Patient satisfaction often is used as a proxy for quality of care, with physicians evaluated and reimbursed based on patient satisfaction scores. As a specialty, dermatology is lagging in quality improvement studies. To fill this gap, we conducted a prospective study of targeted interventions administered at outpatient dermatology clinics to determine if they resulted in statistically significant increases in patient satisfaction measures, particularly among Spanish-speaking patients. This study, along with the existing body of research, suggests the need for continued work to maximize patient satisfaction in dermatology.

The Patient Protection and Affordable Care Act has increased the number of insured Americans by more than 20 million individuals. Approximately half of the newly insured have an income at or below 138% of the poverty level and are on average younger, sicker, and more likely to report poor to fair health compared to those individuals who already had health care coverage. Specialties such as dermatology are faced with the challenge of expanding access to these newly insured individuals while also improving quality of care.

Because of the complexity of defining quality in medicine, patient satisfaction is being used as a proxy for quality, with physicians evaluated and reimbursed based on patient satisfaction scores. Little research has been conducted to validate the relationship between patient satisfaction and quality; however, one study showed online reviews from patients on Yelp correlated with traditional markers of quality, such as mortality and readmission rates, lending credibility to the notion that patient satisfaction equates quality of care. Moreover, prospective studies have found positive correlations between patient satisfaction and compliance to therapy; however, these studies may not give a complete picture of the relationship between patient satisfaction and quality of care, as other studies also have illustrated that, more often than not, factors extrinsic to actual medical care (eg, time spent in the waiting room) play a considerable role in patient satisfaction scores.

When judging the quality of care that is provided, one study found that patients rate physicians based on interpersonal skills and not care delivered. Another important factor related to patient satisfaction is the anonymity of the surveys. Patients who have negative experiences are more likely to respond to online surveys than those who have positive experiences, skewing overall ratings. Additionally,
because of Health Insurance Portability and Accountability Act regulations, physicians often are unable to respond directly to public patient reviews, resulting in an incomplete picture of the quality of care provided.

Ultimately, even if physicians do not agree that patient satisfaction correlates with quality of care, it is increasingly being used as a marker of such. Leading health care systems are embracing this new weight on patient satisfaction by increasing transparency and publishing patient satisfaction results online, allowing patients more access to physician reviews.

In dermatology, patient satisfaction serves an even more important role, as traditional markers of quality such as mortality and hospital readmission rates are not reasonable measures of patient care in this specialty, leaving patient satisfaction as one of the most accessible measures insurance companies and prospective patients can use to evaluate dermatologists. Furthermore, treatment modalities in dermatology often aim to improve quality of life, of which patient satisfaction arguably serves as an indicator. Ideally, patient satisfaction would allow physicians to identify areas where they may be better able to meet patients’ needs. However, patient satisfaction scores rarely are used as outcome measures in studies and are notoriously difficult to ascertain, as they tend to be inaccurate and may be unreliable in correlation with physician skill and training or may be skewed by patients’ desires to please their physicians. There also is a lack of standardized tools and scales to quantitatively judge outcomes in procedural surgeries.

Although patient satisfaction is being used as a measure of quality of care and is particularly necessary in a field such as dermatology that has outcome measures that are subjective in nature, there is a gap in the current literature regarding patient satisfaction and dermatology. To fill this gap, we conducted a prospective study of targeted interventions administered at outpatient dermatology clinics to determine if they resulted in statistically significant increases in patient satisfaction measures, particularly among Spanish-speaking patients.

**Methods**

We conducted a prospective study evaluating patient satisfaction in the outpatient dermatology clinics of LAC+USC Medical Center in Los Angeles, California, spanning over 1 year. During this time period, patients were randomly selected to participate and were asked to complete the Short-Form Patient Satisfaction Questionnaire (PSQ-18), which asked patients to rate their care experience on a 5-point Likert scale (1=strongly agree; 5=strongly disagree). The survey was separated into the following 7 subscales or categories looking at different aspects of care: general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with physician, and accessibility and convenience. Patients were given this survey both before and after targeted interventions to improve patient satisfaction were implemented. The targeted interventions were created based on literature review in the factors affecting patient satisfaction. The change in relative satisfaction was then determined using statistical analysis. The study was approved by the University of Southern California Health Science institutional review board.

