
Meeting Presentation

Race/Ethnicity, Language, and Patients' Assessments of Care in Medicaid Managed Care

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Objective. Consumer assessments of health care provide important information about how well health plans and clinicians meet the needs of the people they serve. The purpose of this study was to examine whether consumer reports and ratings of care in Medicaid managed care vary by race/ethnicity and language.

Data Sources. Data were derived from the National CAHPS[®] Benchmarking Database (NCBD) 3.0 and consisted of 49,327 adults enrolled in Medicaid managed care plans in 14 states in 2000.

Data Collection. The CAHPS[®] data were collected by telephone and mail. Surveys were administered in Spanish and English. The response rate across plans was 38 percent.

Study Design. Data were analyzed using linear regression models. The dependent variables were CAHPS[®] 2.0 global rating items (personal doctor, specialist, health care, health plan) and multi-item reports of care (getting needed care, timeliness of care, provider communication, staff helpfulness, plan service). The independent variables were race/ethnicity, language spoken at home (English, Spanish, Other), and survey language (English or Spanish). Survey respondents were assigned to one of nine racial/ethnic categories based on Hispanic ethnicity and race: White, Hispanic/Latino, Black/African American, Asian/Pacific Islanders, American Indian/Alaskan native, American Indian/White, Black/White, Other Multiracial, Other Race/Ethnicity. Whites, Asians, and Hispanics were further classified into language subgroups based on the survey language and based on the language primarily spoken at home. Covariates included gender, age, education, and self-rated health.

Principal Findings. Racial/ethnic and linguistic minorities tended to report worse care than did whites. Linguistic minorities reported worse care than did racial and ethnic minorities.

Conclusions. This study suggests that racial and ethnic minorities and persons with limited English proficiency face barriers to care, despite Medicaid-enabled financial access. Health care organizations should address the observed disparities in access to care for racial/ethnic and linguistic minorities as part of their quality improvement efforts.

Key Words. Race/ethnicity, consumer assessments, CAHPS[®], patient experiences, patient reports and ratings

Major demographic shifts are changing the landscape of the U.S. population. As of 2000, 31 percent of the U.S. population was a member of a racial or ethnic minority group. By 2030, it is projected that 40 percent of the U.S. population will be members of a racial or ethnic minority group (U.S. Census Bureau 2000). In some states, such as California, whites have already ceased to be the majority group (Johnson 1999). As a result, policymakers are paying more attention to the racial/ethnic disparities in access to care and health status. While racial/ethnic disparities in access, quality, and utilization of care are well documented (Williams and Rucker 2000), relatively less is known about patient experiences with care, especially in managed care settings.

Consumer assessments of health care, such as the standardized surveys developed in the Consumer Assessment of Health Plans Study (CAHPS[®]) are increasingly being used as an indicator of the quality of care provided by health plans and health care providers. These evaluations provide important information about how well health plans and clinicians meet the needs of the people they serve (Crofton, Lubalin, and Darby 1999). Consumers of health care are turning to consumer survey results to help guide their choices among physician groups and health plans (Farley et al. 2002; Spranca et al. 2000). Health care providers are interested in using consumer survey results to monitor quality improvement efforts. Organizations responsible for accrediting health plans and preferred provider organizations are using consumer survey results for accreditation purposes.

Several recent national studies suggest the presence of racial/ethnic disparities in patients' assessments of care. A survey by the Commonwealth Fund in 2001 showed that ethnic minorities were less satisfied with the quality

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of health care services. Only 45 percent of Asians, 56 percent of Hispanics, and 61 percent of African Americans, compared to 65 percent of whites, reported being “very satisfied” with their care. In addition, this study found that 15 percent of African Americans, 13 percent of Hispanics, and 11 percent of Asians, compared to 1 percent of whites, felt that they would receive better health care if they were of a different race or ethnicity. Similarly, a study using the 1996 Medical Expenditure Panel Survey showed that racial/ethnic minorities, especially Hispanics and Asians, face greater barriers to care than whites (Phillips, Mayer, and Aday 2000). Hispanics were twice as likely as other groups to report long waits and to perceive that clinicians fail to listen and provide needed information. Asians reported more difficulties in getting appointments, dissatisfaction with the care received, and less continuity of care. A study using the Community Tracking Survey data found that racial and ethnic minorities expressed less satisfaction with their physician style (listening skills, explanations, and thoroughness) and less trust in their doctor even after controlling for socioeconomic factors (Doescher et al. 2000). Recent studies using the CAHPS[®] data show that racial/ethnic minorities had less positive reports about care than whites in both the commercial and Medicaid managed care sectors (Morales et al. 2001; Weech-Maldonado, Morales et al. 2001).

