



# Improving Patient Satisfaction Surveys to Assess Cultural Competence in Health Care

**March 2003**

*Prepared for the California HealthCare Foundation by*

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# About the Project

This project was conceptualized and implemented by researchers at the Division of General Internal Medicine and Health Services Research, David Geffen School of Medicine at the University of California Los Angeles, in collaboration with Jennifer Eames of the California HealthCare Foundation.

Funding was provided by the California HealthCare Foundation. Leo S. Morales, M.D., Ph.D., was also supported by a Robert Wood Johnson Foundation Minority Medical Faculty Development Program Fellowship.

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ISBN 1-932064-30-3

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# Executive Summary

California is an increasingly diverse state. Foreign immigration has fueled an explosion in the Latino and Asian populations, leaving health care providers to serve increasing numbers of patients who have limited English proficiency and who have culturally distinct beliefs and values.

Consumer surveys offer one avenue for evaluating and monitoring how well providers are meeting the needs of the patients they serve. Consumer surveys assess many important dimensions of care that are affected by cultural and linguistic barriers, including provider communication, access to care, timeliness of care, trust, respectfulness, and customer service.

Research shows that cultural and linguistic minorities face significant barriers to care and receive lower quality of care.<sup>1</sup> Evidence of disparities in care attributable to cultural and linguistic barriers is well documented and summarized in several recent reports, including a report by the Institute of Medicine on disparities in health care.<sup>2</sup> However, the use of standardized consumer surveys to evaluate and improve care for diverse populations has only recently received attention and is not in widespread use.

## **Purpose**

The objectives of this project were to: (1) summarize methodological strengths and weaknesses of standardized consumer experience surveys in measuring culturally and linguistically diverse populations; (2) summarize previous and ongoing research on racial and ethnic differences in experiences with care; (3) develop recommendations for the field regarding the use of standardized consumer surveys to assess care for ethnically and linguistically diverse populations. These objectives were achieved through two main activities:

- interviews with key informants who are experts in research on patients' experiences with the health care system and/or in measuring diverse populations, and
- a review of the literature on research on cultural and linguistic differences in experiences with care.

## **Methods**

### **Key Informant Interviews**

Seventeen key informants were interviewed for this project. These individuals were mostly drawn from academic institutions but also included individuals from the private nonprofit sector and the federal government. Interviews were conducted by telephone between April 25, 2002 and July 10, 2002.

The final interview guide included five main sections: (1) importance of research on ethnically and linguistically diverse patients' experiences with care; (2) data sources for research on ethnically and linguistically diverse patients' experiences with care; (3) strengths and weaknesses of standardized consumer surveys for assessing ethnic and linguistic disparities in care; (4) methodological problems assessing the experience of culturally and linguistically diverse populations; and (5) ongoing and planned research on ethnically and linguistically diverse patients' experiences with care. The interviews took an average of 37 minutes to complete (range: 20–57 minutes).

### **Literature Review**

Four Internet-accessible databases were searched using seven key-word combinations, resulting in 28 distinct database searches. A total of 37 articles were identified and reviewed. Eight elements of information were abstracted from each article, including: (1) purpose of study, (2) patient population studied, (3) setting, (4) survey instrument used, (5) survey mode, (6) survey response rate, (7) domains studied, and (8) key findings. The review focuses on substantive studies of ethnic and linguistic disparities in patients' experiences with care.

## **Summary of Findings and Recommendations**

### **Prioritization of Recommendations**

Recommendations are listed in order of priority within each topical area. All topical areas were of approximately equal importance, thus their ordering does not reflect their relative importance.

### **Addressing the Needs and Concerns of Diverse Populations**

Most existing consumer surveys were developed for a target population consisting of persons who are employed, insured, acculturated, English-proficient, well educated and of moderate to high socio-economic status. Although some efforts have been made to improve the responsiveness of existing surveys to the needs and concerns of diverse populations, much more work is needed. Existing survey instruments need to be translated, adapted, and evaluated for use with diverse populations. Often, ethnic and linguistic subgroups of interest have high rates of unemployment, no insurance, low acculturation, poor English proficiency, and low educational and socio-economic status.

*Recommendation 1:* Support efforts to develop survey modules responsive to the needs and concerns of ethnic and linguistic subgroups. Areas in greatest need of attention include: access to and quality of interpreters, acculturation, language proficiency, and measures of cultural background that extend beyond census measures.

*Recommendation 2:* Support efforts to improve the accessibility of surveys to ethnic and linguistic subgroups (e.g., non-English speaking, less educated), including translating surveys and improving the readability of surveys for low literacy populations.

### **Using Consumer Surveys to Monitor and Improve Care for Diverse Populations**

The ultimate goal of any data collection system designed to collect and monitor data on ethnic and linguistic disparities in care should be to eliminate those disparities. To date, much of the emphasis by researchers has been on developing new tools and collecting and analyzing data. Two strategies for reducing disparities based on consumer survey data have been articulated. First, public reporting of consumer survey data will lead to patients choosing higher quality health care providers, thus eliminating disparities. Second, providers, using consumer survey data, will conduct quality improvement efforts, leading to higher quality of care. Implementation of these strategies can be supported in the following ways:

*Recommendation 1:* Support efforts to analyze and publicly report health care provider (e.g., health plan, hospital, medical group, or physician) performance data by race, ethnicity, gender, socio-economic status, and primary language.

*Recommendation 2:* Support efforts to develop and disseminate translated and readable public reports about health care quality to culturally and linguistically diverse populations.

*Recommendation 3:* Support efforts to develop and implement quality improvement efforts that use consumer survey data to monitor and evaluate progress. This includes the development of survey questions specifically designed to be applicable to quality improvement work.

### **Developing Standardized, Reliable, Valid, and Comparable Measures**

Although multiple survey instruments have been developed that can be used to assess patients' experiences with care, there has been insufficient methodological work to ensure that these instruments are equally reliable and valid when administered to ethnic and linguistic subgroups and that they are psychometrically comparable. Furthermore, substantial methodological work is needed to newly develop and extend methods for mitigating problematic cross-cultural differences in survey instruments once they are identified.

*Recommendation 1:* Support efforts to test the reliability and validity of standard survey instruments when administered to ethnic and linguistic population subgroups.

*Recommendation 2:* Support efforts to evaluate the comparability of survey instruments in multiple languages and administered to ethnic and linguistic subgroups.

### **Collecting and Monitoring Data**

Standardized data collection is critically important to monitoring and improving care for diverse population subgroups. Unfortunately, standardized data on racial/ethnic background is generally not available; when this data is available, it is frequently not sufficiently detailed; and when it is available in detail, sample sizes are usually too small for meaningful analysis.

Ensuring the representativeness of survey data is also essential to monitoring and improving care for diverse populations. The systematic exclusion of population subgroups can lead to biased assessments of care. To assess the representativeness of data, health care providers must obtain ethnic and linguistic data at the time of plan enrollment or utilization of services (prior to drawing a sample for a survey study). Ethnic and linguistic data at the sample frame level is also necessary for oversampling small population subgroups and patients with limited English proficiency.

Standardized data collection and improvements in the representativeness of survey collection efforts can be improved as follows:

*Recommendation 1:* Support efforts to evaluate existing methods and to develop new and improved methods for improving response rates among ethnic and linguistic subgroups.

*Recommendation 2:* Support efforts to add racial/ethnic and preferred language identifiers to enrollment and administrative databases (e.g., utilization/encounter data).

*Recommendation 3:* Support efforts to add and improve racial/ethnic and language preference and proficiency identifiers to surveys.

*Recommendation 4:* Support efforts to oversample ethnic and linguistic subgroups.

# I. Introduction

## Background

California is a culturally and linguistically diverse state. As a result, health care providers in California are faced with serving health care consumers who have vastly differing cultural backgrounds and language needs. According to the U.S. Census Bureau, California's Latino population grew 46 percent over the last decade, from 7.7 million in 1990 to 11.0 million in 2000; and California's Asian populations grew by 40 percent, from 2.6 million to 4.0 million.<sup>3</sup> Although some of the growth in California's Latino and Asian populations is attributable to inter-state migration and high fertility rates, the majority is due to immigration from Latin America and Asia, fueling the cultural and linguistic diversity of California.<sup>4</sup>

As California's diverse populations grows, it will be increasingly important to monitor access to care and quality of care for these populations. Research shows that cultural and linguistic minorities face significant barriers to care and receive lower quality of care.<sup>5</sup> Evidence of disparities in care attributable to cultural and linguistic barriers is well documented and summarized in several recent reports, including a report by the Institute of Medicine, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*.<sup>6</sup>

Consumer surveys have emerged as important tools for monitoring how well health care providers meet the needs of the populations they serve. Consumer surveys such as the Consumer Assessments of Health Plan Study (CAHPS®) have been implemented by federal and state Medicare and Medicaid providers and are used for health plan accreditation by organizations such as the National Committee on Quality Assurance (NCQA). Consumer surveys assess many aspects of care, including patient-provider communication, access to care, timeliness of care, customer service, provider trust, availability of interpreter services, specialty care, and family involvement in care. Analyses of survey data using information about respondents' racial/ethnic background and language abilities yields useful information about the quality of care provided to culturally and linguistically diverse groups across these many aspects of care.<sup>7</sup>

## Purpose

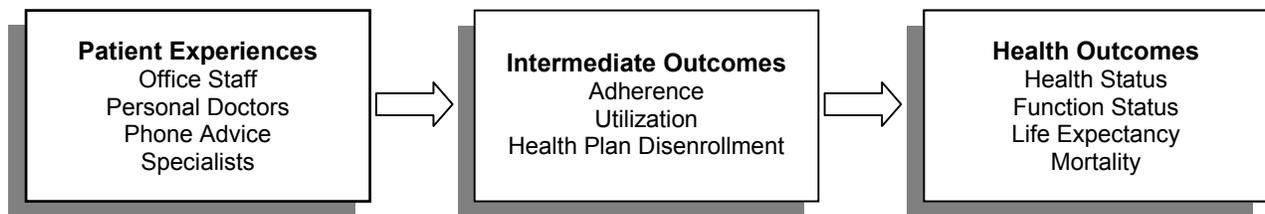
The objectives of this project were: (1) to assess the state of the art in measurement of patients' experiences with care, using standardized survey instruments; (2) to summarize previous and ongoing research on racial and ethnic differences in experiences with care; and (3) to develop recommendations for funding priorities on using standardized consumer surveys to assess care for ethnically and linguistically diverse populations.

These objectives are achieved through two main activities: (1) interviews with key informants who are experts in research on patients' experiences with the health care system, and (2) a review of the literature on research on cultural and linguistic differences in experiences with care.

## Conceptual Framework

Patients' experiences with the health care system, in particular with their health care provider, are linked to important intermediate outcomes such as adherence to treatment regimens, following discharge instructions, and disenrollment from health plans.<sup>8</sup> As illustrated in Figure 1, intermediate outcomes (i.e., following treatment regimens and discharge instructions or changing health plans) in turn influence health outcomes, which are reflected in measures of health and functional status and, subsequently, life expectancy and mortality statistics.<sup>9</sup>

**Figure 1. Outcomes of Patient Experience**



Sociocultural and linguistic differences between patients and their providers influence communication and clinical decisionmaking.<sup>10</sup> Culturally and linguistically diverse groups of patients report worse experiences with care across multiple domains of care including patient-provider communication, access to care, timeliness of care, helpfulness and respectfulness of office staff, and customer service.<sup>11</sup> Research also shows that patient-provider racial concordance results in greater satisfaction and that linguistic concordance results in better health outcomes as measured by health status measures.<sup>12</sup>

In this context, standardized consumer surveys can provide vital, reliable, and valid information about quality of care and outcomes of care in diverse populations. Analyzing results from standardized surveys by racial/ethnic and language variables can inform providers, policymakers, and consumers about how well population subgroups are being served by systems of care at multiple levels of the health care system, including health plans, hospitals, physician groups, and individual doctors.

## Methodology

### Key Informant Interviews

*Identification of key informants.* An initial list of potential key informants was developed by the study leader (Morales) and circulated to the other project team members (Hays and Eames). All project team members were asked to vet the initial list of informants and to recommend additional names. Once a consensus list of potential key informants was obtained, the list was finalized. An initial list of 12 potential key informants was generated as a result of this process.

Of the initial 12 potential key informants invited to participate, ten completed the interview; one cited insufficient expertise in the area, and one never responded to our repeated invitations to participate.

An additional eight potential key informants were identified using a “snowball” sampling methodology. At the end of their interviews, the initial ten key informants were asked to identify additional potential key informants. They were asked to identify persons that are: (1) knowledgeable about the use of patient experience surveys to assess the experiences of culturally and linguistically diverse populations; or (2) have ongoing or planned research using patient surveys to assess the experience of culturally and linguistically diverse populations.

Of the additional eight potential key informants invited to participate, six completed the interview, one cited time constraints, and one never responded to our repeated invitations to participate. A final key informant was identified as a result of the literature review and completed the interview. In total, 17 persons were interviewed (Appendix A).

*Recruitment of key informants.* Potential key informants were initially invited to participate in the study by letter sent via the Internet (Appendix B). Is a letter sent via the Internet different from email? Most participants responded by email indicating their willingness to participate. Subsequently, a mutually agreeable time for the interview was arranged by telephone. A few days prior to the actual interview, participants were sent a copy of the interview guide by email.

*Development of interview guide.* The initial interview guide was developed to reflect the key questions and concerns raised by CHCF staff, as communicated in conversations with the researchers at UCLA. An initial interview guide was developed and circulated to members of the research group for commentary. After revisions, the interview guide was evaluated in two pilot interviews.

The purpose of the pilot interviews was to test the flow of the guide, to identify redundant questions, and to evaluate the length of the guide. In the first pilot interview, the survey took 50 minutes to complete. To reduce the length of the guide, the study team eliminated several redundant questions and reduced the number of topics covered in the guide. As a result, the second pilot interview took 37 minutes to complete. After some final adjustments, the interview guide was finalized (Appendix C). On average, the interview guide took respondents 37 minutes to complete (range 20–52 minutes).

The final interview guide included five main sections: (1) importance of research on ethnically and linguistically diverse patients’ experiences with care; (2) data sources for research on

ethnically and linguistically diverse patients' experiences with care; (3) strengths and weaknesses of standardized consumer surveys for assessing ethnic and linguistic disparities in care; (4) methodological problems assessing the experience of culturally and linguistically diverse populations; and (5) ongoing and planned research on ethnically and linguistically diverse patients' experiences with care.

*Interviews with key informants.* Interviews with key informants were conducted by telephone and completed between April 25, 2002 and July 10, 2002. Interviews were audiotaped and brief handwritten notes were collected as the interviews were conducted. Immediately after completing each interview, more extensive notes were written into a computer-based database. Prior to beginning each interview, consent for audiotaping was obtained from the key informants.

*Human subjects protection.* Approval for this research project was obtained from the UCLA Office for Protection of Research Subjects.

## **Literature Review**

The focus of this literature review is racial/ethnic differences in patients' experiences with care. The literature review was conducted using four Internet-accessible searchable databases including MEDLINE, MEDLINE/HealthSTAR, ERIC, and Ingenta Uncover. A description of these databases is provided in Appendix D. These databases were selected because of their coverage of health services research topics including racial/ethnic disparities in care, cultural competence, and minority health topics.

Our literature review began with identification of a few recent key articles on racial/ethnic differences in patients' experiences with care. These articles were used to generate initial lists of keywords for the database searches. Initial searches were conducted using single keywords from the initial list of keywords. Because these searches resulted in excessively large numbers of articles, we conducted subsequent searches using keyword combinations rather than single keywords.

After reviewing the results of multiple searches using several keyword combinations, seven final keyword combinations were selected. These final seven keyword combinations were selected based on the goal of maximizing the percentage of articles identified by each combination that were likely to be relevant to the literature review topic. In total, 28 unique searches were conducted, based on seven keyword combinations on four searchable databases (Appendix D).

