertrophy, or peptic ulcer disease and related gastric conditions). A multistep sampling strategy was used to select patients for the survey. We began by recruiting medical groups in California that were willing to provide administrative data on physician visits and to allow us to survey enrolled patients and primary care physicians in the group. Ten physician groups agreed to participate, including 3 independent practice associations, 3 integrated medical groups, and 4 physician groups affiliated with 1 large, group-model health maintenance organization. We analyzed administrative records on primary care physician encounters for the period January 1, 1995, through December 31, 1996, to detect patients diagnosed as having 1 of the 3 study conditions. These records were available for patients in health maintenance organizations enrolled in the group on a censored basis. We focused on patients with these specific conditions (1) to reduce the amount of variation in underlying medical conditions that might complicate analyses of referral issues and (2) to focus on patients for whom referrals might be a common consideration. We preferentially included patients who had recently received their initial diagnosis of the study condition.

We selected patients for the study by including all patients in the medical group with the study conditions up to a maximum of 450 patients per condition per medical group. This process produced a list of 13,393 patients potentially eligible for the study. We then mailed each primary care physician a list of the patients from the physician’s practice that we planned to survey. We asked the physicians to indicate patients who had died, who were too ill or mentally incapacitated to respond, or who were no longer in that physician’s practice. Six hundred eighty-six patients were excluded from the survey sample based on feedback from physicians. Questionnaires were mailed to the remaining 12,707 patients.

The questionnaires included items investigating 3 main areas of interest: (1) patient attitudes toward the first-contact and coordinating role of their primary care physicians, (2) patient ratings of their primary care physicians, and (3) patient perceptions of barriers to specialty referrals. Four items addressed patients’ attitudes toward the first-contact and coordination roles of their primary care physicians. Three of these items were rated on a 5-point scale ranging from “strongly agree” to “strongly disagree”: (1) “I value having 1 primary care physician who knows about all my medical problems”; (2) “It is helpful for my primary care physician to participate in decisions about whether I should see a specialist”; and (3) “For most new medical problems, I can decide for myself whether I should see my primary care physician or a specialist.” A fourth item assessed patients’ propensity to seek initial care from specialists rather than their primary care physicians for a series of hypothetical medical conditions; this item asked patients to indicate whether they would prefer to see their primary care physicians or relevant specialists first in the event they experienced “cough with wheezing that has lasted for 1 week,” “arthritis in your knee causing swelling and pain,” and “blood in your bowel movement.” A summary score was created by assigning patients a point for each of the 3 scenarios in which they preferred to see a specialist first (range of summary score, 0-3). (This score is hereafter identified as the “referral propensity score.”) The Cronbach α test for the referral propensity score was .70.

Patients were asked to rate the performance of their primary care physicians on 3 commonly evaluated dimensions: trust, confidence in quality of care, and overall satisfaction. Patients were asked to indicate their level of agreement (using a 5-point scale ranging from “all of the time” to “none of
of attribution for difficulties in obtaining referrals. We validated the question on difficulty obtaining a referral by comparing responses with actual use of specialty care among patients in the group-model health maintenance organization, the only patients for whom comprehensive automated encounter data were available. The mean number of visits to specialists in the prior year was much greater among patients reporting no difficulty obtaining a referral than among those reporting some level of difficulty (4.03 vs 2.93; \( P < .001 \)).

Logistic regression models were used to test the association between referral barriers and the 3 main outcome variables (patient ratings of trust and confidence in and satisfaction with their primary care physicians). Models were designed to predict low ratings on these 3 outcome variables, defined as any value less than “all” or “most of the time” for the trust and confidence variables and a rating of dissatisfaction or uncertainty on the satisfaction item. Included as predictors in these models were the variables on referral barriers; the referral propensity score; variables measuring patient demographic characteristics (age, sex, education, marital status, race/ethnicity) and health status (overall self-rated health status, a Charlson comorbidity score, and variables for each of the 3 study conditions); variables measuring elements of the patient-physician relationship (duration of care with the primary care physician, whether the patient chose or was assigned to the primary care physician, and the availability of the primary care physician to answer questions during the day); and dummy variables for each specific medical group. Logistic regression models used parameter estimation by the generalized estimating equation approach to account for clustering of patients within individual physician practices.26

**RESULTS**

Of the 12 707 patients surveyed, 8394 (66%) returned completed questionnaires. Of the patients not returning questionnaires, we ascertained that 854 were not eligible for the survey because they had died (191), did not speak English (85), were no longer enrolled with the medical group (105), had moved and gave no forwarding address (301), or were otherwise ineligible (172). The adjusted response rate after excluding these additional ineligible patients was 71% (8394/11 853). Among survey respondents, 676 patients were excluded from data analysis because they indicated that their current physicians were not in the study’s physician panel, resulting in a total of 7718 patients for the final analyses.