Language has also been documented as a barrier to care among racial/ethnic minorities, especially for Spanish-speaking Hispanics (Woloshin et al. 1995; Schur and Albers 1996). Hu and Covell (1986) found that outpatients whose primary language was English were more satisfied with their care in general than were patients whose primary language was Spanish. Carrasquillo et al. (1999) examined patient satisfaction in emergency departments (EDs) at five urban teaching hospitals, and showed that non-English-speaking patients were less satisfied than English-speaking patients with the care provided and were less likely to visit the same ED if they needed care in the future. Non-English speakers were particularly dissatisfied with overall care, courtesy, and respect, and discharge instructions. Similarly, Baker et al. (1998) found that patients who communicated through an interpreter or who did not have an interpreter when they thought one was necessary were less satisfied with the patient-provider relationship. Furthermore, language barriers have been found to affect satisfaction with care beyond cultural barriers. Studies contrasting Spanish-speaking and English-speaking Hispanics have found Spanish-speakers to be less satisfied with the care received and with provider communication (David and Rhee 1998; Morales et al. 1999). Thus, non-English speakers are more likely to perceive themselves as receiving

low-quality care and may be at risk for poorer treatment outcomes (Perez-Stable, Naapoles, and Miramontes 1997).

Studies of racial/ethnic differences in consumer assessments of care are particularly important for Medicaid managed care populations. Increasingly, government is relying on the managed care sector to provide coverage for Medicaid and Medicare populations as a cost-containment mechanism (Halstead and Becherer 1998). As of 2000, 22.1 million people, or 58 percent of Medicaid recipients, were enrolled in managed care plans. As more vulnerable populations are increasingly enrolled in managed care plans it becomes essential to assess their care.

Several recent studies examining the impact of Medicaid managed care on racial/ethnic minorities' assessments of care have shown that minorities are less satisfied than whites with certain aspects of managed care. Leigh et al. (1999) in a study comparing low-income managed care enrollees with low-income fee-for-service (FFS) enrollees in Florida, Tennessee, and Texas found that African Americans enrolled in managed care plans were more likely to report problems in obtaining needed care than African Americans in FFS, and Hispanic managed care enrollees were more likely to be dissatisfied with the provider-patient relationship than Hispanics in FFS. Similarly, Weech-Maldonado, Morales et al. (2001) examined racial/ethnic and language differences of parent's reports and ratings of pediatric care in Medicaid managed care in Arkansas, Kansas, Minnesota, Oklahoma, Vermont, and Washington. They found that racial/ethnic minorities had more negative perceptions of care than whites. African Americans scored lower than whites on reports of getting needed care, timeliness of care, and plan service, while American Indians had less positive reports than whites for getting needed care, timeliness of care, provider communication, and plan service. Among Hispanics and Asians, language barriers had a larger negative impact on reports of care than race/ethnicity. However, more negative reports did not translate necessarily into lower ratings of care.

The present study examines whether consumer reports and ratings of care in Medicaid managed care vary by race/ethnicity and language using CAHPS[®] data. To date only one previous study has examined the impact of language in addition to race/ethnicity on CAHPS[®] reports and ratings of care by analyzing the parents' assessments of pediatric care in Medicaid managed care in five states (Weech-Maldonado, Morales et al. 2001). The present study expands upon this research by analyzing adult survey data, expanding the number of states included in the analysis, and incorporating for multiracial categories.

METHODS

Data

This study analyzes the National CAHPS[®] Benchmarking Database 3.0 (NCBD 3.0) Adult Medicaid Surveys. The NCBD is a collaborative initiative of the Quality Measurement Advisory Service (QMAS), Stillwater, MN; The Picker Institute, Boston, MA; and Westat, Rockville, MD. Sponsors of the CAHPS[®] surveys voluntarily participate in the NCBD and include Medicaid agencies, health plans, and employers. The NCBD 3.0 Adult Medicaid data consists of CAHPS[®] 2.0 survey responses from 49,327 adults in 156 Medicaid managed care plans distributed across 14 states (Arizona, California, Colorado, Hawaii, Kansas, Michigan, New York, Ohio, Oklahoma, Pennsylvania, Texas, Utah, Vermont, and Washington) in 2000. The state Medicaid managed care programs represented approximately 44 percent of the total number of Medicaid managed care enrollees in the United States. The data were collected by telephone and mail, and surveys were administered in Spanish and English. Previous research provides support for the equivalence of the telephone and mail responses to the CAHPS[®] survey (Fowler, Gallagher, and Nederend 1999). The average response rate among all plans was 38 percent (median = 36 percent; range = 16 to 53 percent).