Once the search strategy was established, the following steps were used to select articles for inclusion. First, all article titles resulting from the 28 searches were reviewed by the lead investigator (Morales). Based on the article titles, a subset of article abstracts was selected for review based on the articles' potential relevance to the search topic. Based on a review of the resulting abstracts, a subset of articles was selected for full-text review. Finally, a subset of full articles that were reviewed was selected for inclusion in the article summary.

The main criterion for selecting a title, abstract, or paper was that it include mention of racial/ethnic differences in experiences with care. Both substantive and methodological studies were included, though the emphasis was on substantive articles. Articles referencing studies

conducted outside of the United States and articles in languages other than English were excluded.

A few additional articles were identified by searching on the names of key informants and by reviewing the reference lists of seminal articles on racial and ethnic differences in patients' experiences with care. The articles are indexed by the following topic areas: racial/ethnic differences, language differences, CAHPS<sup>®</sup>, and methods (Appendix E). In total, 38 articles are summarized for this report (Appendix F).

## II. Findings

### Key Informant Interviews

#### Importance Research on the Experiences of Culturally and Linguistically Diverse Populations

Key informants were asked to identify the degree of importance of research on the experience of culturally and linguistically diverse populations to a range of stakeholders. The level of importance ascribed to each individual stakeholder was generally high (Table 1). Key informants rated their personal interest in this area of research highest, followed, in descending order of interest, by consumer advocates, minority consumers, policymakers, health plans, and then academic faculty, fellows, and students. Accrediting organizations were rated as having the least amount of interest.

**Table 1. Ratings by Informants of Importance to Stakeholders of Using Consumer Experience Surveys**

Stakeholders	Very Important	Moderately Important	Not Important	No Answer
Self	94	6		
Consumer advocates	88	6		6
Health plans	59	24	12	6
Minority consumers	71	18	12	
Policymakers	65	29	6	
Academic faculty, fellows, and students	47	41		12
Accrediting organizations	29	35	24	12

Note: Percentages may not add up to 100% in each row due to rounding error.

## Strengths and Weaknesses of Consumer Surveys Regarding the Experience of Culturally and Linguistically Diverse Populations

Key informants interviewed in this study represent a large and diverse array of experience, across a range of survey instruments. Although there is significant variation in the degree of their experience with standardized consumer experience surveys, there is also a high degree of commonality in themes they expressed concerning both the attributes of and difficulties encountered with existing instruments.

### *Main Limitations of Existing Patient Surveys*

Key informants reported limitations across all existing patient surveys, expressing what they found to be issues common to all surveys more often than problems specific to any one survey. More frequently mentioned concerns included:

- the effect of cultural response bias on the measurement of quality, that is, it is difficult to differentiate between true quality of care received and the effects of culture and expectations on reports of experience with care;
- difficulty translating concepts into another culture in a way that allows for comparison across groups;
- the use of tools often not geared specifically toward addressing racial, ethnic, or linguistic concerns; and
- the use of tools often derived from a researcher-oriented (i.e., nonpatient) analysis of what is important.

Additional issues reported as important limiting factors in the effectiveness of existing patient surveys included:

### **Key Informant Comments**

“We tend to translate surveys, but are using our own ... perspective of what is important for patients ... lack[ing] an understanding of what is important for minority population groups.”

“The big question is, ‘Can you work with existing surveys, or even new surveys, that cover broader topics and adapt it to look at specific race, ethnic, or linguistically diverse populations versus surveys that are expressly designed to address and query around these issues?’”

### **Key Informant Comment**

“It is hard to determine if someone who reports fewer problems with care [does so] because they are less likely to report problems, or because they actually had fewer problems. This is common to all surveys.”

- mismatch between literacy level of target population and readability of surveys;
- exclusion of important dimensions—some key informants speculated that dimensions of care particular to diverse populations are not addressed in current surveys;
- administration protocols (i.e., who administers, method of outreach, location completed, etc.) that do not include modes to reach less represented subset populations;
- missing content or degree of detail that would allow for a more meaningful interpretation of observed variations;

- high degree of variation in the cultural and linguistic quality of translations;
- specificity of translations for certain subgroups within a linguistic category (i.e. dialects);
- lack of appropriate benchmarks for comparing across facilities and organizations;
- difficulty manipulating existing surveys not specifically geared to address issues of racial, ethnic or linguistic concerns;
- limits on in-depth examination of patient-level and family-level issues due to use of secondary data analysis;
- exclusion of patient perspectives in prioritizing topics for analysis;

**Key Informant Comments**

“No one knows the health care system better than those using it.”

“There are many common areas of experience. Some of these surveys do a very nice job of assessing those aspects of experience that are common to all groups.”

- inability to disentangle cultural, linguistic, and socio-economic status effects;
- lack of racial, ethnic, and linguistic identifiers in survey instruments; and
- insufficient marketing or dissemination of research results to convince stakeholders of the validity and usefulness of data.

*Main Strengths of Existing Patient Surveys*

Though many limitations were identified, those interviewed did indicate a number of strengths within existing patient surveys. Several of the key attributes reported related to what were described as trends or recent movements within patient surveys, including:

- integration of patient perspectives;
- movement away from assessing only the medical dimensions of care;
- use of elements that provide a greater understanding of communication issues in health care and the role of communication in health care quality; and
- broader understanding of the dimensions of experience due partly to the use of patient experience surveys.

Additional strengths listed by key informants included:

- inclusion of questions that deal with provider communication;
- ability to assess the common aspects of experience;

**Key Informant Comments**

“They probably have most of the right domains in place, and within the domains somewhere between a half and two-thirds of the content right, and the rest may be missing.”

“Standardization and a move in questionnaires to report about experiences rather than subjective evaluations ...”

- coverage of a majority of relevant domains of care;
- high level of detail (can be drilled down below the composite);
- beginning to integration of cultural issues (e.g., language and racial/ethnic background);
- increased effort to sample non-English-speaking populations;
- ability to perform comparisons across racial and ethnic groups and providers;
- as a measure, patient experience is less vulnerable to measurement bias than satisfaction;
- only economical way to look at the experiences of diverse populations;
- standardization; and
- provision of a series of dimensions that are consistent across various populations.

#### *Needed Additions or Changes to Instruments*

All informants interviewed agreed on the need to develop additional instruments and offered a variety of suggestions. Although not all in agreement, many recommendations overlapped thematically. Needed instruments most frequently mentioned included:

- ability to address issues of cultural competence and other cultural aspects of care;
- tools that deal with measurement bias, understanding cultural beliefs about care, and challenging concepts of culture.

#### **Key Informant Comment**

“The bigger question is, ‘Is there as much difference across as within racial groups?’”

Other instruments or aspects of instruments reported as needing development included:

- use of racial, ethnic, and linguistic identifiers as a norm in survey instruments;
- getting more information on people’s health care knowledge and medical help-seeking behavior;
- understanding how interpreter-mediated interactions occur;
- tools that assess what cultural competence means quantitatively and qualitatively in the patient-physician interaction;
- means of assessing and incorporating issues of acculturation and expectations in order to add context to findings;
- means of better examining quality and how it may vary by race and ethnicity;

#### **Key Informant Comment**

“Making sure that instruments exist that ask race, ethnicity or primary language ... [is] a basic first step in most cases, missing.”

- means of more rigorously examining instruments with respect to validity for non-English-speaking racial and ethnic populations;
- questions that probe into the health setting and organizational encounter;
- questions that address dimensions of cultural beliefs, trust in the medical system, and willingness to follow instructions; and
- means of addressing the idea that many concepts do not have a parallel or equivalent in another culture.

*Comments on Specific Instruments*

All key informants were familiar with the CAHPS® survey and the Picker hospital survey. Other frequently mentioned surveys included the Medical Expenditure Panel Survey (MEPS), the Medicare Current Beneficiary Survey (MCBS), the National Health Interview Survey (NHIS), and the National Health and Nutrition Examination Survey (NHANES).

Limitations of the CAHPS® survey included:

- incomplete measures of socio-economic status;
- insufficient probing of interpreter services; and
- lack of an acculturation measure.

**Key Informant Comments**

“One of the limits of the CAHPS® data ... and MEPS sort of overcomes this is ... [CAHPS®] does not have income data.”

“In terms of CAHPS® ... trying to sort out the distinction between SES status is a [limitation] ... not really a good acculturation measure.”

“[CAHPS®] does not necessarily address issues of the interpreter as well as it should, in terms of the quality of the interpreter, etc. ... and in general is still not widely accessible to other linguistic minorities other than Spanish.”

“[CAHPS®] main strength is it is a standardized instrument that has been tested to be a valid and reliable instrument and it is widely used across the U.S. so it provides national data.”

**Key Informant Comments**

“The Picker, I would say, is the best hospital survey ... and there is a tradition of research behind it; CAHPS® ... main benefit is it is standardized and the most widely used survey of ambulatory care; and the MCBS, the main advantage is other kinds of information and solid coverage of people over 65.”

Currently, CAHPS® includes one question about educational attainment and two questions about interpreter services.

The Picker hospital survey was the most frequently mentioned survey instrument for assessing hospital care.

It is likely that AHRQ will issue a request for proposal (RFP) in the near future for the development of a new hospital measure.

### Translation of Survey Instruments

The need for accurately translated and culturally appropriate survey instruments was cited by many of the key informants as essential to obtaining culturally and linguistically comprehensive data. Among those interviewed, a majority reported having some degree of experience with the use of translated survey instruments. Of these, the majority had experience with instruments in Spanish. Many cited a lack of instruments translated in other languages (Table 2).

**Table 2. Availability of Well Translated Instruments to Assess Culturally and Linguistically Diverse Consumer Experience (N = 17)**

Languages	Yes	No	Don't Know
Spanish	47	24	29
Other languages	12	47	41

Though many informants reported believing that well translated survey instruments exist in Spanish, a number of them added that a well-translated instrument is not enough. They pointed to issues of linguistic differences among ethnic subgroups that may make translations irrelevant or incomprehensible.

#### Key Informant Comments

“Sometimes just translating English words is not sufficient. There are different cultural perspectives. If you do not take into consideration the cultural context it may or may not be so very useful.”

“Instruments are well-translated into Spanish, but for many of the Spanish subpopulations the cultural concepts do not translate even there. When I get to Somali and Hmang it's all over.”

Some informants raised the question of whether translations are not only accurate, but also culturally appropriate. This issue, it was suggested, may be of greater significance.

One concern raised with respect to efforts of making instruments more appropriate for cultural and linguistic subgroups, was the risk of losing standardization. As instruments are modified to adapt them for specific cultural groups and linguistic subgroups, the ability to use survey results to make comparisons may be compromised.

The majority of informants reported that available translated survey instruments have a number of problems, most commonly:

- difficulty getting translations in languages other than Spanish;
- the compounding effect of mismatched literacy levels (particularly for written surveys); and
- accuracy and equivalence of translations.

Other salient problems mentioned included:

- difficulty finding people to administer surveys in languages other than English;
- multiple versions of translated surveys;
- difficulty of assessing literacy level of survey population;
- lack of readability assessments for most surveys;
- inability to translate words or concepts literally that do not have an equivalent in another language; and
- lack of standardization.

#### **Key Informant Comment**

“The intention is that there are a lot of minor modifications that one might make to make [instruments] more relevant for subgroups, but then you worry about the standardization issue.... There is a big tension between standardization and tailoring translations ... For policy and recommendations you want to have standardization, but for accuracy you want tailoring.”

### **Data Sources for Research on the Experience of Culturally and Linguistically Diverse Populations**

All but one of the interviewed informants was familiar with various publicly available data sources for research on the experience of culturally and linguistically diverse populations. They

#### **Key Informant Comment**

“[Those that are] nationally representative and done over time ... [it is] incredibly valuable to have something longitudinal and nationally representative.”

mentioned various data sources, from foundation to governmental, including the Medical Expenditure Panel Survey (MEPS), the National CAHPS® Benchmarking Database (NCBD), the Medicare Current Beneficiary Survey (MCBS), the Commonwealth Fund, and the Minnesota Health Data Institute, to name only a few. The informants described most of these sources as

easily accessible, though some less than others. They also indicated that many could be accessed in either paper or online formats.

#### *Main Strengths of Data Sources*

Those interviewed enumerated nearly as many perceived strengths as they did data sources of which they were aware. There was neither clear preference for the use of any particular data source across informants, nor was any one described as having a greater degree of strength. Rather, interviewees reported individual data sources as exhibiting varying strengths.

Some of those characteristics described as individual strengths of data sources included:

- ability to compare across ethnically, racially, and linguistically diverse groups;
- coverage of specific age groups;
- longitudinal data on diverse populations;
- national and regional representation;
- population-based or population-derived;
- use of a standardized and well-tested instrument as a base;

- inclusion of specific, concrete aspects of issues affecting diverse populations;
- comprehensive information on consumer perspectives;
- ability to measure certain aspects of technical quality;
- representation of Medicare, Medicaid, and commercial populations;
- inclusion of income data; and
- ability to examine within ethnic/racial and linguistic subgroups.

### *Main Limitations of Data Sources*

Like the key respondents’ descriptions of strengths, the limitations of data sources reported by key informants were varied, though often more generalized. One principal theme articulated by a number of informants was that there is less information, across the board, on racial, ethnic, and linguistic identifiers than many feel they would like to have.

Additional limitations reported more frequently related to issues of sample size and the detail of available data.

More specific issues noted included:

- no readily available identifiers for race, ethnicity, or linguistic diversity—requiring additional work to link information with other data sets;
- clinical data completely lacking or not of sufficient depth;
- limited relevant cultural and demographic information on culturally and linguistically diverse populations (e.g., acculturation);
- lack of income information and other markers of socio-economic status (e.g., wealth, occupation);
- little health plan detail (e.g., cultural and linguistic services provided by health plans);
- inability to measure or standardize respondent expectations regarding health care;
- inadequate measures of English proficiency – cannot examine issues of limited English proficiency;
- inability to examine data at the health plan level (applicable to non- CAHPS® data);

#### **Key Informant Comment**

“Many other variables that would help interpret differences in cultural groups are not included. You can see differences but there is not enough information on the people within a cultural group to understand what that’s about. In some cases there are as many differences within a cultural group as between them ... [there exists a] need to have variables included to help interpret what that means.”

#### **Key Informant Comments**

“[Many] are what they are. They are not necessarily set up for clinical research purposes ... They lack clinical depth ... and have limited information on diverse linguistic and cultural populations.”

“If a data set does not over-sample subgroups it reduces [its value]. You wind up not being able to talk about as much as you want to.”

- small sample sizes of ethnically, racially, and linguistically diverse populations (most sampling strategies are not powered to make cultural or linguistic subgroup comparisons);
- limited capacity for depth examinations of family-level and community-level analysis with secondary data sets; and
- difficulty or impossibility of using federal, nationally based samples for addressing state-level concerns.

### **Methodological Concerns in Assessing the Experience of Culturally and Linguistically Diverse Populations**

#### **Key Informant Comments**

“[You] can get different results just because of language. The probability that someone is going to say their health is excellent is a cultural thing.”

“Not enough of an *N*.... A regular population-based sample will always miss enough of a number to make much sense of the data. One then must look at the total population—which is impossible much of the time, or you have to over-sample.”

A number of methodological issues were identified in our interviews as concerns in assessing the experience of culturally and linguistically diverse populations. Participants indicated concerns with sampling frame information and with the methods and tactics implemented in an effort to address difficulties encountered. Key informants were queried specifically regarding important sampling problems (i.e., identification of racially and ethnically diverse populations and persons with limited English-speaking proficiency in sample frame information). They were also queried as to most effective survey modes and methods for improving response rates among culturally and linguistically diverse populations. Though responses varied, there was a high degree of overlap, particularly among issues of identification and important sampling problems.