**Results**

Of 470 patients surveyed, the average age was 49 years. Fifty percent of respondents were male, 70% self-identified as Hispanic, 45% spoke Spanish as their native language, and 69% reported a mean annual household income of less than $15,000. When scores were stratified, English-speaking patients were significantly more satisfied than Spanish-speaking patients in the categories of technical quality ($P<.0340$), financial aspects ($P<.0301$), interpersonal manner ($P<.0037$), and time spent with physician ($P<.0059$). Specifically, in the time spent with physician category, the lowest scores were found in females, patients aged 18 to 29 years, and patients with a mean annual household income less than $15,000. These demographics correlate well with many of the newly insured and intimate the need for improved patient satisfaction, particularly in this subset of patients.

After analyzing baseline patient satisfaction scores, we implemented targeted interventions such as creating a call tree, developing multilingual disease-specific patient handouts, instituting quarterly nursing services, which judged interpersonal and occupational nursing skills, and recruiting bilingual staff. These interventions were implemented simultaneously and were selected with the goal of reducing the impact of the language barrier between physicians and patients and increasing accessibility to clinics. Following approximately 3 months of these interventions, performance on many categories increased in our demographics that were lowest performing when we collected baseline data. In Spanish-speaking respondents, improvement in several categories approached statistical significance, including general satisfaction ($P<.110$), interpersonal skills ($P<.080$), and time spent with physician ($P<.096$). When stratifying by income and age, patients with a mean annual household income less than $15,000 demonstrated an improved technical quality ($P<.066$) subscale score, and participants aged 18 to 29 years showed improvement in both accessibility and convenience ($P<.053$) and financial aspects ($P<.056$) subscales.

**Comment**

The categories where improvements were found are noteworthy and suggest that certain aspects of care are more important than others. Although it seems intuitive that clinical acumen and training should be important contributors to patient satisfaction, one study that analyzed 1000 online comments regarding patient satisfaction with dermatologists on the website DrScore.com found that most comments concerned physician personality and
interpersonal skills rather than medical judgment and acumen, suggesting that a patient’s perception of the character of the physician directly affects patient satisfaction scores. This notion was reiterated by other studies, including one that found that a patient’s perception of the physician’s kindness and empathy skills is the most important measure of quality of care scores. Although this perception can be intimidating to some physicians, as certain interpersonal skills are difficult to change, it is reassuring to note that external environment and cues, such as the clinic building and staff, also seem to affect interpersonal ratings. As seen in our study, patient ratings of a physician’s interpersonal skills increased after educational materials for staff and patients were created and more bilingual staff was recruited. Other environmental changes, such as spending a few more minutes with patients and sitting down when talking to patients, are relatively easy to administer and can improve patient satisfaction scores.

Although some of the scores in our study approached but did not reach statistical significance, likely because of a small sample size, they suggest that targeted interventions can improve patient satisfaction. They also suggested that targeted interventions are particularly useful in Spanish-speaking patients, younger patients, and patients from lower socioeconomic backgrounds, which are all characteristics of the newly insured under the Patient Protection and Affordable Health Care Act.

Our study also is unique in that dermatology as a specialty is lagging in quality improvement studies. In the few studies evaluating patient satisfaction in the literature, the care provided by dermatologists was painted in a positive light. One study evaluated 48 dermatology practices and reported average patient satisfaction scores of 3.46 and 4.72 of 5 on Yelp and ZocDoc, respectively. Another study looking at dermatologist ratings on DrScore.com found that the majority of patients were satisfied with the care they received.

Although these studies seem encouraging, they have several limitations. First, their results were not stratified by patient demographics and therefore may not be generalizable to low-income populations that constitute much of the newly insured. Secondly, the observational nature and limited number of studies prohibit meaningful conclusions from being drawn and leave many questions unanswered. Additionally, although the raw patient satisfaction scores seem good, dermatology is lacking compared to the patient satisfaction scores within other specialties. A study of more than 28,000 Yelp reviews of 23 specialties found that dermatology ranked second to last, ahead of only psychiatry. Of course, given the observational nature of this study, it is impossible to generalize, as many confounders (eg, medical comorbidities, patient age) may have skewed the dermatology ranking. Regardless, there is always room for improvement, and luckily improving patient satisfaction is not an elusive goal.

Conclusion
As dermatologists, our interventions often improve quality of life; therefore, we are positioned to be leaders in the quality improvement field. Despite the numerous limitations of using patient satisfaction as a measure for quality of care, it is used by payers to determine reimbursement and patients to select providers. Encouraging initial data from our prospective study demonstrate that small interventions can increase patient satisfaction. Continued work to maximize patient satisfaction is needed to improve outcomes for our patients, help validate the quality of care being provided, and further solidify the importance of having insurers maintain sufficient dermatologists in their networks.

REFERENCES