Measures

The dependent variables consist of CAHPS[®] global ratings and reports of care. Ratings consist of the personal evaluation of providers and services; as such they reflect both personal experiences as well as the standards used in evaluating care (Davies and Ware 1988). Reports of care capture the specific experiences with care in terms of what did or did not happen from the consumer's perspective. Responses to questions about specific health care experiences are answered with respect to the past 12 months. CAHPS[®] 2.0 includes four global rating items: personal doctor or nurse, specialists, health care, and health plan (Table 1). The four global rating questions are asked using a 0–10 scale, where 10 is the best possible rating. In addition, CAHPS[®] 2.0 contains 17 items (reports) measuring five domains of health plan performance: getting needed care (access to care), timeliness of care (promptness of care), provider communication, staff helpfulness, and plan service. The items included in the timeliness of care, provider communication, and staff helpfulness composites are asked using a *Never, Sometimes, Usually, Always* response scale, while the items in the getting

Table 1: CAHPS® 2.0 Adult Global Ratings and Reports of Care

<i>Ratings/Composite Measure</i>	<i>Survey Items</i>	<i>Response Scale</i>
Personal doctor or nurse rating	How would you rate your personal doctor or nurse now? (AM6)	0-10 Scale
Specialist rating	How would you rate the specialist? (AM10)	0-10 Scale
Health care rating	How would you rate all your health care? (AM30)	0-10 Scale
Health plan rating	How would you rate your health plan now? (AM45)	0-10 Scale
Getting needed care (composite): access to care	With the choices your health plan gives you, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with? (AM4) In the last 12 months, how much of a problem, if any, was it to get a referral to a specialist that you needed to see? (AM8) In the last 12 months, how much of a problem, if any, was it to get the care you or your doctor believed necessary? (AM20)	1 A big problem 2 A small problem 3 Not a problem
Timeliness of care (composite): access getting care promptly	In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan? (AM21) In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed? (AM13) In the last 12 months, how often did you get an appointment for regular or routine care as soon as you wanted? (AM15) In the last 12 months, when you needed care right away for an illness or injury, how often did you get care as soon as you wanted? (AM17) In the last 12 months, how often did you wait in the doctor's office or clinic more than 15 minutes past your appointment time to see the person you went to see? (AM22) In the last 12 months, how often did doctors or other health providers listen carefully to you? (AM25)	1 Never 2 Sometimes 3 Usually 4 Always
Provider communication (composite): assess communication of provider with patients	In the last 12 months, how often did doctors or other health providers explain things in a way you could understand? (AM27) In the last 12 months, how often did doctors or other health providers show respect for what you had to say? (AM28) In the last 12 months, how often did doctors or other health providers spend enough time with you? (AM29)	1 Never 2 Sometimes 3 Usually 4 Always

<p>Staff helpfulness (composite): whether the staff treats the customer with courtesy and respect</p>	<p>In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect? (AM23)</p> <p>In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be? (AM24)</p>	<p>1 Never 2 Sometimes 3 Usually 4 Always</p>
<p>Plan service (composite): assess calls to customer service</p>	<p>In the last 12 months, how much of a problem, if any, was it to find or understand information in the written materials? (AM40)</p> <p>In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service? (AM42)</p> <p>In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan? (AM44)</p>	<p>1 A big problem 2 A small problem 3 Not a problem</p>

needed care and plan service composites are asked using a *A Big Problem, A Small Problem, Not a Problem* response scale. The composites are calculated in a two-step process: linearly transforming each item score to a 0–100 possible range and then computing the mean score for items within each composite.

Internal consistency reliability for each of the five composites was adequate for group comparisons: Getting needed care (access) ($\alpha = .78$); timeliness of care ($\alpha = .72$); provider communication ($\alpha = .85$); staff helpfulness ($\alpha = .79$); and plan service ($\alpha = .78$). To facilitate comparison between composites and global ratings, the 0–10 ratings were also linearly transformed to a 0–100 possible range.