#### *Important Sampling Problems*

Although responses varied with respect to important sampling problems, there was a high degree of agreement on a variety of issues. The most frequently indicated problems related to:

- difficulty generating an adequate sample size for population subgroups;
- lack of information on ethnic, racial, and language characteristics;
- concerns about, and difficulty determining, the influence of cultural bias in survey responses; and
- issues specific to the primary language of survey respondents.

Among those problems most typically encountered, key informants listed:

- difficulty obtaining an adequate sample size for smaller population subgroups (e.g., Asian subgroups and Hispanic subgroups);

- inability to oversample population subgroups to generate precise confidence bands on point estimates;
- underrepresentation or exclusion of persons of limited English-speaking proficiency;
- difficulty assessing the effect of cultural response bias;
- questions about the reliability and validity of data, particularly data generated using translated survey instruments;
- little or no information about target population (i.e., sample frame) characteristics and response rates; and
- difficulty identifying ethnically and racially diverse individuals and persons of limited English-speaking proficiency among survey respondents.

### *Identifying Racially and Ethnically Diverse Populations*

While noting that a significant amount of data based on health plan, hospital, medical group, or population surveys is lacking racial/ethnic identifiers, most key informants reported being able to

#### **Key Informant Comment**

“You can do it if there is a flag in the system ... from hospital discharge data that identifies the race or ethnicity of a patient.... Sometimes from special studies in health plans. Medicare and Medicaid usually come with at least race identifiers, some of which are better than others.”

identify persons of racially, ethnically, and linguistically diverse groups. Though categorization by these identifiers was described as difficult to derive at best, it was accomplished by what was generally described as “involved” or “difficult” processes of working with given data sets and other available information. Multiple methods of obtaining this information were described, including: combining data sets with other sets of information or records (e.g., information taken at the point of registration in medical group settings; hospital discharge data; or, the use of surname recognition

software (for identifying plan members of Hispanic descent). A number of informants indicated that they work with data derived from surveys that they have personally been involved in developing and in which they have purposefully included racial and ethnic identifiers.

Some specific data sets identified as incorporating racial and ethnic identifiers include, among others: NCBD-CAHPS®, MCBS, CMS-CAHPS®, and NHANES.

But it was also noted that racial and ethnic identifiers themselves, when present, can be overly broad. This lack of specificity, it was pointed out, raises a unique set of issues in that it limits the degree to which large ethnic or racial groups can be differentiated and data analyzed.

#### **Key Informant Comment**

“With most surveys you will never get enough subgroups to talk about, so you end up talking about a large diverse group.”

### *Identifying Persons with Limited English-Speaking Proficiency*

The identification of persons of limited English-speaking proficiency in survey data was generally noted to be even more difficult than distinguishing racial/ethnic subgroups. Many of the key informants indicated that language identifiers are typically nonexistent. Those who

indicated they have been able to differentiate linguistically diverse populations used what many described as suboptimal methods, or not entirely accurate proxies.

Items indicated as commonly used flags (when present) included:

- interpretation needs;
- primary language spoken at home;
- language used in survey response;
- difficulty understanding provider.

**Key Informant Comment**

“For almost all other data sets I have been pretty unsatisfied. Questions that exist are at best, ‘What language do you want to be interviewed in?’ or ‘What is the primary language spoken at home?’—neither of which are adequate proxies for English proficiency.”

In addition, it was noted that even though some data sets did include identifiers for limited English-speaking proficiency, they did not consistently record the respondents’ primary language.

*Response Rates*

As previously mentioned, many of the key informants encountered a problem with generating a sample of ethnically, racially, and linguistically diverse populations of sufficient size for the purpose of comparison across groups. The response rate of these same populations is intrinsically related to this issue.

Although the majority of key informants had not compared the four more commonly used methods of administering surveys (mail, phone, face-to-face, and Internet), nearly all had some direct experience with one or more of these modes. Of those who felt they had enough experience to comment, the majority indicated that they had found face-to-face surveys to yield the highest response rate, followed by phone, mail, and, finally, Internet.

Although there was some agreement as to which method provided the highest degree of response, this did not necessarily correlate with the chosen means of administration. Concerns were raised regarding all methods of survey administration. Among those methods discussed the following are some of the issues raised:

- *Mail*: relatively low response rate, particularly from persons with low literacy (average about 30–40 percent or lower in Medicaid populations);
- *Phone*: excludes persons without phone access and has declining response rates due to the impact of telemarketers and caller identification devices (average about 40 percent to 60 percent in Medicaid populations);
- *Face-to-face*: expensive to administer (as high as 80 percent);
- *Internet*: excludes persons without online access, particularly ethnically, racially, and linguistically diverse populations.

A number of methods were mentioned for improving response rates, including:

- use of bilingual interviewers;
- involving persons of the desired ethnic/racial group in the development and administration of the survey instrument;
- mailing and using bilingual/multilingual survey instruments and contact scripts;
- use of community brokers or organizations for outreach and administration of the survey instrument;
- sending persons into desired communities with cellular phones and performing interviews via this phone;
- outreach in community (at markets, hair salons, etc.);
- cognitive testing of survey instruments and adaptation of these for low-literacy populations;
- monetary incentives.

Only a handful of informants indicated awareness of the implementation of what they believe to be current innovative methods of survey administration. Those methods to which they pointed include:

- use of community leaders for community buy-in;
- use of tier research assistants from within the community to act as data collectors;
- giving people WebTV with agreement that every so often they have to participate in a survey.

#### **Key Informant Comment**

“The declining response rate is an issue everyone is dealing with. People are throwing money at respondents.... There is talk about Internet surveys, but that’s not the place to get a representative sample.... Groups giving WebTV ... end up with professional respondents.”

### **Ongoing and Planned Research Assessing the Experience of Culturally and Linguistically Diverse Populations**

All key informants interviewed reported either current or planned involvement in research assessing the experience of culturally and linguistically diverse populations. The scope and nature of the proposed and ongoing studies reported cover a wide range of work in the field. Themes of projects reported to be in the works or in planning include:

- assessing consumer experiences with health care services within distinct culturally and linguistically diverse populations;
- assessing cultural competence using self-assessment by organizations;
- addressing issues regarding the application and interpretation of quality measures for culturally diverse populations;

- estimating Hispanic/Latino effects on Medicare CAHPS® reports and ratings;
- examining differences in responses by language group in CAHPS®;
- development of culturally comparable measures;
- examining impact of health plan characteristics on the differences in racial and ethnic reports and ratings of care;
- assessing the experiences of low-income Medicare beneficiaries;
- adaptation of a health care system-based audit instrument to a managed care setting;
- assessing the impact of medical interpreter errors on outcomes, including reports and ratings of care;
- examining differences in ethnic/racial experiences in health plans and health plan variation;
- examining perceived cancer risk by ethnic group;
- development and analysis of survey instruments;
- examining emergency department use by ethnically and racially diverse groups;
- examining the experiences of minority physicians.

The results of these key informant interviews—which approximate the collective expertise in measuring patients’ experience in culturally and linguistically diverse populations—clearly highlight the strengths, but more often the weaknesses, of the standardized consumer experience surveys in use today.

## **Literature Review**

### **Purpose**

The purpose of this review is to summarize the recent health services research and public health literature on racial and ethnic differences in patients’ experiences with care. This review focuses on studies that examine racial and ethnic differences in patient satisfaction, ratings of health care services, and reports about care received. In addition to these studies, we have also included some methodological studies related to making assessments of patients’ experiences, although this was not the focus of the review.

### **Populations Studied**

The majority of studies we reviewed examine four or more racial/ethnic groups (typically white, African American, Asian American, or Pacific Islander and Latino). The next largest group of studies examines differences in patients’ experiences by language, primarily language preference or survey language (predominantly English vs. Spanish speakers), with a number of studies

evaluating the impact of interpreters on patient satisfaction or communication between patients and providers.

These population categories are followed by two-group studies comparing one ethnic/racial group against another, typically white, group. Among these two-group studies, the most common population category used compares African Americans and whites (separating language-specific studies from Latino-specific studies), followed by those focusing on Latino populations in comparison to whites, and finally those looking at Asian populations in comparison to whites. Very few studies reviewed examine subgroups within the four principally used racial/ethnic groups.

### **Study Setting**

Study settings were equally varied, including hospital-based; plan-specific; and national, regional, and state-representative samples. The most common settings in the reviewed literature were specific hospital-based settings followed by nationally based and then plan-specific survey settings.

### **Data Collection Instrument**

About half of the studies reviewed used instruments developed by the investigator(s). Various other instruments were used by the remaining studies. There was no apparent preference or more frequently used instrument. Those used included the Consumer Assessment of Health Plans Study (CAHPS®), the Medical Expenditure Panel Survey (MEPS), the Medicare Current Beneficiaries Survey (MCBS), the Primary Care Assessment Survey, and a number of others.

About half of the studies in the literature reviewed used both English and Spanish translated survey instruments. A little over a third of the studies used English-only surveys. Four studies used instruments that were translated into a number of languages. These primarily used a variety of Asian languages, of which Vietnamese, Cantonese, and Mandarin are the most common.

### **Data Collection Mode**

By and large, the most frequently used mode of data collection among those studies examined here was face-to-face—most commonly in the form of an in-person interview, though some were by means of focus groups. The next most commonly used means of collection was telephone surveys, closely followed by mail. A handful of studies implemented a combination of methods, and two used on-site, self-administered surveys.

### **Sample Size and Response Rate**

About three-quarters of the studies reviewed based their findings on a participant pool of less than 10,000. A little under half the surveys reviewed used sample sizes of less than 1,000. The majority of these, about a third of the total studies reviewed, had samples of less than 500. Those studies that surveyed between one and ten thousand individuals made up about a third of all studies reviewed.

Assessing response rates across the studies reviewed is more difficult. Whereas it is relatively standard to present the sample sizes from which analyses were derived, this is not the case with respect to response rates. Of further note is that nearly no studies reported how response rates

were computed. Only a little more than a third of the studies reviewed reported their achieved response rates. Of these, nearly two-thirds reported response rates between 50 and 75 percent. About a third of those that included response rates reported a rate of over 75 percent. As response rates are seldom reported, it is difficult to assess which mode of data collection yielded the highest response rate.

### **Domains Studied**

The domains used for assessing patient reports about the quality of care received were numerous and varied, though principal areas of analysis were evident. The most frequently examined elements of patient reports about care were at the provider and health plan level. Although both were treated about equally overall, studies varied as to which was emphasized more.

Domains assessed included both technical and interpersonal aspects of care such as professional competence, professionalism of office staff, friendliness, feeling respected, communication, and trust. Communication in particular was among the most frequently examined domains, looking at both physicians and other medical and health plan staff. Elements of communication ranged from patient comprehension of diagnoses to the use and quality of interpretation services. Areas of emphasis at both the plan and hospital level included such issues as access to services, staff assistance, and availability and provision of information.

### **Main Findings**

Although it is difficult to generalize the findings of a varied set of studies with a diverse assortment of study purposes, there were some recurring themes evidenced in a number of studies. Among the more frequently reported findings was that ethnically diverse individuals, in particular Asians, report worse care than whites. This finding was consistent across multiple studies in multiple settings using multiple instruments. Generally, Hispanics either reported worse or similar care to whites. African Americans generally reported similar or better care than whites, though in some population-based studies, blacks reported worse care than whites.

Concordance between the race/ethnicity of patients and physicians was reported to have a positive influence on experiences with care. Older people, healthier people, less educated people and women also generally reported better experiences with care. In addition, the primary language of respondents was indicated as having a significant relation to use and experience with care—English-proficient patients reporting better care than non-proficient patients. Also, a number of studies reported that the use of interpreter services was found to have a significant positive influence upon patient satisfaction within groups of limited English proficiency.

### **Major Limitations**

As with the main findings in the literature reviewed, a number of common themes emerged from the studies examined. There was, perhaps, more commonality with respect to the major limitations reported since these were typically more methodological and, hence, not specific to the purpose of each study. Among the limitations more frequently reported were:

- concerns about the impact of the cultural response bias of groups surveyed with regard to satisfaction ratings;

- limited ability to generalize results to other language groups, subgroups within a given ethnic/racial group, or other clinical settings;
- possible underestimation of results due to limitations of survey instruments or inability to translate them;
- low response rates;
- use of unrepresentative samples; and
- small sample size.

## III. Summary and Recommendations

### **Prioritizing Recommendations**

Recommendations are listed in order of priority within each topical area. All topical areas were of approximately equal importance; thus, their ordering does not reflect their relative importance.

### **Addressing the Needs and Concerns of Diverse Populations**

Most existing consumer surveys were developed for a target population consisting of persons who are employed, insured, acculturated, English-proficient, well-educated, and of moderate to high socio-economic status. Although some work has been done to improve the responsiveness of existing surveys to the needs and concerns of diverse populations, much more work is needed. Existing survey instruments need to be adapted and evaluated for use with diverse populations. Often, ethnic and linguistic subgroups of interest have high rates of unemployment, no insurance, low acculturation, poor English proficiency, and low educational and socio-economic status.

This is not to say that diverse populations should not be surveyed. Rather, the differences in population characteristics between intended survey respondents and ethnic subgroups should be acknowledged and addressed.

CAHPS® offers a useful model for tailoring surveys to address the needs and concerns of diverse populations while maintaining comparability and standardization. CAHPS® has adopted a format of core and supplemental question sets that provides a good model for this work. The core items form a basis for comparisons among various populations while supplemental questions sets can be tailored to respond to the needs and concerns of population subgroups.

*Recommendation 1:* Support efforts to develop survey modules that respond to the needs and concerns of ethnic and linguistic subgroups. Areas in greatest need of attention include access to and quality of interpreters, acculturation, language proficiency, and measures of cultural background that extend beyond census measures.

*Recommendation 2:* Support efforts to improve the accessibility of surveys to ethnic and linguistic subgroups (e.g., non-English speaking, less educated), including translating surveys and improving the readability of surveys for low-literacy populations.

## **Using Consumer Surveys to Monitor and Improve Care for Diverse Populations**

The ultimate goal of any data collection system designed to collect and monitor data on ethnic and linguistic disparities in care should be to eliminate those disparities. To date, much of the emphasis by researchers has been on developing tools and collecting and analyzing data to document disparities in care.

Two strategies for reducing disparities based on consumer survey data have been articulated. First, public reporting of consumer survey data will result in patients choosing higher quality health care providers, thus reducing or eliminating disparities. This strategy can only succeed in reducing ethnic and linguistic disparities if minority consumers are provided linguistically accessible information about how well providers are serving various segments of the patient population. There are two important elements to this strategy: (1) producing reports that stratify results by socio-economic variables such as language and ethnicity; and (2) producing reports that are comprehensible to the target populations in terms of readability and translation.

The second strategy suggests that providers using consumer survey data will engage in quality improvement efforts that will result in higher quality of care. This strategy requires providers to develop quality improvement projects using consumer survey data. New actionable survey questions or question sets may be needed to support specific quality improvement projects. Implementation of the following recommendations may further these strategies:

*Recommendation 1:* Support efforts to analyze and publicly report provider performance data by gender, race, ethnicity, socio-economic status, and primary language.

*Recommendation 2:* Support efforts to develop translated and readable public reports about health care quality targeting diverse populations.

*Recommendation 3:* Support efforts to develop and implement quality improvement efforts that use consumer survey data to monitor and evaluate progress. This includes the development of survey questions specifically designed to be applicable to quality improvement work.

## **Developing Standardized, Reliable, Valid, and Comparable Measures**

Although multiple survey instruments have been developed that can be used to assess patients' experiences with care, there has been insufficient methodological work to ensure that these instruments are equally reliable and valid when administered to ethnic and linguistic subgroups and that they are psychometrically comparable. Furthermore, substantial methodological work is needed to newly develop and extend methods for mitigating problematic cross-cultural differences in survey instruments once they are identified.

