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## Satisfaction With Provider Communication Among Spanish-Speaking Medicaid Enrollees

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### Abstract

**Objective**—To determine if differences between English- and Spanish-speaking parents in ratings of their children’s health care can be explained by need for interpretive services.

**Methods**—Using the Consumer Assessment of Health Plans Survey–Child-Survey (CAHPS), reports about provider communication were compared among 3 groups of parents enrolled in a Medicaid managed care health plan: 1) English speakers, 2) Spanish speakers with no self-reported need for interpretive services, and 3) Spanish speakers with self-reported need for interpretive services. Parents were asked to report how well their providers 1) listened carefully to what was being said, 2) explained things in a way that could be understood, 3) respected their comments and concerns, and 4) spent enough time during medical encounters. Multivariate logistic regression was used to compare the ratings of each of the 3 groups while controlling for child’s gender, parent’s gender, parent’s educational attainment, child’s health status, and survey year.

**Results**—Spanish-speaking parents in need of interpretive services were less likely to report that providers spent enough time with their children (odds ratio = 0.34, 95% confidence interval = 0.17–0.68) compared to English-speaking parents. There was no statistically significant difference found between Spanish-speaking parents with no need of interpretive services and English-speaking parents.

**Conclusions**—Among Spanish- versus English-speaking parents, differences in ratings of whether providers spent enough time with children during medical encounters appear to be explained, in part, by need for interpretive services. No other differences in ratings of provider communication were found.

### Keywords

Consumer Assessment of Health Plan Survey; health disparities; Medicaid managed care; ratings of provider communication

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Satisfaction with provider communication is an important indicator of the quality of care delivered by health plans and providers.<sup>1,2</sup> Not only is it a desirable outcome in its own right,

but patient satisfaction is also positively associated with utilization of health services, compliance with medical regimens, and improved medical outcomes.<sup>3–8</sup> Although health care providers care for growing numbers of Spanish-speaking patients, most providers can effectively communicate only in English.<sup>9</sup> Evidence from the Commonwealth Fund 2001 Health Care Quality Survey suggests that fewer than half of patients who need interpretive services typically receive them.<sup>10</sup> Language barriers can compromise information exchange between patients and providers and reduce the effectiveness of health-related messages.<sup>10–12</sup>

Overall, Spanish-speaking patients tend to be less satisfied with health care, compared to their English-speaking counterparts.<sup>13–17</sup> The need to identify and understand differences in satisfaction ratings between English and Spanish speakers in a Medicaid managed care population is important. Increasingly, states are enrolling Medicaid recipients in managed care organizations; with an estimated 54% of Medicaid recipients enrolled in a managed care health plan as of 1997.<sup>18</sup> Moreover, Hispanics are the fastest-growing minority population in several geographic areas of the United States, an increase of over 32% between 1990 and 2000.<sup>19</sup>

Despite the need for research that compares dimensions of provider communication between English and Spanish speakers within the Medicaid population, little research has been conducted to date. Only 2 studies of which we are aware have compared satisfaction with provider communication between English and Spanish speakers in a Medicaid managed care environment.<sup>20,21</sup> These studies found that Spanish speakers reported lower satisfaction with provider communication within both adult and pediatric populations. However, these studies did not examine explanatory factors, such need or receipt of interpretive services, that may account for differences in satisfaction with care.

We investigated satisfaction with provider communication among parents of children enrolled in a managed Medicaid health plan. This study had 2 objectives: 1) to determine whether satisfaction with provider communication differs among Spanish-speaking versus English-speaking parents and 2) to determine if differences between these 2 groups can be explained by the need for interpreter services. Within this population, this study is the first of which we are aware to investigate whether language differences in provider satisfaction can be explained by need for interpretive services.

## METHODS

### Data Source

The data source for this study is the Consumer Assessment of Health Plans Survey (CAHPS), Child-Survey version 2.0.<sup>22</sup> CAHPS was established by the Agency for Healthcare Research and Quality in 1995 through cooperative agreements among Harvard Medical School, RAND, and the Research Triangle Institute. The English and Spanish CAHPS surveys have been extensively tested and are reliable and valid indicators of consumers' experiences with their health care.<sup>22–24</sup>

### Study Population

The population surveyed is a large not-for-profit fully capitated health plan, CareOregon (CO), serving a Medicaid-only population in Oregon. CO is a community health plan serving 90 000 members (including 50 000 children) statewide through 1100 primary care providers and 2700 specialists who serve as its provider panel.