The main independent variables were race/ethnicity, language spoken at home (English, Spanish, Other), and survey language (English or Spanish). Survey respondents were assigned to one of nine racial/ethnic categories based on Hispanic ethnicity and race: White, Hispanic/Latino, Black/African American, Asian/Pacific Islanders, American Indian/Alaskan native, American Indian/White, Black/White, Other Multiracial, Other Race/Ethnicity. Respondents were provided six options to the question about race (White, Black/African American, Asian, Pacific Islander, American Indian/Native Alaskan, Other), but could endorse more than one option if applicable, creating the possibility for mixed race/ethnicity (American Indian/White, Black/White, Other Multiracial).

Whites and Asians were further classified into language subgroups based on the language primarily spoken at home: white-English speaking, white-other language, Asian-English speaking, and Asian-other language. Hispanics were further classified into language subgroups based on the survey language and based on the language primarily spoken at home. Persons of Hispanic ancestry who completed an English survey and spoke English primarily at home were considered Hispanic-English speakers. On the other hand those who completed an English survey but spoke Spanish primarily at home were classified as Hispanic-bilinguals. Finally, participants who completed a Spanish survey were classified as Hispanic-Spanish speakers (Table 2).

Table 2: Hispanic Language Subgroups

<i>Language Group</i>	<i>Survey Language</i>	<i>Language Spoken at Home</i>
Hispanic-English speaker	English	English
Hispanic-bilingual (English/Spanish)	English	Spanish
Hispanic-Spanish speaker	Spanish	Spanish

An additional set of independent variables was used as case-mix adjusters: gender, age, education, and health status. These are characteristics known to be related to systematic differences in survey responses (Aharony and Strasser 1993; Cleary and McNeil 1988; Elliot et al. 2001). Gender is a dichotomous variable: *0 = female, 1 = male*. Age is a categorical variable consisting of three levels: *18–34; 35–54; 55 or older*. Education is a categorical variable with three levels: *less than high school, high school graduate, and 1 or more years of college*. Self-rated health is a categorical variable measuring perceived overall health: *excellent, very good, good, fair, and poor*.

Analytic Approach

Ordinary least squares regression was used to model the effect of race/ethnicity and language on CAHPS[®] ratings and reports, controlling for age, gender, education, and self-rated health. Standard errors for all regressions were adjusted for correlation within health plans using the Huber/White correction (White 1980). A small departure from normality was detected for the dependent variables (negative skewness). To correct for this departure, the variables were transformed by dividing the square of the variable by one hundred, producing an approximately normal distribution. However, because regression results for the transformed and untransformed dependent variables were quite similar, only the results for the untransformed variables are reported here.

Nonresponse weights, computed as the inverse of health plan response rates, were used to account for variation in response rate by plan (Brick and Kalton 1996). As a result, respondents belonging to a plan with a low response rate received a greater weight than respondents belonging to a plan with a higher response rate, and all respondents within the same plan received the same weight. All regression analyses adjusted standard errors for design effects due to weighting.

RESULTS

Table 3 presents the regression results for the reports of care. In general, racial/ethnic and linguistic minorities had more negative experiences with care than white-English speakers. The beta coefficients shown on Table 3 indicate the difference between the scores of white-English and those of the other racial/ethnic subgroups (based on a 0–100 possible scale). Compared to white-English, Asian-other had worse reports of care than whites across four

Table 3: Regression Results for Reports of Care by Race/Ethnicity and Language, Beta Coefficients^a (Standard Error)