*Recommendation 1:* Support efforts to test the reliability and validity of standard survey instruments when administered to ethnic and linguistic population subgroups.

*Recommendation 2:* Support efforts to evaluate the comparability of survey instruments in multiple languages and administered to ethnic and linguistic subgroups.

### **Collecting and Monitoring Data**

Standardized data collection is critically important to monitoring and improving care for diverse population subgroups. Data on patients' and providers' racial and ethnic background would help researchers identify and understand disparities in care, ensure accountability to enrolled members and payers, and improve patient choice. Unfortunately, standardized data on racial/ethnic background is generally not available; when this data is available, it is frequently not sufficiently detailed; and, when it is available in detail, sample sizes are frequently too small for meaningful analysis.

Ensuring the representativeness of survey data is also essential to monitoring and improving care for diverse populations. The systematic exclusion of population subgroups can lead to biased assessments or care. Key to obtaining representative data is obtaining adequate overall response rates and subgroup response rates. Assessing response rates for subgroups requires that sample frame data include racial/ethnic and linguistic data. Typically, this means that health plans and other providers must obtain this data at the time of plan enrollment or utilization of services (prior to drawing a sample for a survey study).

Racial/ethnic and linguistic data at the sample frame level is also necessary for oversampling small population subgroups and patients with limited English proficiency.

*Recommendation 1:* Support efforts to develop new methods, and extend and further evaluate existing methods, for improving response rates among ethnic and linguistic subgroups.

*Recommendation 2:* Support efforts to add racial/ethnic and preferred language identifiers to enrollment and administrative databases (e.g., utilization/encounter data).

*Recommendation 3:* Support efforts to add and improve racial/ethnic and language preference and proficiency identifiers to surveys.

*Recommendation 4:* Support efforts to oversample ethnic and linguistic subgroups.

## Appendix A: Key Informants

<b>Name/Title</b>	<b>Affiliation</b>	<b>Address</b>
Dennis P. Andrulis, Ph.D., M.P.H. <i>Research Professor</i>	Dept. of Preventive Medicine & Community Health SUNY Downstate Medical Ctr.	450 Clarkson Avenue Box 1240 Brooklyn, NY 11203
Christina Bethell, Ph.D., M.P.H., M.B.A. <i>Senior Vice President</i>	The Foundation for Accountability	1200 Naito Parkway #470 Portland, OR 97209
Lorraine U. Brown, M.S.P.H. <i>Deputy Director of Benefits and Quality Monitoring</i>	The California Managed Risk Medical Insurance Board	1000 G Street #450 Sacramento, CA 95814
Paul Cleary, Ph.D. <i>Professor</i>	Havard Medical School Dept. of Health Care Policy	180 Longwood Avenue Boston, MA 02115-5899
Charles Darby, M.A. Senior Project Officer for CAHPS®	Agency for Healthcare Research and Quality	6011 Executive Blvd, Rockville, MD 20852
Glen Flores, M.D. <i>Associate Professor of Pediatrics &amp; Public Health</i>	Boston University School of Medicine & Boston Medical Center	Boston Univ. School of Med. Boston Medical Ctr. Maternity Bldg. #419 91 Concord St. Boston, MA 02118-2393
Tawara D. Goode, M.A. <i>Director and Associate Director for Community Planning</i>	National Center for Cultural Competence Georgetown University Child & Human Development Center	3307 M Street, NW Suite 401 Washington, DC 20007-3935
J. Lee Hargraves, Ph.D. <i>Senior Health Researcher</i>	Center for Studying Health System Change	600 Maryland Avenue, #550 Washington, DC 20024
Nicole Lurie, M.D., M.S.P.H. <i>Senior Natural Scientist</i>	RAND	1200 South Hayes Street Arlington VA 22202-5050
David R. Nerenz, Ph.D. <i>Professor</i>	College of Human Medicine, Michigan State University	IHCS, Michigan State Univ. D132 West Fee Hall East Lansing, MI 48824-1315
Quyên Ngo-Metzger <i>Instructor in Medicine</i>	Harvard Medical School	Division of General Medicine and Primary Care 330 Brookline Ave, LY-330 Boston, MA 02215

<b>Name/Title</b>	<b>Affiliation</b>	<b>Address</b>
Eliseo Pérez-Stable, M.D. <i>Professor</i>	UCSF Medical School	Div. of General Internal Med. UCSF, 400 Parnassus Ave. A-405 Box 0320 San Francisco, CA 94143-0320
Dana G. Safran, Sc.D. <i>Director</i>	The Health Institute Tufts New England Medical Center	750 Washington St., Box 345 Boston, MA 02111
Judy Sangl, Sc.D. <i>Health Scientist Administrator</i>	Center for Quality Improvement and Patient Survey Agency for Healthcare Research and Quality	6011 Executive Blvd., Suite 200 Rockville, MD 20852
Walter Suarez, M.D., M.P.H. <i>Executive Director</i>	Minnesota Health Data Institute	2550 University Ave. West, #35N St. Paul, MN 55114
Robert Weech-Maldonado, Ph.D. <i>Assistant Professor of Health Policy and Administration</i>	Pennsylvania State University	116 Henderson, Dept. of Health Policy & Administration Penn State University University Park, PA 16802-4705

## Appendix B: Key Informant Contact Letter

Dear [NAME]:

I am writing to ask you to participate in a 30-minute interview, which is part of a health care research project being conducted by the University of California, Los Angeles. The purpose of this interview is to learn about your previous and ongoing research using standardized consumer experience surveys such as CAHPS® for measuring the quality of care of diverse populations. This study is funded by the California HealthCare Foundation and by participating in this interview, you will provide information that may help shape the future of funding priorities for the California HealthCare Foundation.

Your participation in this survey is completely voluntary. This interview will be audio-recorded to facilitate taking notes. You have the right to review, edit or erase the tapes of your participation in whole or in part and will be permitted to do so upon your request. If you choose to participate in the study, your responses will be used to produce a report to the foundation. In addition, any of the information you provide us, including your identity, may be published in a journal article summarizing this work.

We hope you will take the time to provide us with some of your knowledge and insight in this area of research. If possible, please respond and let us know whether or not you are interested in participating. We will also call you soon to ask you to participate in this survey if we have not heard from you. In the meantime, if you have any questions or concerns about this study or wish to not be contacted about participating in the study, please call [NAME] at [PHONE NUMBER] or via email [EMAIL], or contact me at [PHONE NUMBER] or via email [EMAIL] as soon as is possible. Thank you in advance for your assistance.

Sincerely,

Leo Morales, M.D., Ph.D.

Assistant Professor  
UCLA Division of General Internal Medicine/  
Health Services Research

# Appendix C: Key Informant Interview Guide

## UCLA/CHCF Key Informant Interview

Name:

Phone#:

Interview Date:

Time Interview Began:

Time Interview Ended:

## CONTACT SCRIPT

1. Hello, my name is TONY PUYOL. I'm calling from the University of California at Los Angeles. May I speak with [R's NAME]?

WHEN R COMES TO PHONE:

Hello, my name is TONY PUYOL. I'm calling to follow up on the email you received from Dr. Leo Morales about the study on using patient surveys to assess experiences with health care in culturally and linguistically diverse populations. UCLA is working with the California HealthCare Foundation to conduct this important study.

Do you remember getting the email?

YES, GO TO 3

NO, GO TO 2

2. The email was by Dr. Leo Morales, a researcher at UCLA working with the California HealthCare Foundation. It invited you to be in a study of researchers and other experts who conduct research on patients' experiences with care in culturally and linguistically diverse populations.

It mentioned that an interviewer from UCLA would call to ask about a telephone interview and to answer any questions you have about this study. That is why I am calling.

The purpose of this interview is to learn about your previous and ongoing research using standardized consumer experience surveys such as CAHPS® for measuring the quality of care of diverse populations. This study is funded by the California HealthCare Foundation, and by participating in this interview you will provide important information that may help shape the future of funding priorities for the foundation. This interview lasts about 30 minutes.

Your participation in this survey is completely voluntary. This interview will be audio-recorded so that it is easier for me to take notes. You have the right to review, edit or erase the tapes of your participation in whole or in part and will be permitted to do so upon your request. If you choose to participate in the study, your responses will be used to produce a report to the foundation. In addition, you should be aware that any of the information you provide us, including your identity, may be published in a journal article summarizing this work. Is this a good time to do the interview?

YES/CONTINUE, GO TO 4

WANTS REMAIL, GO TO 4

REFUSAL, GO TO 4

NO, SCHEDULE, GO TO 4

3. Great. It mentioned that an interviewer from UCLA would call to ask about a telephone interview and to answer any of your questions about this study. That's why I'm calling.

The purpose of this interview is to learn about your previous and ongoing research using standardized consumer experience surveys such as CAHPS® for measuring the quality of care of diverse populations.

Your participation in this survey is completely voluntary. This interview will be audio-recorded so that it is easier for me to take notes. You have the right to review, edit or erase the tapes of your participation in whole or in part and will be permitted to do so upon your request. If you choose to participate in the study, your responses will be used to produce a report to the foundation. In addition, you should be aware that any of the information you provide us, including your identity, may be published in a journal article summarizing this work. Is this a good time to do the interview?

- YES/CONTINUE
- WANTS REMAIL
- REFUSAL
- NO, SCHEDULE

4. ALL RESPONDENTS GET THIS ITEM:

Okay, do you have any questions at this time that you would like to ask me? (ANSWER AS NEEDED)

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May we begin?

- YES/CONTINUE
- NO(CALLBACK/APPOINTMENT)
- REFUSAL

## SURVEY ITEMS

- 1) Some of the questions I am about to ask are closed-ended while others are open-ended. If you feel confused about how to answer any question, please feel free to interrupt me and ask for clarification.

I would like to begin with a couple of definitions so that there will not be any confusion during the interview: First, throughout the survey we ask about assessing patients' experiences in culturally and linguistically diverse populations. We are specifically interested in research using standardized surveys that ask about patients' experiences with medical care services, either ambulatory or hospital. Examples of standardized surveys include the Consumer Assessments of Health Plans Study (CAHPS®) survey, the Picker hospital survey distributed by the National Research Corporation, the Physician Group CAHPS® (G-CAHPS), or the Consumer Assessment Survey fielded by the Pacific Business Group on Health (PBGH).

Second, by culturally and linguistically diverse populations, we are referring to patient populations that are diverse with respect to race, ethnicity and English language proficiency. Do you have any questions about this? (ANSWER AS NEEDED)

I would like to begin by confirming some general information about you:

- a) R NAME: [SPELL OUT]
  - b) R TITLE:
  - c) R PRIMARY AFFILIATION:
  - d) R SECONDARY AFFILIATION:
  - e) R MAILING ADDRESS:
  - f) R EMAIL:
  - g) R TERMINAL DEGREE (MD, PhD, MSPH):
- 2) Now I would like to ask you about the importance of research on the experience of culturally and linguistically diverse populations to various groups of stakeholders.
    - a) How important is research on the experience of culturally and linguistically diverse populations to most health plans? Would you say:  
 Very Important  
 Moderately Important  
 Not Important
    - b) How important is research on the experience of culturally and linguistically diverse populations accrediting organizations such as NCQA (National Committee for Quality Assurance) or URAC (American Accreditation HealthCare Commission)? Would you say:  
 Very Important

- Moderately Important
- Not Important

c) How about to minority consumers? Would you say:

- Very Important
- Moderately Important
- Not Important

d) How about to consumer advocates? Would you say:

- Very Important
- Moderately Important
- Not Important

e) How about to policy makers? Would you say:

- Very Important
- Moderately Important
- Not Important

f) How about to academic faculty, fellows and students? Would you say:

- Very Important
- Moderately Important
- Not Important

g) Finally, how much importance do you place on research on the experience of culturally and linguistically diverse populations? Would you say:

- Very Important
- Moderately Important
- Not Important

3) The next questions are about data sources for research on the experience of culturally and linguistically diverse populations with health care:

Are you aware of any publicly available data sources for research on the health care experiences of culturally and linguistically diverse populations?

YES/CONTINUE

NO/SKIP TO NEXT SECTION

a) Please tell me the names of these data sources and how to access them:

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b) What are the main strengths of these data sources by name?

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c) What are the main limitations of these data sources by name?

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4) The next questions are about methodological problems in assessing the experience of culturally and linguistically diverse populations.

a) The first set of questions are about sampling issues:

i) Have you been able to identify racial/ethnic minorities in health plan, hospital, medical group or population-based sample frame information? If so, how?

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ii) Have you been able to identify persons with limited English-speaking proficiency in sampling frame information? If so, how?

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iii) What, if any, important sampling problems have you encountered in survey studies of racial/ethnic and linguistic minorities?

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iv) What methods have you used to improve response rates among cultural and linguistic minority respondents?

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v) What survey modes (for example: mail, phone, in-person, online) have you found most successful in getting responses from cultural and linguistic minority respondents? [PROBE: Why?]

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vi) Are you aware of any other groups using innovative methods for improving response rates among cultural and linguistic minority respondents?

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b) The next set of questions is about measurement problems in assessing the experience of culturally and linguistically diverse populations.

i) Please tell us if you have knowledge about any of the following survey instruments and which you know best?

- CAHPS
  - Picker hospital survey distributed by the NRC
  - G-CAHPS
  - Consumer Assessment Survey (CAS)
  - OTHER
- 

ii) What do you see as the main limitations of existing patient surveys for assessing the experience of culturally and linguistically diverse populations?

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iii) What do you see as the main strengths of existing patient surveys for assessing the experience of culturally and linguistically diverse populations?

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iv) What new instruments or aspects of instruments do you feel need to be developed to improve research on the experience of culturally and linguistically diverse populations? (and why?)

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v) In your experience, are well-translated survey instruments available in Spanish and other languages?

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vi) What are the main problems you have encountered with available translated survey instruments? [PROBE: What are you doing to address these problems?]

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5) Now I want to ask you a few questions about your research on the experience of culturally and linguistically diverse populations. Have you conducted any research on the experience of culturally and linguistically diverse populations in the past 5 years?

YES/CONTINUE

NO/SKIP TO NEXT SECTION

a) Please tell me about the most recent research you have completed.

i) Who is the Principal Investigator?

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ii) What was the primary purpose of study?

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iii) What populations were studied?

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iv) Did your project collect data?

(1) If yes, what survey instruments were used?

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(2) If no, what data sources were used?

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v) What are the main study findings?

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vi) What was the funding source?

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6) Are you planning any research on the experience of culturally and linguistically diverse populations in the near future?

YES/CONTINUE

NO/SKIP TO NEXT SECTION

i) Who will be the Principal Investigator?

---

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ii) What will be the primary purpose of study?

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---

iii) What populations will be studied?

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iv) Will data be collected?

(1) If yes, what survey instruments will be used?

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(2) If no, what data sources will be used?

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v) Where are you planning to seek funding for this project?

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7) Are you aware of any other groups that have recently completed or are planning research on patients' experiences with care?

YES/CAN YOU BRIEFLY IDENTIFY WHO THESE GROUPS ARE?

NO/SKIP TO NEXT SECTION

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8) Finally, I would like to ask for your recommendations. Is there any person or persons you recommend we speak with about research on the experiences of culturally and linguistically diverse populations? We are interested in talking to researchers and administrators who have expertise in this area.

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9) Closing

Those are all the questions I have for you. Are there any other questions that you would like me to answer at this time? (ANSWER AS NEEDED) Thank you very much for your help.