The mean age of study participants was older than 65 years, and almost 30% of participants rated their health as only fair or poor (Table 1), reflecting the study’s focus on patients with medical conditions that increase in prevalence with age. The relatively low proportion of women in the study is attributable to the inclusion of benign prostatic hypertrophy as 1 of the study conditions. The racial and ethnic distribution of patients was comparable to that of the overall insured population of California, excepting a somewhat lower proportion of Latino patients. Two thirds of patients

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**Table 1. Characteristics of Respondents**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No. of respondents</th>
<th>Age, mean (SD), y</th>
<th>Female, %</th>
<th>Education, % with some college or higher</th>
<th>Race/ethnicity, %</th>
<th>Condition, %</th>
<th>Charlson score, mean (SD)</th>
<th>Practice setting, %</th>
<th>Time with physician, %</th>
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<tr>
<td>No. of respondents</td>
<td>7718</td>
<td>66.7 (12.9)</td>
<td>32</td>
<td>64</td>
<td>64</td>
<td>9</td>
<td>0.76 (1.29)</td>
<td>54</td>
<td>65</td>
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<td>Age, mean (SD), y</td>
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<td>Education, % with some college or higher</td>
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<td>Race/ethnicity, %</td>
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<td>Charlson score, mean (SD)</td>
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<td>Practice setting, %</td>
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<td>Time with physician, %</td>
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had chosen their primary care physicians, and half had been with their physicians for at least 5 years.

Almost all patients valued the role of a primary care physician as a source of first-contact care and coordinator of referrals (TABLE 2). Ninety-four percent of patients agreed that they valued having primary care physicians who knew about all of their medical problems. Almost as many patients (89%) agreed that it was helpful for their primary care physicians to participate in decisions about specialty referrals. Fewer than half (46%) of the patients agreed that they should decide for themselves in most instances whether to see a specialist; 28% of patients disagreed with this statement, while 26% reported that they were uncertain or did not know whether they could usually decide for themselves to see a specialist without first consulting their primary care physicians.

On the set of items evaluating patients’ propensity to seek first-contact care from a specialist rather than their primary care physician, from 75% to 91% of patients preferred to visit their primary care physicians first, depending on their specific medical problems (FIGURE). Sixty-seven percent of patients indicated that they would seek initial care from their primary care physicians for all 3 of the problems combined.

Twenty-three percent of patients agreed with the statement “My primary care physician or medical group interferes with my ability to see specialists.” When asked specifically about whether they thought they had needed referrals in the prior year, 67% of patients answered in the affirmative. Among those patients who thought they needed referrals, 12% reported that it was difficult to get the referrals they wanted, 82% indicated that it was easy to get the referrals, and 7% reported that they “hadn’t tried” to get the referrals. Agreement with the general statement about referral barriers was highly correlated with each patient’s own experience with a needed referral. Seventy-five percent of patients who needed referrals and reported them as being difficult to obtain also agreed with the statement that their physicians or medical groups interfered with access to specialists, compared with 18% of patients who reported an easy time getting the referrals they wanted and 17% of patients who said they had not needed referrals in the past year (P = .001).

Patients’ ratings of their primary care physicians revealed generally high levels of trust, confidence, and satisfaction. Eighty-five percent of patients trusted their primary care physicians to do what is best for them, and 82% believed that all or most of the time their physicians were well qualified to manage their care. A similar proportion (82%) of patients were satisfied with their primary care physicians.

In multivariate regression analyses of factors associated with low ratings of trust, confidence, and satisfaction, experiences or perceptions of referral barriers emerged as 1 of the strongest independent predictors of lower patient ratings of their primary care physicians (TABLE 3). Compared with patients who said they did not need referrals, patients who had needed referrals and encountered difficulty obtaining them were much more likely to report low trust (odds ratio [OR] 2.7; 95% confidence interval [CI], 2.1-3.5), low confidence (OR, 2.2; 95% CI, 1.6-2.9), and low satisfaction (OR, 3.3; 95% CI, 2.6-4.2). Patients who needed referrals and reported that it was easy to get them had ratings of trust, confidence, and satisfaction that were comparable to those for patients who did not need referrals. Patients’ propensity to want referrals, as measured by their preference for first-contact care from specialists, was also strongly and independently associated with their ratings of their primary care physicians; patients with higher referral propensities rated their primary care physicians lower on the trust and confidence items (TABLE 3). The referral propensity score was also associated with lower satisfaction, although not as strongly as with the trust and confidence scales. Consistent with prior research on the patient-physician relationship, patients who chose their physicians, who had longer relationships with their physicians, and who reported that their physicians were more available to answer questions were less likely to report low ratings of trust, confidence, and satisfaction.3,21,27