	<i>Getting Care Needed</i>	<i>Timeliness of Care</i>	<i>Provider Communication</i>	<i>Staff Helpfulness</i>	<i>Plan Service</i>
Race/Ethnicity (reference white-English)					
White-Other	-8.464** (1.457)	-8.341** (1.107)	-0.214 (0.970)	-4.485** (1.051)	-1.232 (1.735)
Hispanic-English	-0.159 (0.621)	-3.573** (0.643)	0.040 (0.468)	-1.175* (0.495)	4.093** (0.899)
Hispanic-Bilingual	-1.357 (1.221)	-7.979** (1.015)	-0.454 (0.916)	-3.256** (0.949)	4.404** (1.241)
Hispanic-Spanish	-4.606 (2.980)	-11.470** (0.910)	-3.575** (0.654)	-5.502** (1.226)	-1.120 (4.239)
Asian-English	1.425 (1.020)	0.242 (1.018)	0.411 (0.764)	0.267 (0.775)	5.990** (1.384)
Asian-Other	-8.459** (1.192)	-12.649** (1.050)	-7.158** (0.872)	-10.270** (0.974)	-2.166 (1.579)
American Indian	-4.507** (1.662)	-4.811* (2.098)	-1.934 (1.148)	-3.711* (1.482)	-0.086 (1.638)
American Indian/White	-6.370** (1.780)	-1.812 (1.457)	-3.166* (1.314)	-2.271 (1.254)	-6.884** (2.555)
Black	0.215 (0.622)	-2.642** (0.652)	1.717** (0.407)	-0.203 (0.461)	4.131** (0.873)
White/Black	1.532 (2.908)	0.061 (2.525)	2.231 (2.581)	2.415 (2.445)	-2.954 (3.453)
Other Multiracial	-0.654 (2.151)	-0.887 (1.718)	0.680 (1.729)	-0.218 (1.320)	-3.280 (2.887)
Other Race	-6.827** (1.073)	-8.556** (0.909)	-2.126** (0.810)	-5.309** (1.033)	-2.440 (1.268)
Missing Race	-6.028** (1.461)	-6.446** (1.270)	-2.105 (1.248)	-3.841** (1.277)	-6.286** (2.058)
Age (reference 18-34 years)					
35-54 years	0.488 (0.460)	3.188** (0.410)	2.514** (0.398)	2.454** (0.349)	1.880** (0.583)
55+ years	7.424** (0.584)	8.956** (0.557)	8.347** (0.464)	8.162** (0.435)	5.792** (0.722)
Gender (reference female)					
Male	-0.270 (0.382)	1.391** (0.457)	0.168 (0.318)	1.006** (0.344)	-0.566 (0.721)
Education (reference high school)					
<High School	0.441 (0.401)	0.068 (0.415)	-0.226 (0.308)	-0.409 (0.315)	0.346 (0.531)
College	-3.725** (0.434)	-1.334** (0.357)	-2.166** (0.338)	-2.764** (0.332)	-2.263** (0.568)

continued

Table 3: (Continued)

	<i>Getting Care Needed</i>	<i>Timeliness of Care</i>	<i>Provider Communication</i>	<i>Staff Helpfulness</i>	<i>Plan Service</i>
Health Status (reference excellent)					
Very Good	-2.487** (0.468)	-4.689** (0.476)	-4.783** (0.449)	-4.287** (0.437)	-4.790** (0.714)
Good	-5.977** (0.453)	-8.203** (0.505)	-8.922** (0.394)	-7.531** (0.361)	-8.194** (0.701)
Fair	-12.634** (0.621)	-10.612** (0.563)	-12.257** (0.498)	-9.690** (0.465)	-14.211** (0.952)
Poor	-22.837** (1.030)	-14.257** (0.645)	-17.140** (0.637)	-12.528** (0.621)	-22.430** (1.356)
R ²	0.07	0.04	0.05	0.04	0.05

^aUnstandardized beta coefficients.

* $p < 5\%$; ** $p < 1\%$

CAHPS[®] domains of care: getting needed care ($b = -8.46$), timeliness of care ($b = -12.65$), provider communication ($b = -7.16$), and staff helpfulness ($b = -10.27$). Furthermore, Asian-other had the lowest reports of care of all racial/ethnic subgroups. On the other hand, Asian-English did not differ significantly from white-English on four of the CAHPS[®] domains (getting needed care, timeliness of care, provider communication, and staff helpfulness), and actually had more positive experiences with their plan service ($b = 5.99$).

Hispanic-Spanish had more negative reports than white-English for timeliness of care ($b = -11.47$), provider communication ($b = -3.58$), and staff helpfulness ($b = -5.50$). Hispanic-bilinguals had worse experiences than white-English for timeliness of care ($b = -7.98$) and staff helpfulness ($b = -3.26$), but higher scores than whites for plan service ($b = 4.40$). Hispanic-English exhibited a similar pattern to Hispanic-bilinguals when compared to white-English: lower scores for timeliness of care ($b = -3.57$) and staff helpfulness ($b = -1.18$), but higher scores for plan service ($b = 4.09$).

Compared to white-English speakers, whites-other language had more negative reports for getting needed care ($b = -8.46$), timeliness of care ($b = -8.34$), and staff helpfulness ($b = -4.49$). American Indians scored lower than white-English on reports of getting needed care ($b = -4.51$), timeliness of care ($b = -4.81$), and staff helpfulness ($b = -3.71$). African Americans scored lower than white-English on timeliness of care ($b = -2.64$),

but higher than white-English on provider communication ($b = 1.72$) and plan service ($b = 4.13$).