END CALL

# Appendix D: Literature Review Search Results

## Databases Searched

### MEDLINE (MEDlars onLINE)

MEDLINE is the National Library of Medicine's (NLM) premier bibliographic database covering the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, and the preclinical sciences. It contains bibliographic citations (e.g., authors, title, and journal reference) and author abstracts from over 3,900 biomedical journals published in the United States and 70 foreign countries during the current four years. It also contains over 9 million records dating back to 1966 and has worldwide coverage, but 88 percent of the citations in the current MEDLINE are from English-language sources and 76 percent have English abstracts. Citations for MEDLINE are created by the National Library of Medicine, International MEDlars partners, and cooperating professional organizations.

### HealthSTAR

HealthSTAR contains relevant bibliographic records from MEDLINE (1975 to present) and unique records from three sources: (1) records emphasizing health care administration selected and indexed by the American Hospital Association (AHA); (2) records emphasizing health planning from the National Health Planning Information Center (only in the backfile); and (3) records emphasizing health services research, clinical practice guidelines, and health care technology assessment selected and indexed through NLM's National Information Center on Health Services Research and Health Care Technology (NICHSR). It includes journal articles, technical and government reports, meeting papers and abstracts, books and book chapters.

### ERIC

ERIC is the Educational Resources Information Center (ERIC), a federally funded national information system that provides a variety of services and products on education-related issues. The ERIC database, the world's largest source of education information, contains more than 950,000 abstracts of documents and journal articles on education research and practice. Abstracts in the ERIC Database are available in printed version in *Resources in Education* and *Current Index To Journals in Education*. The database is updated monthly, ensuring that the information is timely and accurate.

### Ingenta Uncover

Ingenta Uncover is a database of current article information taken from over 18,000 multidisciplinary journals. Uncover contains brief descriptive information for over 8,800,000 articles which have appeared since fall 1988. Uncover is easy to use, with keyword access to article titles and summaries.

## Search Results

**Table D-1: Literature Search Results—Consumer Assessment Survey**

<b>Strategy 1</b>			<b>Keywords: patient satisfaction AND ethnic groups AND differences</b>				
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b># of Articles</b>	<b># of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
1	MEDLINE	PubMed*	1966 – 2002	50	18	14	28
2	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	60	15	6	10
3	ERIC	ERIC	1966 – 2002	0	0	0	0
4	Ingenta Uncover	Ingenta	1988 – 2002	2	0	0	0
<b>Strategy 2</b>			<b>Keywords: patient satisfaction AND ethnic group differences</b>				
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b># of Articles</b>	<b># of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
5	MEDLINE	PubMed*	1966 – 2002	53	18	14	26
6	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	30	9	3	10
7	ERIC	ERIC	1966 – 2002	0	0	0	0
8	Ingenta Uncover	Ingenta	1988 – 2002	1	1	0	0
<b>Strategy 3</b>			<b>Keywords: patient satisfaction AND ethnic groups</b>				
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b># of Articles</b>	<b># of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
9	MEDLINE	PubMed*	1966 – 2002	171	22	31	18
10	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	206	27	31	15
11	ERIC	ERIC	1966 – 2002	0	0	0	0
12	Ingenta Uncover	Ingenta	1988 – 2002	5	0	0	0
<b>Strategy 4</b>			<b>Keywords: consumer satisfaction AND ethnic groups</b>				
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b># of Articles</b>	<b># of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
13	MEDLINE	PubMed*	1966 – 2002	303	29	23	8
14	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	101	9	5	5
15	ERIC	ERIC	1966 – 2002	0	0	0	0
16	Ingenta Uncover	Ingenta	1988 – 2002	0	0	0	0

\* MeSH terms used for PubMed search.

<b>Strategy 5</b>		<b>Keywords: patient satisfaction AND measurement AND questionnaire/*standards</b>					
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b>No. of Articles</b>	<b>No. of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
17	MEDLINE	PubMed*	1966 – 2002	26	7	1	3
18	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	31	6	1	4
19	ERIC	ERIC	1966 – 2002	1	0	0	0
20	Ingenta Uncover	Ingenta	1988 – 2002	13	0	0	0
<b>Strategy 6</b>		<b>Keywords: patient satisfaction AND questionnaires AND ethnic groups</b>					
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b># of Articles</b>	<b># of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
21	MEDLINE	PubMed*	1966 – 2002	50	21	7	14
22	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	43	6	2	5
23	ERIC	ERIC	1966 – 2002	0	0	0	0
24	Ingenta Uncover	Ingenta	1988 – 2002	1	0	0	0
<b>Strategy 7</b>		<b>Keywords: patient assessment AND questionnaires AND cultural</b>					
<b>No.</b>	<b>Database</b>	<b>Internet Search Engine</b>	<b>Years</b>	<b># of Articles</b>	<b># of Viewed Abstracts</b>	<b># Selected for Review</b>	<b>% Success</b>
25	MEDLINE	PubMed*	1966 – 2002	83	4	2	2
26	MEDLINE, HealthSTAR	NLM Gateway	1957 – 2002	88	4	2	2
27	ERIC	ERIC	1966 – 2002	0	0	0	0
28	Ingenta Uncover	Ingenta	1988 – 2002	6	0	0	0

\* MeSH terms used for PubMed search.

# Appendix E: Principal Categories of Articles Reviewed

**Table E-1. Articles Reviewed by Category**

<b>Racial/Ethnic Differences</b>		
<b>Art. No.</b>	<b>Title</b>	<b>Authors</b>
4	Consumer Satisfaction with Group Practice: The CHA Case	Bashshur, Rashid L.
5	Differences in Health Care Quality for Children and Adults under Managed Care: Justification for Separate Quality Assessments?	Bost, James E.
6	Race and Patient Satisfaction	Bouknight, Reynard R.
8	Racial Differences in How Patients Perceive Physician Communication Regarding Cardiac Testing	Collins, Tracie C.
9	Race, Gender, and Partnership in the Apatine-Physician Communication Relationship	Cooper-Patrick, Lisa
10	Perceived Needs and Service Use of Spanish Speaking Monolingual Patients Followed at a Hispanic Clinic	Diaz, Esperanza
11	Racial and Ethnic Disparities in Perceptions of Physician Style and Trust	Doescher, Mark P.
12	Exploring Quality of Care for African Americans	Fongwa, Marie N.
15	Correlates of Satisfaction and Dissatisfaction with Medical Care: A Community Perspective	Hulka, Barbara S.
18	Health Status and Satisfaction of Patients Receiving Ambulatory Care at Osteopathic Training Clinics	Licciardone, John C.
19	Quality of Hospital Service: A Study Comparing “Asian” and “Non-Asian” Patients in Middlesbrough	Makhok, Rajan
20	Social Distance and Patients’ Ratings of Healthcare Providers	Malat, Jennifer
21	Variation and Quality of Self-Report Health Data: Asians and Pacific Islanders Compared with Other Ethnic Groups	Meredith, Lisa L.
23	Differences in CAHPS® Adult Survey Reports and Ratings by Race and Ethnicity: An Analysis of the National CAHPS® Benchmarking Data 1.0	Morales, Leo S.

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**Racial/Ethnic Differences (cont'd.)**

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<b>Art. No.</b>	<b>Title</b>	<b>Authors</b>
24	Evaluating the Equivalence of Health Care Ratings by Whites and Hispanics	Morales, Leo S.
25	Racial and Ethnic Differences Among Medicare Beneficiaries	Murray, Lauren A.
26	Racial and Ethnic Differences in a Patient Survey: Patients' Values, Ratings, and Reports Regarding Physician Primary Care Performance in a Large Health Maintenance Organization	Murray-García, Jann L.
29	Barriers to Care Among Racial/Ethnic Groups under Managed Care	Phillips, Kathryn A.
30	Assessing Client Satisfaction Among Hispanics	Roberts, Robert E.
31	Patient-Physician Racial Concordance and the Perceived Quality and Use of Health Care	Saha, Somnath
32	Experience of Primary Care by Racial and Ethnic Groups in the United States	Shi, Leiyu
33	Access to Medical Care Reported by Asians and Pacific Islanders in a West Coast Physician Group Association	Snyder, Rani E.
35	Consumer Satisfaction with CMHC Services	Sullivan, Greer
36	Asian-American Patient Ratings of Physician Primary Care Performance	Taira, Deborah A.
37	Medicaid Beneficiaries under Managed Care: Provider Choice and Satisfaction	Temkin-Greener, Helena

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**Language Differences**

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<b>Art. No.</b>	<b>Title</b>	<b>Authors</b>
1	What a Difference an Interpreter Can Make: Health Care Experiences of Uninsured with Limited English Proficiency	Andrulis, Dennis
2	Use and Effectiveness of Interpreters in an Emergency Department	Baker, David W.
3	Interpreter Use and Satisfaction with Interpersonal Aspects of Care for Spanish-Speaking Patients	Baker, David W.
7	Impact of Language Barriers on Patient Satisfaction in an Emergency Department	Carrasquillo, Olveen
14	Health Care Usage by Hispanic Outpatients as a Function of Primary Language	Hu, Dale J.

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**Language Differences (cont'd.)**

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<b>Art. No.</b>	<b>Title</b>	<b>Authors</b>
16	Language of Interview: Relevance for Research of Southwest Hispanics	Kirkman-Liff, Bradford
17	Satisfaction with Methods of Spanish Interpretation in an Ambulatory Care Clinic	Kuo, David
22	Are Latinos Less Satisfied with Communication by Health Care Providers?	Morales, Leo S.
28	Quality of Data in Multiethnic Surveys	Pasick, R. J.
38	Racial and Ethnic Differences in Parents' Assessments of Pediatric Care in Medicaid Managed Care	Weech-Maldonado, Robert

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**CAHPS®**

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<b>Art. No.</b>	<b>Title</b>	<b>Authors</b>
5	Differences in Health Care Quality for Children and Adults under Managed Care: Justification for Separate Quality Assessments?	Bost, James E.
23	Differences in CAHPS® Adult Survey Reports and Ratings by Race and Ethnicity: An Analysis of the National CAHPS® Benchmarking Data 1.0	Morales, Leo S.
38	Racial and Ethnic Differences in Parents' Assessments of Pediatric Care in Medicaid Managed Care	Weech-Maldonado, Robert

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**Methods**

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<b>Art. No.</b>	<b>Title</b>	<b>Authors</b>
13	Methodological Problems in Comparing English-Speaking and Spanish-Speaking Patients' Satisfaction with Interpersonal Aspects of Care	Hayes, Risa P.
27	Patient-Centered Quality Measures for Asian Americans: Research in Progress	Ngo-Metzger, Quyen
34	Interpersonal Processes of Care in Diverse Populations	Stewart, Anita L.

## Appendix F: Article Summaries

1. **“What a Difference an Interpreter Can Make: Health Care Experiences of Uninsured with Limited English Proficiency.”** Dennis Andrulis, 2002.

*Study Purpose:* To compare the perceptions and experiences of adults who needed and easily got an interpreter with those who needed and did not get an interpreter (or had difficulty getting one), and with other uninsured who did not need an interpreter.

*Population Studied:* English proficient and limited English proficient (Spanish-speaking) adults.

*Study Setting:* 23 primarily safety net hospitals in 16 cities.

*Data Collection Instrument Used (Languages):* Community Access Monitoring Survey (CAMS) (English and Spanish)

*Data Collection Mode:* Face-to-face

*Sample Size (Response Rate):* 4,161 (N/A).

*Domains Studied:* Facility’s reputation for treating the uninsured; medical and support staff treatment; access to services; difficulty paying for prescription drugs and medical care; need for financial assistance to pay for medications and care; indebtedness to facility and affect upon future use of facility; need for and access to interpretation services; availability of information for persons with limited English proficiency.

*Main Findings:* The uninsured who got an interpreter had similar or more positive experiences at the hospital where they received care than the uninsured without language barriers; adults who needed and did not get an interpreter had more negative perceptions about their health than those who either got interpreter services or did not need them.

*Major Limitations:* N/A.

2. **“Use and Effectiveness of Interpreters in an Emergency Department.”** David W. Baker, 1996.

*Study Purpose:* To determine how often interpreters were used for Spanish-speaking patients, patients’ perceived need for an interpreter, and the impact of interpreter use on patients’ subjective and objective knowledge of their diagnosis and treatment.

*Population Studied:* English-speaking Latino and native Spanish-speaking Latino patient.

*Study Setting:* Public hospital emergency department (Harbor-UCLA Medical Center).

*Data Collection Instrument Used (Languages):* TOFHLA and TOFHLA-S (indicator of patients’ functional health literacy). (English and Spanish)

*Data Collection Mode:* Face-to-face

*Sample Size (Response Rate):* 467 native Spanish speakers; 63 English-speaking Latinos (N/A).

*Domains Studied:* Information collected on demographics, self-reported reading difficulties; health care access; health care use; functional health literacy; ability to speak English; examiner's Spanish; use of interpreters; patient comprehension of discharge diagnosis and treatment plan; desire for better explanation; accuracy of patients' knowledge.

*Main Findings:* Of Spanish speakers, 26 percent used an interpreter; for 52 percent an interpreter was not used but thought to be necessary; 34 percent of the time a patient's English and examiner's Spanish were poor an interpreter was not called; 87 percent of patients who did not have an interpreter felt one should have been used; nurses and physicians interpreted most frequently; professional interpreters used for 12 percent of patients; patients who did not feel an interpreter was necessary rated their understanding of their disease best, followed by those who used an interpreter and then by those who felt one should have been used.

*Major Limitations:* Ratings of English proficiency and clinicians' Spanish proficiency self-reported only; medical conditions vary greatly in their ease of explanation; no information on the proficiency of interpreters used; looked only at patients' understanding of their diagnoses – did not determine the impact of language barriers on the accuracy of the diagnoses themselves.

3. **“Interpreter Use and Satisfaction with Interpersonal Aspects of Care for Spanish-Speaking Patients.”** David W. Baker, 1998.

*Study Purpose:* To evaluate the effect of current interpreting practices on Spanish-speaking patient's satisfaction with the patient-provider relationship.

*Population Studied:* Group 1 (Patients who communicated without need for interpreter); Group 2 (patients who needed and received an interpreter); Group 3 (patients who needed an interpreter and did not receive one)

*Study Setting:* Emergency room in southern California public hospital

*Data Collection Instrument Used (Languages):* Instrument developed by investigator (English and Spanish)

*Data Collection Mode:* Telephone followed by in-person interview if needed.

*Sample Size (Response Rate):* 467 (approximately 54%)

*Domains Studied:* Friendliness, respectfulness, concern for patient as person, spending enough time, making patient feel comfortable

*Main Findings:* Group 2 less satisfied than Group 1 and Group 3 less satisfied than Group 2 on most domains.

*Major Limitations:* Low response rate; most interpreters ad hoc; limited generalizability

*Comments:* Nice study; seminal article

4. **“Consumer Satisfaction with Group practice, the CHA Case.”** Bashshur, Rashid L., 1967.

*Study Purpose:* To examine consumer satisfaction with a group practice prepayment plan and associated factors.

*Population Studied:* White Protestant, white Catholic, Negro Protestant, Other

*Study Setting:* Community Health Association (CHA) plan

*Data Collection Instrument Used (Languages):* 1964 survey that examined choice behavior and consumer attitudes (N/A).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 90 White Protestant; 136 White Catholic; 210 Negro Protestant; 53 Other (N/A).

*Domains Studied:* Satisfaction with plan by life cycle stage, family income, color-religion, length of employment, attendance to union meetings, conception of union role, utilization of metropolitan hospital, information.

*Main Findings:* Negroes were more satisfied than whites; no real differences in satisfaction related to formal schooling or family income; nonacademic training and seniority on job positively related to satisfaction

*Major Limitations:* N/A.

*Comments:* Very old study. Provides interesting historical perspective.

5. **“Differences in Health Care Quality for Children and Adults under Managed Care: Justification for Separate Quality Assessments?”** James E. Bost.

*Study Purpose:* To assess reported results of health care quality for children and adults in managed systems of care and to determine if variations exist between reported quality results for adults and children with the same plan.