The CAHPS Child Survey was administered over 2 time periods: 1) October 1998 through March 1999 and 2) November 2000 through March 2001. Data were collected by mail and telephone and surveys were administered in Spanish and English. Parents responded as proxies for their children. The total unadjusted response rates for each survey was 59.8% and 47.8%

respectively, for a total overall response rate of 50.7% (n = 570 respondents). These response rates are similar to those found in other published research that has used the CAHPS.<sup>24,25</sup> Survey results from both years were pooled to get sufficiently large numbers to permit subgroup analyses.

## Measures

For this study, we analyzed 4 items on provider communication from the CAHPS survey. Parents were asked how often their child's doctor or health professional (in the previous 6 months) 1) listened carefully to what was being said, 2) explained things in a way that could be understood, 3) showed respect for what was being said during the medical encounter, and 4) spent enough time with their child during the medical encounter. Each question was administered using a 4-point scale with response options never/sometimes/usually/always. Because responses to these items tend to be positively skewed, each of the outcomes was dichotomized with the highest response option, "always," compared with all other options, as recommended in the CAHPS 2.0 Survey and Reporting Kit.<sup>26</sup>

Language status for this study was based on the language in which the survey was completed. Parents were asked, "In the last 6 months, did you need an interpreter to help you speak with doctors or other health providers?" Parents who answered yes were further asked, "In the last 6 months when you needed an interpreter to help you speak with doctors or other health providers, how often did you get one?" Similar to the provider satisfaction questions, response choices included a 4-point scale: never/sometimes/usually/always. Parents who answered "always" were considered to have needed and received interpretive services. Those who answered "never/sometimes/usually" were considered to have needed, but not received interpretive services. Because most parents who needed interpreter services received them (78.5%), all parents who needed interpretive services (whether they received them or not) were grouped together for analysis purposes.

An additional set of variables, known to be potential confounders in previous research,<sup>27,28</sup> were used as case-mix adjustors: parent's gender, child's age, parent's education, child's health status, and survey year.

## Statistical Methods

We performed all analyses using the Statistical Package for the Social Sciences (SPSS 11; SPSS Inc, Chicago, Ill). First, we examined the bivariate associations between language and each of the 4 outcome measures using chi-square analysis. Next, multivariate models were constructed for outcome measures in which a significant relationship ( $P < .05$ ) existed between language and the outcome measure. To evaluate the independent effect of language and need for interpretive services on outcome measures, multivariate logistic regression models were constructed in 2 steps, both adjusting for case-mix measures. First, 2 groups were compared, English speakers and Spanish speakers (including those who did and did not need interpretive services). Second, to isolate the independent effect of need for interpretive services, 3 groups were compared: 1) English speakers, 2) Spanish speakers with no self-reported need for interpretive services, and 3) Spanish speakers with self-reported need for interpretive services.

## RESULTS

### Study Population Characteristics

Overall, just over one-third of parents completed the CAHPS survey in Spanish, with about one-half of these respondents reporting a need for interpretive services. Of those who needed interpreter services only 17.4% did not receive them. Most of the child proxy respondents were

women, and 60.1% were high school graduates or higher. The distribution of respondents was evenly dispersed throughout each survey year (Table 1).

About one-half of the children represented in the survey were of nonwhite ethnicity, with an even distribution of boys and girls. African American representation in the sample (5.8%) was lower than might be expected from a national Medicaid perspective, but is consistent with Oregon demographics overall. Most children's health status was reported to be good to excellent. Eighty percent of children saw a physician or health care provider in the 6 months prior to survey.

### **Association of Language and Ratings of Provider Communication**

Spanish-speaking parents reported significantly worse experiences with provider communication than English-speaking parents on 2 of the 4 provider communication items: 1) explained things in a way that could be understood and 2) spent enough time (Table 2). After controlling for case-mix measures, Spanish-speaking parents were significantly less likely than English-speaking parents (odds ratio [OR] 0.38, 95% confidence interval [CI] = 0.21–0.71; Table 3, model 2A) to report that health care providers spent enough time with their child. However, there was no significant difference between Spanish-speaking parents and English-speaking parents in whether their providers explained things well after adjusting for case-mix measures (Table 3, model 1A).