Among the multiracial groups examined, American Indian/white had the worse experiences with care when compared to white-English, with lower reports of care for getting needed care ($b = -6.37$), provider communication ($b = -3.17$), and plan service ($b = -6.88$). Neither black/white nor other multiracial differ significantly from white-English on any of the dimensions of care. Other race/ethnicity had worse experiences with care than white-English on four dimensions of care: getting needed care ($b = -6.83$), timeliness of care ($b = -8.56$), provider communication ($b = -2.13$), and staff helpfulness ($b = -5.31$). Finally, persons for whom race/ethnicity information was missing scored lower than white-English on four dimensions of care: getting needed care ($b = -6.03$), timeliness of care ($b = -6.45$), staff helpfulness ($b = -3.84$), and plan service ($b = -6.29$).

Table 4 presents the regression results for the global ratings of care. There were fewer differences between white-English speakers and other subgroups in the global ratings of care. More specifically, white-other had worse ratings than white-English on all four global ratings: personal doctor ($b = -4.20$), specialist ($b = -4.00$), health care ($b = -3.87$), and health plan ($b = -2.71$). Similarly, Asian-other had lower ratings than did white-English for all four areas of care: personal doctor ($b = -4.68$), specialist ($b = -6.79$), health care ($b = -5.37$), and health plan ($b = -2.50$). Asian-English had lower ratings than did white-English for specialist ($b = -2.43$), but had higher ratings for personal doctor ($b = 1.80$), health care ($b = 2.15$), and health plan ($b = 5.44$).

Hispanic-Spanish had more positive ratings than white-English for all areas of care: personal doctor ($b = 4.90$), specialist ($b = 3.52$), health care ($b = 4.91$), and health plan ($b = 10.05$). Hispanic-bilingual had higher ratings than white-English for personal doctor ($b = 2.51$) and health plan ($b = 4.86$). Hispanic-English had more positive ratings than white-English for health plan ($b = 3.39$).

American Indians had lower ratings than white-English for health care ($b = -3.46$), while American Indian/white had more negative ratings than white-English for specialist ($b = -5.19$) and health plan ($b = -5.48$). African Americans had more favorable ratings than white-English for personal doctor ($b = 0.95$) and health plan ($b = 1.67$), while African American/white had more positive ratings than white-English for specialist ($b = 7.27$). Other multiracial did not differ significantly from white-English on any of the ratings of care. Other race/ethnicity had lower ratings of care

Table 4: Regression Results for Rating of Care by Race/Ethnicity and Language, Beta Coefficients^a (Standard Error)

	<i>Personal Doctor</i>	<i>Specialist</i>	<i>Health Care</i>	<i>Health Plan</i>
Race/Ethnicity (reference white-English)				
White-Other	-4.198** (0.874)	-4.002** (1.119)	-3.867** (0.823)	-2.708* (1.086)
Hispanic-English	0.591 (0.486)	-0.748 (0.663)	0.372 (0.434)	3.386** (0.648)
Hispanic-Bilingual	2.508** (0.652)	-0.857 (0.996)	0.870 (0.780)	4.860** (0.740)
Hispanic-Spanish	4.899** (0.502)	3.517** (0.970)	4.907** (0.790)	10.046** (1.018)
Asian-English	1.803* (0.891)	-2.432* (1.223)	2.148* (0.844)	5.439** (1.063)
Asian-Other	-4.683** (0.932)	-6.788** (1.225)	-5.373** (0.990)	-2.495* (1.110)
American Indian	-0.351 (1.273)	-1.965 (1.767)	-3.462** (1.289)	0.605 (1.243)
American Indian/White	-1.827 (1.310)	-5.187* (2.273)	-2.333 (1.250)	-5.483** (1.413)
Black	0.950** (0.362)	0.235 (0.557)	0.197 (0.461)	1.670* (0.651)
White/Black	0.900 (2.066)	7.265** (2.417)	-0.622 (2.219)	-0.433 (2.540)
Other Multiracial	1.987 (1.341)	-0.998 (2.166)	-0.364 (1.846)	2.207 (1.699)
Other Race	-2.071** (0.745)	-2.983* (1.478)	-2.506** (0.913)	-0.008 (0.883)
Missing Race	-0.833 (1.220)	-2.316 (1.774)	-3.084* (1.269)	-4.520** (1.328)
Age (reference 18-34 years)				
35-54 years	2.719** (0.416)	3.507** (0.571)	4.353** (0.393)	3.883** (0.356)
55+ years	7.019** (0.428)	8.443** (0.605)	10.403** (0.452)	10.920** (0.455)
Gender (reference female)				
Male	-0.423 (0.329)	-0.194 (0.570)	-0.354 (0.332)	-0.929** (0.352)
Education (reference high school)				
<High School	0.729* (0.317)	0.085 (0.435)	0.479 (0.316)	0.589 (0.305)
College	-1.895** (0.339)	-1.731** (0.511)	-2.677** (0.347)	-3.316** (0.405)