*Population Studied:* Latino, White, Black or African American, and Asian children and adults

*Study Setting:* 178 managed care plans

*Data Collection Instrument Used (Languages):* Consumer Assessment of Health Plans Survey (CAHPS®) (N/A).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 178 managed care plans; 515 adults per plan (average); 304 children per plan (average) (N/A).

*Domains Studied:* Rating of doctor, specialist, health care, health plan; getting needed care composite; customer service composite; getting care quickly composite; doctor’s communication composite; courteous staff composite; claims processing composite.

*Main Findings:* Within the same plan reported results for care provided by specialists and primary care physicians to adults and children in the same plan revealed marked variation; assessments of activities related directly to health plan activities showed little variation; differences in demographic characteristics between adults and children survey respondents do not appear to explain observed variations.

*Major Limitations:* N/A.

6. **“Race and Patient Satisfaction,”** Reynard R. Bouknight, 2000.

*Study Purpose:* To examine the impact of racial concordance on patient satisfaction.

*Population Studied:* African Americans and whites.

*Study Setting:* Three metropolitan areas across Michigan.

*Data Collection Instrument Used (Languages):* African Americans and whites.

*Data Collection Mode:* Phone

*Sample Size (Response Rate):* 473 African Americans; 518 whites (N/A).

*Domains Studied:* Patient satisfaction based on the ABIM patient satisfaction scale.

*Main Findings:* Racial concordance improves patient satisfaction.

*Major Limitations:* N/A.

*Comments:* Commentary to editor in support of findings from another study. Not detailed description of own study.

7. **“Impact of Language Barriers on Patient Satisfaction in an Emergency Department.”**  
Olveen Carrasquillo, 1999.

*Study Purpose:* To examine patient satisfaction and willingness to return to an emergency department (ED) among non-English speakers.

*Population Studied:* English and non-English (Spanish) speakers

*Study Setting:* Five urban teaching hospital emergency departments in the Northeastern United States

*Data Collection Instrument Used (Languages):* On-site administered questionnaire and follow-up phone interview (English and Spanish)

*Data Collection Mode:* Questionnaire self-administered on-site or by interviewers.

*Sample Size (Response Rate):* 2,333 (80%)

*Domains Studied:* Overall care; courtesy and respect; completeness of care; explanation of what was done; waiting time; discharge instructions; willingness to return if had another problem requiring emergency care; problems with care (communication, follow-up, medication use, diagnostic testing)

*Main Findings:* 52 percent of non-English speakers vs. 71percent English speakers reported overall satisfaction; 14 percent of non-English speakers vs. 9.5 percent English speakers said they would not return to the ED if they had another problem requiring emergency care; non-English speakers were more likely to report overall problems with care.

*Major Limitations:* Dichotomized language proficiency, though it is likely a more continuous concept; satisfaction with care ratings may be biased by cultural response tendencies; interviews only in Spanish and English.

8. **“Racial Differences in How Patients Perceive Physician Communication Regarding Cardiac Testing.”** Tracie C. Collins, 2002.

*Study Purpose:* To study differences between white and black patients in their perceptions of provider communication regarding cardiac testing

*Population Studied:* Whites and African Americans

*Study Setting:* Houston VA

*Data Collection Instrument Used (Languages):* Focus group protocol developed by investigator (English and Spanish)

*Data Collection Mode:* Face-to-face

*Sample Size (Response Rate):* 13 of 89 eligible patients (2 deceased) over 4 groups or about 3 persons per group (15%)

*Domains Studied:* Domains emerge from focus groups: information needs; prior experiences and expectations; need to be convinced; physician trust

*Main Findings:* Black patients consistently expressed need for building trusting relationships while whites stressed the need to be convinced of the need for recommended procedures.

*Major Limitations:* Focus group protocol developed by investigator (English and Spanish); small number of patients; study results not generalizable

*Comments:* Qualitative study of four focus groups consisting of three patients per group on average. Well conceptualized and written.

9. **“Race, Gender, and Partnership in the Apatine-Physician Relationship.”** Lisa Cooper-Patrick, 1999.

*Study Purpose:* To describe how the race/ethnicity and gender of patients and physicians are associated with physicians’ participatory decisionmaking (PDM) styles.

*Population Studied:* White, African American, other adult patients.

*Study Setting:* 32 primary care practices associated with a large mixed-model managed care organization in an urban setting.

*Data Collection Instrument Used (Languages):* Baseline survey for a randomized clinical trial for patients with depression (N/A).

*Data Collection Mode:* Phone.

*Sample Size (Response Rate):* 1,816 (N/A).

*Domains Studied:* Age; Gender; Education; Marital Status; Self-rated health status; Length of relationship with primary care physician; Race of physician seen; Gender of physician seen.

*Main Findings:* African American patients rated their visits as significantly less participatory than whites in models adjusting for patient age, gender, education, marital status, health status, and length of the patient-physician relationship; ratings of minority and white physicians did not differ with respect to PDM style; patients in race-concordant

relationships with their physicians rated their visits as significantly more participatory than patients in race-discordant relationships; patients of female physicians had more participatory visits, but gender concordance between physicians and patients was not significantly related to PDM score; patient satisfaction was highly associated with PDM score within all race/ethnicity groups.

*Major Limitations:* Patients not assigned to physicians in a randomized fashion; PDM style relies on patient self-report, and a large percentage of patients do not respond to all three questions; would have been useful to have other physician or practice measures known to affect physician communication.

10. **“Perceived Needs and Service Use of Spanish-Speaking Monolingual Patients Followed at a Hispanic Clinic.”** Esperanza Diaz, 2001.

*Study Purpose:* To compare needs for health care, assistance with community adjustment and material support, access to services, and attitudes towards medications among Spanish-speaking Hispanics served by a Hispanic clinic.

*Population Studied:* Monolingual Spanish-speaking Hispanics, English-speaking Hispanics, non-Hispanics.

*Study Setting:* Hispanic patients served by a Community Mental Health Center (CMHC) and a "Hispanic clinic"

*Data Collection Instrument Used (Languages):* Survey instrument developed by investigator; (English and Spanish).

*Data Collection Mode:* Face-to-face.

*Sample Size (Response Rate):* Hispanic clinic=165; CMHC/Hispanics=62; CMHC/Non-Hispanics=98 (N/A).

*Domains Studied:* Domains derived via factor analysis of items: health needs; community adjustment; need for help with community adjustment; medication management; medication effectiveness.

*Main Findings:* Spanish-speaking Hispanics have greater need for physical health services than English-speaking Hispanics and non-Hispanics; Hispanics seen at Hispanic clinic had greater difficulty with medication management.

*Major Limitations:* Cross-sectional study.

*Comments:* Poorly written study.

11. **“Racial and Ethnic Disparities in Perceptions of Physician Style and Trust.”** Mark P. Doescher, 2000.

*Study Purpose:* To assess whether a person's race or ethnicity is associated with low trust in the physician.

*Population Studied:* Whites, African Americans, Latinos and other non-whites.

*Study Setting:* Nationally representative population based study.

*Data Collection Instrument Used (Languages):* 1996 and 1997 Community Tracking Survey (N/A).

*Data Collection Mode:* Random digit dial telephone survey supplemented by sample of non-phone households.

*Sample Size (Response Rate):* 32,929 (N/A).

*Domains Studied:* Physician trust and physician style.

*Main Findings:* Minorities less positive on both domains than whites.

*Major Limitations:* Excessively broad racial/ethnic categories; no information on physicians' race/ethnicity or other characteristics; potential response bias to Likert scales; cross-sectional study.

*Comments:* Secondary data analysis study.

12. **“Exploring Quality of Care for African Americans.”** Marie N. Fongwa, 2001.

*Study Purpose:* To explore quality of care dimensions from the African American perspective.

*Population Studied:* African Americans.

*Study Setting:* Convenience sample from general population.

*Data Collection Instrument Used (Languages):* Focus group protocol developed by investigator; (English).

*Data Collection Mode:* Group interviews.

*Sample Size (Response Rate):* 7 focus groups with 35 subjects (N/A).

*Domains Studied:* Domains derived from Donabedian quality evaluation model (i.e., structure, process outcomes). Three roles examined: client, provider, setting.

*Main Findings:* Focus group analysis identified five themes: quick fixes, care-seeking militancy, proof of insurance is no guarantee of quality care, skin as a communication medium and assumptions/beliefs and stereotypes about blacks.

*Major Limitations:* Non-representative sample.

*Comments:* Qualitative research.

13. **“Methodological Problems in Comparing English-Speaking and Spanish-Speaking Patients’ Satisfaction with Interpersonal Aspects of Care.”** Risa P. Hayes, 1998.

*Study Purpose:* To examine the reliability and validity of English and Spanish versions of a patient satisfaction measure, the Interpersonal Aspects of Care (IAC) Examiner Scale.

*Population Studied:* English and Spanish-speaking adults.

*Study Setting:* Emergency department of a large public hospital (Harbor-UCLA Medical Center). Persons with non-urgent medical problems.

*Data Collection Instrument Used (Languages):* Interpersonal Aspects of Care (IAC) Examiner Scale (English and Spanish)

*Data Collection Mode:* Face-to-face.

*Sample Size (Response Rate):* 484 (N/A).

*Domains Studied:* How was the examiner at: listening to you; answering your questions; using words that you could understand, instead of confusing medical words; being friendly with you; treating you with respect; showing concern for you as a person; making you feel comfortable.

*Main Findings:* In general, the examiner scale was reliable and valid; the Spanish version of the scale was significantly less reliable and valid; depending on the method of dichotomization, significant differences between Spanish-speaking and English-speaking patients were found for the majority of the individual scale items.

*Major Limitations:* Most of the Spanish-speaking respondents were Mexican-American – do not know if results are generalizable to other Spanish-speaking patients; looked only at Spanish-speaking respondents who communicated adequately without the need for an interpreter.

14. **“Health Care Usage by Hispanic Outpatients as a function of Primary Language.”**  
Dale J Hu, 1986.

*Study Purpose:* To determine the association between health care use and satisfaction with care by three groups of Hispanics: Spanish monolingual, English-Spanish bilingual, English monolingual

*Population Studied:* Hispanics

*Study Setting:* Outpatient clinic patients in San Diego, California. Patients approached in clinic waiting rooms and asked to complete survey.

*Data Collection Instrument Used (Languages):* Instrument developed by investigators (Spanish or English).

*Data Collection Mode:* Self-administered

*Sample Size (Response Rate):* 190 adults (N/A).

*Domains Studied:* Use of care and satisfaction with care.

*Main Findings:* Usage and satisfaction increased with English language proficiency

*Major Limitations:* Non-random sample; sample predominantly Mexican-Americans; small sample size.

*Comments:* Older study. Pilot study. Nicely done.

15. **“Correlates of Satisfaction and Dissatisfaction with Medical Care: A Community Perspective.”** Barbara S. Hulka, 1975.

*Study Purpose:* To examine the attitude of the public toward physicians and medical services.

*Population Studied:* White and black male and female adults (21 and over)

*Study Setting:* Household survey in Fort Wayne, Indiana

*Data Collection Instrument Used (Languages):* Instrument developed by authors, based on Thurstone scaling methods and Likert format (N/A).

*Data Collection Mode:* Face-to-face

*Sample Size (Response Rate):* 1,584 (N/A).

*Domains Studied:* Satisfaction with professional competence, personal qualities, cost/convenience.

*Main Findings:* Overall attitudes were favorable toward the professional competence and personal qualities of physicians; accessibility, including costs and convenience were less highly regarded; men were less satisfied than women and blacks were less satisfied than whites; particularly negative attitudes were expressed toward the personal qualities of physicians by young blacks; blacks over 60 expressed negative attitudes toward costs and convenience; having a regular physician and long attendance with that physician were correlated with positive attitudes.

*Major Limitations:* N/A.

*Comments:* Older study.

16. **“Language of Interview: Relevance for Research of Southwest Hispanics”** Bradford Kirkman-Liff, 1991.

*Study Purpose:* To investigate the health status, access, satisfaction with care, and barriers to care in Arizona. The major focus is on the association between language of interview and the dependent measures.

*Population Studied:* Hispanic adults and children

*Study Setting:* Representative cross-section of Arizona, excluding those whose place of residence were Indian reservations, military bases, prisons, nursing homes, college dormitories, and mental institutions.

*Data Collection Instrument Used (Languages):* Questionnaire and survey design by investigators, provider and consumer groups, and government agencies in Arizona. Conducted by Louis Harris and Associates, Inc. (English and Spanish).

*Data Collection Mode:* Grand majority by phone. Some face-to-face.

*Sample Size (Response Rate):* 469 adults and 235 children (N/A).

*Domains Studied:* Health status; Disability; Usual source of care; Had a medical visit; Had an emergency visit; Needed but did not receive care; Refused care; Access to care; Financial problems from illness.

*Main Findings:* Language of interview for Hispanic children was a significant variable, more important than ethnicity itself, in determining health status, access, satisfaction with care, and barriers to care, language of interview for Hispanic adults was not a significant measure, but neither was ethnicity. Income affected access to care for adults.

*Major Limitations:* N/A.

17. **“Satisfaction with Methods of Spanish Interpretation in an Ambulatory Care Clinic”**  
David Kuo, 1999.

*Study Purpose:* To describe the utilization of various methods of language interpretation by Spanish-speaking patients in an academic medical clinic and to determine patients’ and physicians’ satisfaction with these methods.

*Population Studied:* Medical residents and Spanish-speaking patients.

*Study Setting:* Medical Primary Care Unit at Rhode Island Hospital.

*Data Collection Instrument Used (Languages):* Patient survey designed by investigator; medical resident survey designed by investigator (adapted from patient survey). (Patient survey—Spanish; medical resident survey—N/A).

*Data Collection Mode:* Face-to-face (patient survey); mail (medical resident survey).

*Sample Size (Response Rate):* 149 patients (94%); 51 medical residents (69%)

*Domains Studied:* Patient survey: Frequency patients used various methods of interpretation; satisfaction with method of interpretation; need for interpreters; bad care because of unavailability of interpreter; comfort level discussing sensitive issues or embarrassing subjects using various interpretation methods; characteristics of interpreters perceived important. Medical resident survey: adapted patient survey.

*Main Findings:* Both patients and residents had the highest level of satisfaction for professional interpreters; patients were significantly more satisfied than residents with using family members and friends; physicians and patients agreed that accuracy, accessibility, and respect for confidentiality were highly important characteristics of interpreters; patients were more concerned than residents about the ability of the interpreter to assist them after the physician visit.

*Major Limitations:* Findings may not be generalizable to other outpatient clinics or other languages; cultural differences as well as language proficiency may independently influence patients’ expectations for satisfactory medical care and how they report them; did not record data on physicians and patients who did not consent to participate.

18. **“Health Status and Satisfaction of Patients Receiving Ambulatory Care at Osteopathic Training Clinics.”** John C. Licciardone, 2002.

*Study Purpose:* To examine the health status and satisfaction of patients receiving ambulatory care at osteopathic training clinics

*Population Studied:* English and Spanish-speaking adults.

*Study Setting:* 6 family medicine training clinics at a college of osteopathic medicine.

*Data Collection Instrument Used (Languages):* Medical Outcomes Study 36-Item Short Form (SF-36) (English and Spanish)

*Data Collection Mode:* Face-to-face.

*Sample Size (Response Rate):* 2,406 English-speaking; 294 Spanish-speaking (74-98% depending on clinic)

*Domains Studied:* Physical functioning; role limitations (physical); bodily pain; general health; vitality; social functioning; role limitations (emotional); mental health.

*Main Findings:* Patients who were English speakers reported significantly better health than their Spanish-speaking counterparts on four of the eight scales, although Spanish-speaking patients reported greater vitality. There were significant differences in patient health across clinics. More than 92% of patients at these clinics reported that they were satisfied or very satisfied with their health care.