We repeated these regression analyses, substituting the more general referral barrier question (“My primary care physician or medical group interferes . . .”) for the item inquiring about actual experience with needed refer-

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**Table 2. Patient Attitudes Toward Primary Care Physicians and Use of Specialists**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
<th>Don’t Know or Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value having 1 primary care physician</td>
<td>94</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Helpful for primary care physician to participate in decision to see specialist</td>
<td>89</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Can decide for myself whether to see primary care physician or specialist for new problem</td>
<td>46</td>
<td>28</td>
<td>26</td>
</tr>
</tbody>
</table>

*All data are presented as percentages.*

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**Figure. Preference for Primary Care Physician or Specialist as First-Contact Physician for Selected Medical Problems**

The figure indicates the percentages of patients who would prefer to first seek care from their primary care physician as a first-contact physician or from a relevant specialist for each of 3 hypothetical new medical problems.
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January 1999—Vol 281, No. 3

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rals. Patients who agreed that their physicians or medical groups interfered with referrals were more likely to report low trust (OR, 2.0; 95% CI, 1.7-2.4), low confidence (OR, 1.9; 95% CI, 1.6-2.3), and low satisfaction (OR, 2.0; 95% CI, 1.7-2.3). We also repeated the analyses limiting the sample to only those patients who indicated that they had chosen their primary care physicians. The referral experience variable remained strongly associated with lower ratings of primary care physicians in analyses performed only on this subgroup of patients. Finally, because men were overrepresented in our study sample relative to their proportion in the overall population, we stratified the sample by sex to determine whether effects differed according to patients’ sex. Difficulty obtaining referrals remained a significant predictor of low trust, confidence, and satisfaction in all models for each sex, although the ORs for this effect tended to be larger among women.

**COMMENT**

Health policy debates are often framed as “either-or” propositions. Do patients value primary care, or do they value specialty care? Our study suggests that the answer is that patients value both. Patients overwhelmingly endorsed the importance of having identified primary care physicians to integrate their overall care and preferred to involve their primary care physicians in decisions about obtaining care from specialists. Most patients also preferred to initiate care for new medical problems with their primary care physicians rather than seeking care directly from specialists. These responses indicate that patients perceive a beneficial role for primary care physicians in coordinating their care, suggesting that most patients do not generally endorse a model of fragmented specialty care without primary care physicians integrating this care.

Patients also clearly want to be able to obtain specialty care when they believe they need it. A small but noteworthy proportion of patients perceived their primary care physicians or medical groups to be impediments to specialty care. Most of these patients had actually experienced difficulty obtaining referrals that they believed they needed. Perceptions of referral barriers were 1 of the strongest predictors of patients giving their primary care physicians low trust, confidence, and satisfaction ratings. Other studies have shown that low ratings on these types of measures are associated with some important outcomes, such as poorer adherence to treatment and worse health status outcomes in chronic disease. 3,28,29

Several limitations of our study merit comment. As in any cross-sectional observational study, causal inferences must be made cautiously. Our results may indicate that the experience of a referral barrier results in patients having lower trust and confidence in their primary care physicians. An alternative interpretation is that patients who have underlying distrust of or dissatisfaction with their physicians are more likely to perceive barriers to referrals. Several findings support the former interpretation. We attempted to measure patients’ underlying preference for specialty care using a referral propensity score. This score likely captures components of patients’ predispositions to distrust or lack confidence in their primary care physicians. It was strongly associated with patients’ ratings of their physicians, in that patients who were more inclined to seek specialty care reported lower confidence, trust, and satisfaction. However, in models that adjusted for the referral propensity score, the experience of a referral barrier remained a strong predictor of lower physician ratings. In addition, we reanalyzed the data including only patients who actively chose their primary care physicians, thereby limiting the sample to patients who presumably had sufficiently high initial regard for their physician to voluntarily enroll in that physician’s practice. The referral barrier variables remained strong predictors of lower ratings in this sample.