### **Association of Language and Need for Interpretive Services With Ratings of Provider Communication**

Spanish-speaking parents who needed interpretive services reported significantly worse experiences with provider communication than English-speaking parents on one item (OR 0.34, 95% CI 0.17–0.68; Table 3, model 2B), providers spending enough time with their children. On the other hand, Spanish speakers who did not need interpreter services did not differ from English speakers in their reports about the amount of time providers spent with their children.

## **DISCUSSION**

This study found that after adjusting for potential case-mix confounders, Spanish-speaking parents reported significantly lower ratings of provider communication than English-speaking parents on only 1 of the 4 items of provider satisfaction studied, that is, provider time spent with child. This relationship was explained, in part, by need for interpretive services. Spanish-speaking parents who needed interpreter services were less likely than both English speakers and Spanish speakers not needing interpretive services to report that providers spent enough time with their children. Additionally, we found no statistically significant difference in this item between Spanish-speaking parents who did not need interpretive services and English-speaking parents.

Our findings suggest that parents' satisfaction with provider time spent with their children was most strongly influenced by whether parents were able to directly communicate with their child's provider in the same language. This finding is consistent with that of Baker and colleagues,<sup>14</sup> who found that patients who communicated through an interpreter were less satisfied than patients who communicated directly with their provider without an interpreter.

Spanish speakers in need of interpretive services may have perceived that not enough time was spent with their children because they didn't understand the medical information conveyed during the medical encounter. Likewise, Spanish speakers with no need for interpretive services may have reported higher ratings because they were bilingual, or had family/friends with

English competency who were able to convey medical information in a way that was understandable for the parents. It was also possible that this group was more likely to receive care from language-concordant providers. Nevertheless, other factors besides understanding information transfer during the medical encounter may have explained this finding. Spanish-speaking parents who needed interpretive services may have been less acculturated to the norms of the US health care system and have different expectations about the time necessary for a medical visit. In addition, dissatisfaction may have been influenced by the fact that the time required for interpretation essentially reduces “time” available for the interaction between the patient and doctor.

The study had several limitations. First, we had a relatively small sample size that reduced statistical power to detect differences in parent reports of satisfaction with provider communication. Second, important information that may explain variation in provider satisfaction, such as provider language concordance, acculturation, length of residency, language proficiency, and quality of interpretive services, was not included in the CAPHS survey. Third, we did not have data on other socioeconomic factors such as family income or occupation, both of which may have affected ratings of provider communication. Moreover, we did not have information on whether respondents differed from nonrespondents with regard to language status. The dissatisfaction finding among Spanish speakers in need of interpretive services may have been overestimated if respondents were more likely to report a need for interpretive services compared to nonrespondents. In addition, because about half the sample did not respond to the survey, an element of nonresponse bias most likely exists. However, we believe this bias is minimal since nonrespondents did not differ significantly from respondents with respect to available demographic information. Last, study results are not generalizable to Spanish-speaking parents overall, but only to parents whose children are enrolled in Medicaid managed care organizations within the state of Oregon.

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Table 1

## Descriptive Statistics

Characteristic	n (% in Parentheses)
Language and Interpreter Services	
Parent's language	
English	358 (62.8)
Spanish	212 (37.2)
Spanish speakers	
No reported need for interpreter services	91 (42.9)
Reported need for interpreter services	121 (56.1)
Unmet need for interpreter services	
Needed and received services	95 (78.5)
Needed and did not receive services	21 (17.4)
Missing data for receipt of services	5 (4.1)
Case mix adjustors	
Child's race/ethnicity	
White (non-Hispanic)	238 (41.8)
African American	33 (5.8)
Hispanic*	260 (45.6)
Other	39 (6.8)
Child's age (y)	
0–5	328 (57.5)
6–11	169 (29.7)
12–17	73 (12.8)
Child's gender	
Male	295 (51.8)
Female	275 (48.2)
Parent's gender	
Female	508 (89.1)
Male	62 (10.9)
Parent's education	
Less than high school	205 (36.0)
High school graduate	190 (33.3)
Some college or greater	153 (26.8)
Missing education data	22 (3.9)
Health status	
Good/very good/excellent	529 (92.8)
Poor/fair	36 (6.3)
Missing health status information	5 (0.9)
Survey year	
1998–1999	299 (52.5)
2000–2001	271 (47.5)
Utilization	
Went to office or clinic in last 6 mo	458 (80.4)
Did not go to office or clinic in last 6 mo	112 (19.6)

\* Other race includes Asian, Hawaiian American, American Indian, and other races.