*Major Limitations:* The comparison of clinic patients with the general U.S. population and the comparisons between different segments of the clinic population may be confounded by patient demographics; mode of administration used in this study may alter norms for some SF-36 health scales and thereby affect the comparisons made in this study.

19. **“Quality of Hospital Service: A Study Comparing ‘Asian’ and ‘Non-Asian’ Patients in Middlesbrough.”**

*Study Purpose:* To compare ‘Asian’ and ‘non-Asian’ patients’ experience of and satisfaction with non-clinical aspects of care and to evaluate the effect of subsequent provision of ‘Asian’ food.

*Population Studied:* Asian and non-Asians 16 and older.

*Study Setting:* Two district general hospitals in Middlesbrough, Ohio.

*Data Collection Instrument Used (Languages):* Instruments developed by investigator. (Urdu, Punjabi, Hindi, Mirpuri and English)

*Data Collection Mode:* Face-to-face (in-home).

*Sample Size (Response Rate):* 52 Asian; 52 non-Asian (N/A).

*Domains Studied:* Satisfaction and experience with: communication; medical students; examination of women; privacy; visiting arrangements; food and dietary requirements; miscellaneous issues.

*Main Findings:* Main differences between groups related to the receipt of written information in the patients’ first language; inability to communicate because of lack of English and dissatisfaction with existing interpreting arrangements; ‘Asian’ women’s attitudes to examination by male doctors; provision of and satisfaction with hospital food; ‘Asians’ were less satisfied with food overall; 14% of ‘Asians’ and 19% of ‘non-Asians’ required a special diet but only 19% and 86%, respectively, received it; following provision of ‘Asian’ food, ‘Asian’ patients reported satisfaction levels comparable with those of ‘non-Asians’

*Major Limitations:* N/A.

20. **“Social Distance and Patient’s Ratings of Healthcare Providers.”** Jennifer Malat, 2001.

*Study Purpose:* To determine the association between socioeconomic status and patient-provider racial concordance on patient’s reports about respect and time

*Population Studied:* White and African American adults.

*Study Setting:* Detroit Area Study.

*Data Collection Instrument Used (Languages):* Instrument developed by investigators at University of Michigan (English)

*Data Collection Mode:* Face-to-face interviews.

*Sample Size (Response Rate):* 1,140 (70%)

*Domains Studied:* Respect and dignity during last office visit; Provider spending enough time with them.

*Main Findings:* SES and racial concordance account for a portion of the disparity in respect between whites and blacks; SES but not racial concordance account for disparity in time spent.

*Major Limitations:* Limited generalizability.

*Comments:* Nicely written study. Nice theoretical framework grounded in literature.

21. **“Variation and Quality of Self-Report Health Data: Asians and Pacific Islanders Compared with Other Ethnic Groups.”** Lisa S. Meredith, 1995.

*Study Purpose:* To examine the variation in the sociodemographic, system, and disease characteristics of Asians and Pacific Islanders compared with other ethnic groups and the quality of standard self-report measures of health and functioning by ethnic groups.

*Population Studied:* Adult outpatients who received care in prepaid or fee-for-service plans. Asian, white, African American, Latino, other.

*Study Setting:* HMOs, large multispecialty groups, and solo practices in Los Angeles, Boston, and Chicago.

*Data Collection Instrument Used (Languages):* Medical Outcomes Study (English).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 21,481 (N/A).

*Domains Studied:* Physical functioning; Role functioning; Social functioning; Mental health; Health perceptions; Pain; Patient satisfaction; Participation style.

*Main Findings:* Asians/Pacific Islanders were similar to African Americans and Latinos on most sociodemographic and system characteristics, disease status, and risk factors; ethnicity was a significant predictor of differences in self-reported health; Asian/Pacific Islanders as a group had better health or health of equal status compared with whites, but were less satisfied and perceived less sharing in the doctor-patient relationship compared with other ethnic groups.

*Major Limitations:* Causal interpretations not possible because of insufficient numbers of Asians in the longitudinal portion of the MOS, which restricts analyses to the cross-sectional screener sample of patients; more detailed information about health attitudes and beliefs were unavailable for comparing Asians to other ethnic groups; inability to distinguish within ethnic groups, potentially obscuring much diversity in the Asian community; because analyses are based on a patient population, findings cannot be generalized to other types of samples, including the general population.

22. **“Are Latinos Less Satisfied with Communication by Health Care Providers?”** Leo S. Morales, 1999.

*Study Purpose:* To examine association of patient ratings of communication by health care providers with patient language (English vs. Spanish) and ethnicity (Latino vs. white).

*Population Studied:* Latino and white, English and Spanish speakers.

*Study Setting:* Independent association of physician groups (48) located primarily in the western United States.

*Data Collection Instrument Used (Languages):* Opscan questionnaire designed to ask about health status, satisfaction with care, and use of health services during previous 12 months (English and Spanish)

*Data Collection Mode:* Mail.

*Sample Size (Response Rate):* 7,093 (59%).

*Domains Studied:* Health status, satisfaction with care, and use of health services during previous 12 months; 153 items assessing: intention to switch to another physician group; intention to switch to another health plan; ratings of care including ratings of communication with health care providers; reports about care; utilization of care; health status; and a chronic condition inventory.

*Main Findings:* Latinos responding in Spanish were significantly more dissatisfied compared with Latinos responding in English and non-Latino whites responding in English when asked about: the medical staff listened to what they say; answers to their questions; explanations about prescribed medications; explanations about medical procedures and test results; and reassurance and support from their doctors and the office staff.

*Major Limitations:* Those who participated in study were similar; unable to calculate response rates specific to language or race/ethnicity; satisfaction rating might have been interpreted differently by English and Spanish-language respondents; study done in western United States – findings may not generalize to other U.S. Spanish-speaking ethnic groups.

23. **“Differences in CAHPS® Adult Survey Reports and Ratings by Race and Ethnicity: An Analysis of the National CAHPS® Benchmarking Data 1.0.”** Leo S. Morales, 2001.

*Study Purpose:* To examine racial/ethnic group differences in adults’ reports and ratings of care using data from the National Consumer Assessment of Health Plans (CAHPS®) Survey Benchmarking Database (NCBD) 1.0.

*Population Studied:* Hispanic, white, black or African American, Asian and Pacific Islander, and American Indian or Alaskan native adults.

*Study Setting:* Data from 54 commercial and 31 Medicaid health plans.

*Data Collection Instrument Used (Languages):* CAHPS® 1.0 (English and Spanish)

*Data Collection Mode:* Phone and mail.

*Sample Size (Response Rate):* 28,354 (52% mean across commercial and Medicaid)

*Domains Studied:* Personal doctor, specialty care, overall rating of health plan, overall rating of health care, access to needed care, provider communication, office staff helpfulness, promptness of care, and health plan customer service.

*Main Findings:* Members of racial/ethnic minority groups, with the exception of Asian/Pacific Islanders, reported experiences with health care similar to those of whites.

*Major Limitations:* Overall mean and median response rates for both commercial and Medicaid health plans was 52 percent, threatening the representativeness of the sample; significant variation in response rates among the included health plans may have biased results – data limitations prevented determining this as these also prevented estimating racial/ethnic group-specific response rates or differences in reports and ratings between respondents and nonrespondents within the surveyed health plans.

24. **“Evaluating the Equivalence of Health Care Ratings by Whites and Hispanics.”** Leo S. Morales, 2000.

*Study Purpose:* To assess the equivalence of a health care ratings scale administered to non-Hispanic white and Hispanic survey respondents.

*Population Studied:* White and Hispanic adults.

*Study Setting:* Randomly selected patients receiving medical care from an association of 48 physician groups in the western United States.

*Data Collection Instrument Used (Languages):* 153 item questionnaire. This study evaluated the 9 survey items relevant to ratings of interpersonal care (English and Spanish)

*Data Collection Mode:* Mail.

*Sample Size (Response Rate):* 7,093 (59%)

*Domains Studied:* Medical staff listening; answers to your questions; explanations about tests and medical procedures; explanations about prescribed medications; explanations about tests and medical procedures; reassurance and support offered; quality of examinations; quality of treatment; thoroughness and accuracy of diagnosis; and comprehensiveness of exams.

*Main Findings:* Hispanics were found to be significantly more dissatisfied with care than whites: reassurance and support offered by your doctors and staff and quality of examinations received. However summative scale scores and test characteristic curves for whites and Hispanics were similar whether or not these were included in the scale.

*Major Limitations:* The moderate response rate may pose some risk of nonresponse bias; data sources prevented computation of ethnic group-specific response rates.

25. **“Racial and Ethnic Differences among Medicare Beneficiaries.”** Lauren A. Murray, 2000.

*Study Purpose:* To examine racial and ethnic differences among Medicare beneficiaries.

*Population Studied:* White, non-Hispanic; black, non-Hispanic; Hispanic.

*Study Setting:* Medicare beneficiaries.

*Data Collection Instrument Used (Languages):* Medicare Current Beneficiary Survey (N/A).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 39.8 million (N/A).

*Domains Studied:* Aged and Disabled Beneficiaries; Health Status; Disease or Chronic Condition; Usual Source of Care; Barriers to Care; Type of Care; Access and Cost; Preventive Service; Received a Flu Shot; Received a Mammogram; Personal Health Expenditures, Type.

*Main Findings:* More black and Hispanic beneficiaries qualified for Medicare due to disability than whites; 40 percent white and 25 percent black and Hispanic beneficiaries reported their health as “excellent” or “very good”; blacks had a much higher rate of hypertension than whites or Hispanics; Hispanics were most likely to have a health maintenance organization as their usual source of care; whites were more likely to report being “very satisfied” with their care; blacks had the lowest satisfaction ratings for access to and cost of care.

*Major Limitations:* N/A.

*Comments:* Article essentially comprised of only tables.

26. **“Racial and Ethnic Differences in a Patient Survey: Patients’ Values, Ratings, and Reports Regarding Physician Primary Care Performance in a Large Health Maintenance Organization.”** Jann L. Murray-García, 2000.

*Study Purpose:* To explore whether patients’ values, ratings, and reports regarding physicians’ primary care performance differed by race and/or ethnicity.

*Population Studied:* Adult primary care patients (whites, blacks, Latinos and Asians).

*Study Setting:* Enrollees of the northern California region of Kaiser Permanente Medical Care Program.

*Data Collection Instrument Used (Languages):* SF-12 with the inclusion of 2 additional questions (re: ethnicity & general health status) (English)

*Data Collection Mode:* Mail.

*Sample Size (Response Rate):* 11,494 (71.4%).

*Domains Studied:* Technical competence, communication, accessibility, prevention and health promotion, and overall satisfaction. Patients’ values regarding these dimensions and their confidence in medical care were measured.

*Main Findings:* For 7 of 10 of the dimensions of primary care measured, Asians rated physician performance significantly less favorably than did whites, including differences among Asian ethnic subgroups. Latinos rated physicians’ accessibility less favorably than did whites. Blacks rated physicians’ psychosocial and lifestyle health promotion practices higher than did whites. No differences were found in patient reports of prevention services received, except Pacific Islanders reported receiving significantly more prevention services than whites.

*Major Limitations:* Surveys only in English—may have estimated the racial/ethnic differences in patient ratings; analysis of secondary data; no specific information on ethnic subgroup identity of Latinos; cannot estimate non-response rates for each racial/ethnic subgroup; methodological questions exist for the way in which members of various racial/ethnic groups respond to surveys – use of extreme responses may cause biases; unable to say conclusively if differences in patients’ ratings represented true differences in quality of care received, differences in the perception of the quality of care received, persisting differences in the level of expectations of care received, or systematic differences in quality by race/ethnicity, as evidenced by inequitable services allocation and differences in content and process of patient-physician dialogue.

27. **“Patient-Centered Quality Measures for Asian Americans: Research in Progress.”** Quyen Ngo-Metzger, 2000.

*Study Purpose:* To develop and validate a questionnaire that examines quality of care from the patient's perspective for limited-English-proficient Asian Americans of Chinese and Vietnamese descent.

*Population Studied:* Asian Americans.

*Study Setting:* Focus groups: N/A; Pilot Study: N/A; National Study: 10 sites in 6 geographically diverse cities.

*Data Collection Instrument Used (Languages):* Developed by investigator based on focus groups, CAHPS® and Picker outpatient survey instruments (English, Vietnamese, Mandarin and Cantonese).

*Data Collection Mode:* Focus groups: in-person; pilot study: mail and phone; national study: mail.

*Sample Size (Response Rate):* Pilot: 200 completed surveys; national study: 200 completed surveys per site (N/A).

*Domains Studied:* Communication and access to care.

*Main Findings:* None.

*Major Limitations:* Focuses on two ethnic groups (Chinese and Vietnamese) and three spoken languages (Cantonese, Mandarin, and Vietnamese).

*Comments:* This paper describes a work in progress. No results are published (confirmed by personal communication with principal investigator).

28. **“Quality of Data in Multiethnic Surveys.”** R. J. Pasick, 2001.

*Study Purpose:* To identify problematic variables in survey questions when answered in English, Spanish, Cantonese, Mandarin, and Vietnamese.

*Population Studied:* Whites, African Americans, Chinese and Vietnamese.

*Study Setting:* Secondary data analysis: The Breast and Cervical Cancer Intervention Study (BCCS); the Vietnamese Prevention Study (VPS); The Pathways Study (PS).

*Data Collection Instrument Used (Languages):* Statistical analysis of survey items, a survey of the survey developers and interviews with the survey developers were used to

identify problematic variables in 3 survey instruments. Focus groups and cognitive interviews were used to identify causes of problems. Alternative questions forms were tested using telephone interviews (English, Spanish, Cantonese, Mandarin and Vietnamese).

*Data Collection Mode:* Multiple methods including telephone and face-to-face; investigator survey; investigator interviews; focus groups; cognitive interviews.

*Sample Size (Response Rate):* Developer survey: N/A; developer interviews: 55; focus groups: N/A; cognitive interviews: 120; telephone survey: 120 (30 for each language group).

*Domains Studied:* N/A.

*Main Findings:* Problematic areas included (1) Sociodemographics: education, race/ethnicity, household size, income, insurance status; (2) preventive behaviors: receipt of routine care, number of doctor visits in past 12 months, receipt of PAP smears, mammograms and BSE; (3) attitudes and beliefs: fatalism; (4) problematic variables identified and underlying causes found; (5) alternative item forms proposed and tested.

*Major Limitations:* Not all problematic items studied; not generalizable findings due to small scale of study.

*Comments:* Methods paper. Nice illustration of multiple method approach to survey development and testing.

29. **“Barriers to Care among Racial/Ethnic Groups under Managed Care.”** Kathryn A. Phillips, 2000.

*Study Purpose:* To examine barriers to health care reported by racial/ethnic groups and the extent to which barriers vary between persons enrolled in managed care and those in non-managed care plans.

*Population Studied:* Hispanics, non-Hispanic African Americans, Asian Americans, and non-Hispanic whites.

*Study Setting:* Data obtained from household component of MEPS, a nationally representative survey.

*Data Collection Instrument Used (Languages):* 1996 Medical Expenditure Panel Survey (MEPS) (English and Spanish).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 10,500 families and 24,000 individuals for survey (78%). (Data for this analysis primarily from a Round 2 module on access to care, yielding sample sizes of 22,087 individuals and 9,084 families.)

*Domains Studied:* Family-level and individual-level dimensions of care.

*Main Findings:* Most respondents were satisfied with their care and reported high continuity of care; a substantial percentage in all racial/ethnic groups reported experiencing barriers to care; findings mixed on continuity of care; Minorities, particularly Hispanics reported barriers to care more frequently than did non-Hispanic whites; findings suggest that within racial/ethnic groups, privately insured managed care and non-managed care

enrollees face different barriers to care; several sociodemographic characteristics differed significantly between families with one or more barriers to care and families with none.

*Major Limitations:* N/A.