continued

Table 4: (continued)

	<i>Personal Doctor</i>	<i>Specialist</i>	<i>Health Care</i>	<i>Health Plan</i>
Health Status (reference excellent)				
Very Good	- 4.737** (0.376)	- 4.636** (0.747)	- 5.929** (0.409)	- 6.842** (0.390)
Good	- 7.603** (0.425)	- 8.551** (0.683)	- 10.671** (0.413)	- 12.005** (0.427)
Fair	- 9.234** (0.449)	- 9.566** (0.671)	- 13.768** (0.524)	- 16.198** (0.571)
Poor	- 11.557** (0.599)	- 12.376** (0.865)	- 18.749** (0.682)	- 21.797** (1.019)
R ²	0.04	0.04	0.07	0.09

^aUnstandardized beta coefficients.

* $p < .05$; ** $p < .01$

than white-English for personal doctor ($b = -2.07$), specialist ($b = -2.98$), and health care ($b = -2.51$). Finally, missing race/ethnicity had more negative ratings than white-English for health care ($b = -3.08$) and health plan ($b = -4.52$).

CONCLUSIONS

The purpose of this study was to examine whether CAHPS[®] reports and ratings of care vary by race/ethnicity and language for adult patients in Medicaid managed care. Our findings suggest that racial/ethnic and linguistic minorities still face access to care barriers and lower quality of care, even after financial access has been assured by Medicaid. Racial/ethnic minorities had lower reports of care than white-English speakers, especially for timeliness of care and staff helpfulness. Timeliness of care addresses issues related to promptness in receiving urgent care as well routine care, while staff helpfulness deals with issues related to the courtesy and respect of the doctor’s office staff. On the other hand, racial/ethnic and linguistic minorities were similar to white-English speakers in their health plan customer service scores. This pattern may be a result of Medicaid state agencies requirements to ensure that health plans have the appropriate organizational infrastructure to address the customer service needs of members of different racial/ethnicities and languages.

Our findings also suggest that language determines experiences with care among whites, Hispanics, and Asians. Among Asians, English speakers had experiences with care similar to that of whites, while non-English speakers

had more negative reports and ratings of care. We also found that Asian non-English speakers had the lowest reports and ratings of care of all racial/ethnic groups. Similarly, among whites, non-English speakers had worse reports and ratings of care than did white-English speakers.

Among Hispanics, we observe a gradient effect of language whereby Spanish speakers had worse reports of care than did both bilinguals or English speakers, while bilinguals had scores in between English and Spanish speakers. However, lower reports concerning actual health care experiences did not translate into poorer ratings of care among Hispanic-Spanish speakers. A possible explanation is that reports of care are more objective and better capture differences in care, whereas ratings may be influenced by expectations and obscure these differences if Hispanic-Spanish speakers have lower expectations (Weech-Maldonado, Morales et al. 2001).

This study has important policy implications. Traditionally, policy-makers have focused on financial access to care as a mechanism to address disparities in care. These study findings suggest that it is necessary to go beyond financial access to address nonfinancial barriers to care (Williams and Rucker 2000). Possible remedies to reduce health disparities in quality of care include engaging in human resources and health care delivery practices and policies aimed at: (1) recruiting, retaining, and managing a more diverse workforce; and (2) developing culturally appropriate systems of care (Weech-Maldonado et al. 2002). Health systems should ensure adequate representation of minorities in areas of clinical practice and management. However, workforce diversity is only one mechanism to ensure culturally appropriate health care services and improve access to care. Health systems should also adopt practices and policies that reduce institutional barriers to care. Potential fruitful activities include establishing interpreter services, providing training to its workforce in cultural competency, using community health workers, developing culturally appropriate services, and addressing other nonfinancial barriers to care such as clinic locations and hours of operation (Brach and Fraser 2000). The national standards for culturally and linguistically appropriate services (CLAS) in health care, set forth by the Department of Health and Human Services (DHHS) Office of Minority Health, provide guidelines on policies and practices aimed at developing culturally appropriate health care systems (see <http://www.omhrc.gov/CLAS/finalcultural1a.htm>).