**Table 2**  
Bivariate Association of Language With Satisfaction With Provider Communication\*

Respondent Language	Listened Carefully, <sup>†</sup> N = 251	Explained Things Well, <sup>‡</sup> N = 251	Respected Comments and Concerns, <sup>§</sup> N = 259	Spent Enough Time, <sup>//</sup> N = 183
Language				
Spanish	78 (66.7%)	71 (61.7%)	83 (70.9%)	37 (32.5%)
English	173 (70.0%)	180 (73.5%)	176 (70.7%)	146 (58.6%)
P value	P = .5	P = .03	P = .99	P = .0001

\* Respondents who answered “always” to specified satisfaction questions. Only respondents who utilized outpatient care in the previous 6 months were eligible to answer these questions assessing provider satisfaction. Includes respondents who always said that:

<sup>†</sup> Doctors or health professionals listened carefully to their child.

<sup>‡</sup> Doctors or health professionals explained things in a way that could be understood.

<sup>§</sup> Doctors or health professionals showed respect to what was said by the parent.

<sup>//</sup> Doctors or health professionals spent enough time with their child.



Table 3

Logistic Regression Results: Association of Language and Need for Interpreter Services With Significant Provider Communication<sup>†</sup> Items in Bivariate Analysis

Variables in Model	Model 1A: Explained Things Well		Model 2A: Time Spent with Child	
	OR <sup>*</sup>	95% CI	OR	95% CI
Language only				
Spanish-speaking <sup>‡</sup>	0.63	0.34–1.18	0.38	0.21–0.71
Child's age (y) <sup>§</sup>				
6–11	0.97	0.55–1.73	1.26	0.73–2.17
12–17	0.88	0.40–1.95	0.81	0.39–1.66
Child's gender (male) <sup>//</sup>	1.12	0.69–1.82	1.30	0.82–2.06
Parent's gender (female) <sup>¶</sup>	1.68	0.64–4.41	1.93	0.83–4.51
Parent's education attainment <sup>#</sup>				
High school graduate	1.35	0.72–2.53	1.49	0.80–2.77
Some college or greater	1.52	0.76–3.02	1.08	0.56–2.07
Child's health status (poor/fair) <sup>**</sup>	0.37	0.16–0.88	0.22	0.07–0.69
Survey year (2000–2001) <sup>††</sup>	0.74	0.46–1.21	0.64	0.39–1.14

  

Variables in Model	Model 1B: Explained Things Well		Model 2B: Time Spent with Child	
	OR	95% CI	OR	95% CI
Language and need for interpretive services <sup>‡</sup>				
Spanish-speaking with need	0.55	0.28–1.07	0.34	0.17–0.68
Spanish-speaking with no need	0.88	0.37–2.12	0.47	0.20–1.11
Child's age (y) <sup>§</sup>				
6–11	0.96	0.54–1.71	1.26	0.73–2.17
12–17	0.88	0.40–1.95	0.81	0.39–1.66
Child's gender (male) <sup>//</sup>	1.11	0.67–1.81	1.29	0.82–2.05
Parent's gender (female) <sup>¶</sup>	1.76	0.66–4.64	1.98	0.84–4.67
Parent's education attainment <sup>#</sup>				
High school graduate	1.32	0.70–2.50	1.46	0.77–2.73
Some college or greater	1.50	0.75–2.98	1.07	0.55–2.05
Child's health status (poor/fair) <sup>**</sup>	0.37	0.16–0.88	0.22	0.07–0.69
Survey year (2000–2001) <sup>††</sup>	0.76	0.47–1.24	0.65	0.40–1.15

\* OR indicates odds ratio; CI, confidence interval.

<sup>‡</sup> Compares parents who answered ‘‘always’’ to the question, ‘‘How often did doctors or other health providers spend enough time with your child,’’ compared to parents who answered ‘‘usually, sometimes, or never.’’

<sup>‡</sup> Reference group is English-speaking parents.

<sup>§</sup> Reference group is children ages 0–5.

<sup>//</sup> Reference group is female children.

<sup>¶</sup> Reference group is male parents.

# Reference group is parents with less than a high school education.

\*\* Reference group is children with good, very good, or excellent health status.

†† Reference group is survey year 1998–1999.