30. **“Assessing Client Satisfaction among Hispanics.”** Robert E. Roberts, 1983.

*Study Purpose:* To assess how a measure of client satisfaction operates when used with different ethnic populations.

*Population Studied:* Anglos, Blacks, Mexican Americans, Other Hispanics.

*Study Setting:* 76 clinical facilities (community mental health centers, public health centers, free-standing mental health clinics – partial care programs and outpatient clinics) – predominantly from Western region of U.S. and California.

*Data Collection Instrument Used (Languages):* Version of the Client Satisfaction Questionnaire (CSQ-8) (English and Spanish)

*Data Collection Mode:* Self-administered on site. Assistance provided if necessary.

*Sample Size (Response Rate):* Study 1 – 3,628 (N/A). Study 2 – N/A.

*Domains Studied:* Quality of service received; receipt of service desired; needs met by program; recommendation of program; satisfaction with help received; services received helped deal with individual problems effectively; overall satisfaction with service received; would return if needed help in future.

*Main Findings:* Instrument operates about the same irrespective of ethnic origin or language (Spanish or English); essentially no differences among the various ethnic groups across statistical criteria of internal consistency reliability, central tendency, dispersion, item intercorrelation, or missing values.

*Major Limitations:* N/A.

31. **“Patient-Physician Racial Concordance and the Perceived Quality and Use of Health Care.”** Somnath Saha, 1999.

*Study Purpose:* To determine whether racial concordance between patients and physicians affects the patients’ satisfaction with and use of health care.

*Population Studied:* White, black and Hispanic individuals.

*Study Setting:* Data analyzed from the 1994 Commonwealth Fund’s Minority Health Survey, a nationwide, telephone survey of noninstitutionalized adults in the 48 contiguous United States.

*Data Collection Instrument Used (Languages):* Commonwealth Fund’s Minority Health Survey 1994 (6 different languages).

*Data Collection Mode:* Phone.

*Sample Size (Response Rate):* 3,120 (55%).

*Domains Studied:* Ratings of physician; Satisfaction with health care; Receipt of preventive care; Receipt of needed medical care.

*Main Findings:* Black respondents with black physicians were more likely than those with non-black physicians to rate their physicians as excellent and to report receiving preventive care and all needed medical care during the previous year. Hispanics with Hispanic physicians were more likely than those with non-Hispanic physicians to be very satisfied with their health care overall.

*Major Limitations:* Participation in the survey was incomplete, raising the concern of selection bias; nonparticipation resulted in a sample with higher levels of education, income, and insurance coverage than the population from which it was drawn; the Hispanic group had few recent immigrants, limiting the generalizability of the results; no detailed information on the ethnicity, or nationality, of physicians; relied on respondents' assessments of physician race, which may not always accurately reflect the physician's true race; the observational nature of study creates possibility that findings do not reflect true associations but are the result of confounding.

32. **“Experience of Primary Care by Racial and Ethnic Groups in the United States.”**  
Leiyu Shi, 1999.

*Study Purpose:* To examine the experience of primary care by racial and ethnic groups and identify aspects of primary care where significant disparities in experience exist across racial and ethnic groups.

*Population Studied:* Asian and Pacific Islander, black, Hispanic (nonwhite), white.

*Study Setting:* Nationally representative sample of civilian noninstitutionalized population of the U.S.

*Data Collection Instrument Used (Languages):* Household component of the 1997-98 Medical Expenditure Panel Survey (MEPS).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 9,906 white; 409 Asian; 2653 Hispanic; 1843 black (N/A).

*Domains Studied:* The principal domains included: predisposing factors; enabling factors; need factors; primary care: first contact; primary care: longitudinality; primary care: comprehensiveness; primary care: coordination; primary care attributes.

*Main Findings:* Racial and ethnic minorities experienced worse primary care, particularly in the first-contact aspect, than did white Americans; their usual sources of care were more likely to be hospital settings than private clinics; they faced greater barriers accessing their usual source of care.

*Major Limitations:* Secondary nature of the dataset precluded consideration of all the major measures of primary care attributes; use of four primary racial/ethnic groups not entirely representative of the heterogeneity of U.S. population and do not capture culture, biology, values, or behavior; causal relationships between race/ethnicity and primary care access are difficult to ascertain with certainty because of largely cross-sectional nature of the dataset and analysis.

33. **“Access to Medical Care Reported by Asians and Pacific Islanders in a West Coast Physician Group Association.”** Rani E. Snyder, 2000.

*Study Purpose:* To examine access to medical care for Asian Americans.

*Population Studied:* Asian Americans, Hispanics, African Americans and Whites.

*Study Setting:* Random sample of patients receiving medical care through a physician group practice located on the West Coast.

*Data Collection Instrument Used (Languages):* Developed by Investigator(English and Spanish)

*Data Collection Mode:* Mail survey.

*Sample Size (Response Rate):* 5508 Whites; 713 Hispanics; 298 Asians; 210 Blacks; 182 Other (59% overall)

*Domains Studied:* Preventive services; timeliness of care; telephone access; general access; specialist services.

*Main Findings:* Asians and Hispanics had worse access to care on multiple measures in multiple domains including: timeliness, telephone access, specialty services and general access.

*Major Limitations:* Low response rate; English and Spanish surveys only; small sample sizes of minority patients; only those receiving care.

34. **“Interpersonal Processes of Care in Diverse Populations.”** Anita L. Stewart, 1999.

*Study Purpose:* To present and validate, from the perspective of patients, a conceptual framework of interpersonal processes that distinguishes specific components.

*Population Studied:* White, Latino and African American adults.

*Study Setting:* Adult medical clinic at San Francisco General Hospital.

*Data Collection Instrument Used (Languages):* Interpersonal Processes of Care – a self-report instrument for measuring the processes of the conceptual framework (English and Spanish).

*Data Collection Mode:* Phone and face-to-face.

*Sample Size (Response Rate):* 603 (82%).

*Domains Studied:* Communication: General clarity, elicitation and responsiveness of patients’ concerns and expectations, explanations of condition, explanations of processes, explanations of self-care, explanations of medications, empowerment; Decisionmaking: Responsiveness to patient preferences, consideration of patients’ ability to comply; Interpersonal style: Friendliness and courteousness, respectfulness, discrimination, emotional support and reassurance.

*Main Findings:* Five of six hypothesized communication scales were confirmed by the analyses. The final general clarity scale omitted the items pertaining to people with language barriers and use of interpreters because these items did not meet the item convergence criterion. The correlations among the seven communications scales indicated sufficient independence to consider them as unique. Both decisionmaking scales were confirmed and the two had a correlation score indicating independence. Four of the five hypothesized interpersonal style scales were confirmed with correlation scores indicating

these are relatively independent. The cultural sensitivity scale did not meet the criteria for psychometric adequacy.

*Major Limitations:* Room for improvement in how well the final survey items fully represent the definitions; there may be areas in which existing confirmed concepts can be enriched; improved items based on specific qualitative studies of the problematic scales could result in better measurement of the existing definitions; tests of the survey in other diverse populations and in different settings would be useful.

35. **“Consumer Satisfaction with CMHC Services.”** Greer Sullivan, 1997.

*Study Purpose:* To examine the relationship between consumer satisfaction with community mental health clinic (CMHC) services and patterns of outpatient service use.

*Population Studied:* Schizophrenic adults. White and African American.

*Study Setting:* Mississippi public mental health system.

*Data Collection Instrument Used (Languages):* Structured interview survey instrument based on the format of the Lehman’s Quality of Life Interview (N/A).

*Data Collection Mode:* Face-to-face.

*Sample Size (Response Rate):* 101 inpatient; 109 outpatient (N/A).

*Domains Studied:* Satisfaction with treatment at CMHC; satisfaction with treatment at state hospital; primary source of outpatient care; use of regular source of care; frequency of medication checks; use of CMHC, case management, home visits, day treatment.

*Main Findings:* Those with lowest satisfaction did not identify the CMHC as their primary source of outpatient mental health care; and were more likely to be white, single, and to either receive no outpatient mental health care or to seek care from sources other than the CMHC. Among those who identified the CMHC as their primary source of mental health care, little evidence that satisfaction was associated with type, variety, or frequency of services; there were differences in consumer satisfaction ratings by clinics. No significant relationship between age, marital status, educational level, ethnicity, or rurality of residency and CMHC satisfaction.

*Major Limitations:* N/A.

36. **“Asian-American Patient Ratings of Physician Primary Care Performance.”** Deborah A. Taira, 1997.

*Study Purpose:* To examine how Asian American patients’ ratings of primary care performance differ from those of whites, Latinos, and African Americans.

*Population Studied:* Asian Americans, Latinos, African Americans, whites

*Study Setting:* University hospital primary care group practice.

*Data Collection Instrument Used (Languages):* Primary Care Assessment Survey (English).

*Data Collection Mode:* Initial group of 143 asked face-to-face to complete survey. Second group by mail-out, mail-back survey.

*Sample Size (Response Rate):* 502; (66%).

*Domains Studied:* Financial access, Organizational access, Visit-based continuity, Longitudinal continuity, Communication, Technical skill, Contextual knowledge of patient, Comprehensive scope of care, Interpersonal treatment, Integration, Trust, Overall satisfaction.

*Main Findings:* Asian Americans rated overall satisfaction and 10 of 11 scales assessing primary care significantly lower than whites did. There were no differences for the scale of longitudinal continuity. On average, the rating scale scores of Asian Americans were 12 points lower than those of whites (on 100-point scales).

*Major Limitations:* Data from a single practice in Boston; Data includes responses from only 25 Asian American patients; information was not available for Asian ethnic origin, beliefs about medicine, expectations, cultural background, English language proficiency, and length of time in U.S.; ethnicity self-reported hence unable to calculate ethnic-specific response rates; surveys only in English; no third party “objective” observer of patient-physician encounter hence unable to determine extent to which observed differences reflect differences in survey response tendencies or actual quality differences; unable to examine impact of matched ethnicity between patient and physician.

37. **“Medicaid Beneficiaries under Managed Care: Provider Choice and Satisfaction.”**

Helena Temkin-Greener, 1990.

*Study Purpose:* To assess changes in utilization patterns and satisfaction with care associated with moving from Medicaid fee-for-service to managed care.

*Population Studied:* Whites and African Americans.

*Study Setting:* AFDC and general assistance clients in Monroe County, New York. Results from two surveys, one in 1984 and a second in 1986 analyzed for this study. 1984 survey administered before managed care and 1986 survey administered after managed care implemented.

*Data Collection Instrument Used (Languages):* Instruments developed by investigators (English).

*Data Collection Mode:* N/A.

*Sample Size (Response Rate):* 1984 survey: 495 adults and 479 children; 1986 survey: 788 adults (N/A).

*Domains Studied:* Humanness of doctors, quality of care, general satisfaction, continuity of care, convenience of services.

*Main Findings:* Latinos responding in Spanish were significantly more dissatisfied compared with Latinos responding in English and non-Latino whites responding in English when asked about: the medical staff listened to what they say; answers to their questions; explanations about prescribed medications; explanations about medical procedures and test results; and reassurance and support from their doctors and the office staff.

*Major Limitations:* Those who participated in study were similar; unable to calculate response rates specific to language or race/ethnicity; satisfaction rating might have been

interpreted differently by English and Spanish-language respondents; study done in western United States – findings may not generalize to other U.S. Spanish-speaking ethnic groups.

38. **“Racial and Ethnic Differences in Parents’ Assessments of Pediatric Care in Medicaid Managed Care.”** Robert Weech-Maldonado, 2001.

*Study Purpose:* To examine whether parents’ reports and ratings of pediatric health care vary by race/ethnicity and language in Medicaid managed care.

*Population Studied:* White, African American, American- Indian, Asian, and Hispanic children.

*Study Setting:* Medicaid managed care plans. Responses from seven Medicaid sponsors comprising 33 HMOs from Arkansas, Kansas, Minnesota, Oklahoma, Vermont, and Washington state.

*Data Collection Instrument Used (Languages):* National Consumer Assessment of Health Plans (CAHPS®) Child Survey. Data analyzed from the National Consumer Assessment of Health Plans Benchmarking Database 1.0 (English and Spanish).

*Data Collection Mode:* Phone and mail.

*Sample Size (Response Rate):* 9,540 (42.1% mean).

*Domains Studied:* Personal doctor; specialist; health care; health plan; getting needed care, timeliness of care, provider communication, staff helpfulness, plan service.

*Main Findings:* Racial/ethnic minorities had worse reports of care than whites. Among Hispanics and Asians language barriers had a larger negative effect on reports of care than race/ethnicity. Asian English speakers did not differ significantly from whites on any of the reports of care. However, lower reports of care for racial/ethnic groups did not translate necessarily into lower ratings of care.

*Major Limitations:* NCBD CAHPS® 1.0 data did not allow identification of surveys conducted in either English or Spanish; data limitations precluded examination of other socio-economic confounders; unable to examine persons who indicate multiple races.

# Endnotes

1. D. R. Williams and T. D. Rucker. "Understanding and Addressing Racial Disparities in Health Care." *Health Care Financing Review*. 2000, 21(4): 75-90; L. S. Morales, W. E. Cunningham, J. A. Brown, H. Liu, and R. D. Hays. "Are Latinos Less Satisfied with Communication by Health Care Providers? A Study of 48 Medical Groups." *Journal of General Internal Medicine*. 1999, 14(7): 409-17; R. Weech-Maldonado, L. S. Morales, K. L. Spritzer, M. N. Elliott, and R. D. Hays. "Racial and Ethnic Differences in Parents' Assessments of Pediatric Care in Medicaid Managed Care." *Health Services Research*. 2001, 36(3): 575-594.
2. Institute of Medicine. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. National Academy Press, Washington, DC: 2002.
3. U.S. Census Bureau ([www.census.gov](http://www.census.gov)).
4. H. P. Johnson. "A State of Diversity: Demographic Trends in California's Regions." *Public Policy Institute of California: California Counts Population Trends and Profiles*. May 2002, 3(5).
5. Williams and Rucker, 2000; Morales et al., 1999; Weech-Maldonado, et al., 2001.
6. Institute of Medicine, 2002.
7. J. L. Murray-García, J. V. Selby, J. Schmittdiel, K. Grambach, et al. "Racial and Ethnic Differences in a Patient Survey: Patients' Values, Ratings, and Reports Regarding Physician Primary Care Performance in a Large Health Maintenance Organization." *Med. Care*. March 2000, 38(3): 300–10.
8. C. D. Sherbourne, R. D. Hays, L. Ordway, M. R. DiMatteo, et al. "Antecedents of Adherence to Medical Recommendations: Results from the Medical Outcomes Study." *Journal of Behavioral Medicine*. October 1992, 15(5): 447–68; M. Schlesinger, B. Druss, and T. Thomas. "No Exit? The Effect of Health Status on Dissatisfaction and Disenrollment from Health Plans." *Health Serv. Res.* June 1999, 34(2): 547–76.
9. M. Stewart, J. B. Brown, H. Boon, J. Galajda, et al. "Evidence on Patient-Doctor Communication." *Cancer Prevention Control*. February 1999, 3(1): 25–30.
10. J. M. Eisenberg. "Sociologic Influences on Decision-Making by Clinicians." *Annals of Internal Medicine*. June 1979, 90(6): 957–64.
11. Murray-Garcia, et al., 2000; Weech-Maldonado, et al., 2001.

12. S. Saha, S. H. Taggart, M. Komaromy, and A. B. Bindman. "Do Patients Choose Physicians of Their Own Race?" *Health Aff. (Millwood)*. Jul–Aug 2000, 19(4): 76–83; E. J. Pérez-Stable, A. Nápoles-Springer, and J. M. Miramontes. "The Effects of Ethnicity and Language on Medical Outcomes of Patients with Hypertension or Diabetes." *Med. Care*, Dec. 1997, 35(12): 1212-9.