Our study included patients who were enrolled only in managed care plans and who each had an identified primary care physician. If patients who prefer a more primary care-oriented model are more likely to enroll in managed care plans, our study may have a selection bias toward patients with more favorable views of primary care physicians. Our study design also selected for patients with a higher level of illness than the general population. Although these patients may have greater

**Table 3. Association Between Perceptions of Referral Barriers and Ratings of Primary Care Physician**

<table>
<thead>
<tr>
<th>Patient Rating of Primary Care Physician, OR (95% CI)</th>
<th>Low Trust</th>
<th>Low Confidence</th>
<th>Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referral experience Did not need</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Needed and easy to obtain</td>
<td>0.7 (0.6-0.9)</td>
<td>0.9 (0.8-1.1)</td>
<td>1.0 (0.9-1.2)</td>
</tr>
<tr>
<td>Needed and difficult to obtain</td>
<td>2.7 (2.1-3.5)</td>
<td>2.2 (1.6-2.9)</td>
<td>3.3 (2.6-4.2)</td>
</tr>
<tr>
<td>Needed and did not try</td>
<td>1.6 (1.1-2.3)</td>
<td>2.0 (1.4-2.8)</td>
<td>1.8 (1.3-2.5)</td>
</tr>
<tr>
<td>Referral propensity score†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>1</td>
<td>1.5 (1.2-1.9)</td>
<td>1.5 (1.2-1.9)</td>
<td>1.0 (0.8-1.3)</td>
</tr>
<tr>
<td>2</td>
<td>1.9 (1.5-2.4)</td>
<td>2.3 (1.8-2.7)</td>
<td>1.1 (0.9-1.4)</td>
</tr>
<tr>
<td>3</td>
<td>3.2 (2.3-4.5)</td>
<td>2.5 (1.9-3.4)</td>
<td>1.6 (1.2-2.1)</td>
</tr>
<tr>
<td>Chose primary care physician</td>
<td>0.7 (0.6-0.8)</td>
<td>0.7 (0.6-0.8)</td>
<td>0.8 (0.7-0.9)</td>
</tr>
<tr>
<td>Duration of primary care physician relationship, y</td>
<td>0.89 (0.86-0.93)</td>
<td>0.90 (0.87-0.93)</td>
<td>0.97 (0.94-0.99)</td>
</tr>
<tr>
<td>Primary care physician availability†</td>
<td>0.4 (0.4-0.5)</td>
<td>0.5 (0.4-0.5)</td>
<td>0.8 (0.8-0.9)</td>
</tr>
</tbody>
</table>

*Analyses are adjusted for patient age, sex, education, marital status, race/ethnicity, health status, Charlson score, study condition, and individual medical group. OR indicates odds ratio; CI, confidence interval.
1 = low propensity, 3 = high propensity for referral.
2 Availability on a 1 (low) to 5 (high) scale.
needs for referrals, they may also be more likely than healthier patients to have established ongoing relationships with their primary care physicians. Because of the sampling design, our results are not necessarily generalizable to all patients in these medical groups or to the population at large.

Our findings have important policy implications. Many health care systems, such as the British National Health Service, have long emphasized the virtues of primary care, fostering a medical culture in which patients have grown accustomed to registering with family physicians and routing most of their medical needs through those physicians’ practices. In the United States, the principle of a primary care coordinator of services has been less ingrained in the health care system. In the pre–managed care era, the values of specialty care dominated the medical culture, leading many insured Americans to expect unfettered access to specialists of their choice. Many advocates of primary care in the United States welcomed the ascendance of managed care as a force that would value and enhance the practice of primary care. Although managed care has placed primary care physicians in a more prominent role in the current US health care system, the role of gatekeeper has been a mixed blessing. Overemphasis of primary care gatekeepers as agents of cost control threatens to undermine primary care in the United States.

The challenge in the United States is to create practice arrangements that promote a first-contact and coordinating role for primary care physicians without simultaneously casting primary care physicians in the role of rationer of specialty care. Some analysts have proposed redefining the role of the primary care physician in the United States from that of gatekeeper to conductor, reaffirming the central role of primary care physicians as coordinators of a health care team. This redefinition would involve elimination of financial incentives that allow primary care physicians to profit by withholding referrals and relaxation of strict prior-authorization rules for specialty visits. At the same time, specialists would be expected to effectively communicate with primary care physicians and to recognize the importance of primary care physicians as integrators of care. Resolving the gatekeeper conundrum also will require addressing many of the underlying structural problems in the US health care system, such as an overabundant supply of specialists, that contribute to this predicament.

Our study provides new insights into patient attitudes toward primary care and access to specialty care. Although patients value the first-contact and coordinating role of primary care physicians, managed care policies that emphasize primary care physicians as gatekeepers impeding access to specialists undermine patients’ trust and confidence in their primary care physicians.

Funding/Support: This work was supported by grant RO1 HS08269 from the Agency for Health Care Policy and Research.

Acknowledgment: We thank the Permanente Medical Group, the Sharp Rees-Stealy Medical Group, the Huntington Provider Group, the MedPartners Medical Group (Mullikin IPA), the Friendly Hills Healthcare Network, the Alta Bates Medical Group, and the other participating medical groups for their cooperation. We also thank Sylvie Canuel, MA; Julie Schmittle, MA; and Michelle Won for their contributions to this project.

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