Health care organizations should address the observed racial/ethnic disparities in assessments of care as part of their quality improvement efforts. Our study shows wide variations across health plans in the reports and ratings of care among racial/ethnic minorities. For example, reports on getting

needed care showed about a 10-point spread across health plans for Asian-other (73–82) and for Hispanic-Spanish (76–86). By engaging in quality improvement activities aimed at reducing the observed disparities in assessments of care, health plans should be able to improve their overall ratings and reports of care.

Our study also suggests the importance of identifying the patient experiences of non-English speakers. As such, health care organizations should step up their efforts to increase the availability of translated surveys and ensure the proper representation of non-English speakers in patient surveys. In addition, the National Committee on Quality Assurance should establish a policy for the CAHPS[®] survey protocol requiring plans with a critical number of non-English speakers to administer surveys in languages other than English. Finally, efforts should continue to translate the CAHPS[®] and other patient surveys into other languages, and to evaluate the cultural appropriateness of these instruments for non-English speakers (Morales, Elliott et al. 2001; Weech-Maldonado, Weidmer et al. 2001). Producing culturally and linguistically appropriate research instruments should be viewed as a process. Ensuring an adequate translation is only the first step. The translated instrument needs to be evaluated further with qualitative (e.g., cognitive interviews) and quantitative (e.g., psychometric analysis) methods and revised accordingly to maximize its readability, reliability, and validity in measuring the health needs of English- and non-English-speakers.

Our study presents several limitations. First, participation in the NCBD is on a voluntary basis. As such, the database is neither nationally representative nor necessarily representative of Medicaid managed care organizations. Notwithstanding this limitation, state Medicaid managed care programs represented in the NCBD 3.0 data constituted 44 percent of the total number of Medicaid managed care enrollees in the United States in 2000.

Second, the observed differences in evaluations between subgroups may be due to differences in the quality of care received or to response bias. Cultural differences may influence response style in surveys and limit our ability to make comparisons between respondents of different racial/ethnic groups. For example, Hayes and Baker (1998) compared the reliability and validity of the English and Spanish versions of a patient satisfaction survey, and found that the Spanish version of the scale was significantly less reliable and valid. They also found evidence that the response scale was not equivalent between different groups of patients, as Spanish-speakers appeared, all other things being equal, to be more likely to respond “good” than were English-speaking patients. The main objective of the Spanish CAHPS[®] project was to

assess the cultural and linguistic appropriateness of the Spanish version of CAHPS[®] 2.0. This was accomplished through focus groups and cognitive interviews among Hispanic subgroups, as well as through a larger-scale field test. Results from the qualitative and quantitative analyses provide support for the cultural and linguistic appropriateness of the Spanish version of the CAHPS[®] 2.0 survey for most Spanish speakers, regardless of their national origin (Marshall et al. 2001; Morales, Weidmer et al. 2001; Weidmer, Weech-Maldonado, Hays, and Morales 2002). The second phase of CAHPS[®] (CAHPS[®] II) aims to further assess the cultural appropriateness of the Spanish version of CAHPS[®] by conducting extensive psychometric analysis to evaluate the equivalence of the English and Spanish CAHPS[®] survey instruments (Weidmer, Weech-Maldonado, Darby, and Morales 2002).

Third, the observed effects in this study reflect the overall differences in ratings and reports of care among racial/ethnic groups, which are a combination of within-plan effects and between-plan effects. The lower scores among racial/ethnic minorities may be a result of minorities being clustered in health plans that provide poor care. Future research should estimate the unique contributions of within-plan and between-plan sources of disparities in ratings and reports of care.

Finally, this study did not differentiate among managed care plans and there is great diversity among plans. Managed care organizations differ on various dimensions: methods of provider reimbursement, scope of benefit coverage, access to primary and specialty care, patient cost-sharing, and utilization management. Relatively little is known about the impact of managed care organizational characteristics on consumer assessments of care (Hellinger 1998; Miller and Luft 1997). Future research should examine whether health plan differences, in terms of organizational structure and practices, influence racial/ethnic differences in patients' assessments of care.

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