Do Latinos and Anglos think about Health Care in the Same Ways?

Patricia M. Gallagher and Floyd J. Fowler, Jr.
Center for Survey Research, University of Massachusetts Boston, MA 02125

Key Words: Latinos, health care, CAHPS

Introduction

Latinos are the fastest growing ethnic minority in the U.S. They are also disproportionately poor and tend to have lower levels of education than other racial/ethnic groups (National Center for Health Statistics 2000). For these reasons, it is increasingly important to make accommodations to the language and other needs of this population. There has, however, been limited research on whether Latinos value the same dimensions of health care as do the majority groups that have typically been used to develop and test survey instruments to measure quality of care.

Under the auspices of the Agency for Healthcare Research and Quality (AHRQ), the Consumer Assessment of Health Plans Study (CAHPS) consortium has developed a set of survey instruments to gather information from members of health insurance plans about their health care experiences. These instruments were developed in concert with a set of reports intended for use by consumers, health plans, and government agencies.

The raw survey data is summarized by combining 17 individual items into 5 composite scores that reflect member assessments of the health plan and the health care professionals who provide their care: 1) how well doctors communicate with their patients; 2) getting needed care; 3) getting timely care; 4) the courtesy and helpfulness office staff; and 5) the health plan's customer service. The reports to consumers contain these composite scores as well as global ratings of personal doctors, specialists, all health care received, and an overall rating for each health plan offered.

The extent to which the domains of care included in consumer reports are valued similarly by the different cultural groups that use these reports to make health plan choices is an important question. Angel and Thoits (1987) note that "culture constrains the perceptual, explanatory, and behavioral options that individuals have at their disposal for understanding and responding to illness" (Angel & Thoits 1987: page 465). By extension, it is not unreasonable to hypothesize that cultural characteristics may also influence which facets of care are most important to members of a given socio-cultural group when health plan decisions are made.

This paper assesses the correspondence among quality of care domains demonstrated by three groups of respondents to a CAHPS survey of Medicaid enrollees: respondents choosing to respond in Spanish, self-identified Hispanics responding in English, and non-Hispanic Whites responding in English.

Sample design

The sampling frame was provided by the Division of Medical Assistance which oversees the administration of Medicaid in Massachusetts. Probability samples of 1600 adult (18-64 years old) and 1600 child (17 and younger) members of a single health plan were drawn. Sample members had been continuously enrolled in the plan for at least 136 days in a designated 6 month period, with no breaks in enrollment exceeding 45 days.

Instrumentation

The questionnaire (CAHPS version 1.0) asked members to report on their health care experiences and to rate various aspects of their care. The instrument was formatted for self-administration in a mail survey and programmed into computer assisted telephone interviewing software for interviewer administration.

The composite scales were developed using psychometric testing. Items in a particular scale not only had to perform well psychometrically, they also had to employ the same response set and appear meaningful to consumers. To ensure that respondents only report on experiences they have had, each item included in the composite scores is preceded by a screening question. See Table 4 for an outline of the items included in each of the composite scores.

Data collection procedures

Data were collected in Massachusetts in 1998 using standard mail and telephone data collection protocols. A substantial portion of MassHealth members speak Spanish as their primary language and respondents had the option of completing the survey in either Spanish or English at each phase of this dual mode study. A methodological test of alternative approaches to

providing Spanish language questionnaires was embedded within this survey. For a discussion of the results of that test see Gallagher, et al., 2000. In the mail phase, a random half of the sample was sent an English questionnaire with a dual-language (Spanish and English) postcard attached that could be mailed back if the respondent preferred to fill out a Spanish version of the questionnaire. The other half was sent a single questionnaire printed in English on one side and Spanish on the other in a Canadian-style dual-language instrument. In the telephone phase, bi-lingual interviewers were assigned to members who preferred to be interviewed in Spanish.

Analyses

Data were analyzed using responses from 814 adult Medicaid enrollees and proxy responses from a parent or guardian for 777 child enrollees. For all analyses, respondents were divided into 3 groups based on two factors: the language in which they chose to respond and their self-identified race and ethnicity. The group "Non-Hispanic Whites" includes respondents who answered in English and chose to self-identify as White only; multi-racial respondents are excluded from this category. The group "Hispanics responding in English" includes self-identified Blacks, Whites, and multi-racial respondents who also indicated Hispanic ethnicity. Responses in Spanish were taken as *prima facie* evidence of Hispanic ethnicity for the third group, "Hispanics responding in Spanish". A total of 1267 cases were available for analysis: 846 non-Hispanic Whites; 251 Hispanics in English; and 170 Hispanics in Spanish.

Four types of analyses were conducted across these groups. First, to examine if summary scores and ratings differed by group, mean composite scores and global ratings were compared using t-tests to measure the equality of the means. Second, the internal consistency of the composite scores for each group was measured using Chronbach's alpha. Third, to examine if the associations between composite scales and global ratings are consistent, separate linear regressions were estimated for the items in each of the composite scales by group. The global rating of all health care was regressed on 4 of the composites, but because early correlation analysis showed that the health plan rating was more highly correlated with the Plan Customer Service composite than the rating of all care, the plan rating was used as the dependent variable for regression analysis of this composite scale. Fourth, principal components factor analysis with Varimax rotation was used to identify underlying dimensions that may account for patterns of variation among answers to the 17 items included in the composite scores.

Results

Response Rates. Overall, there was a 45% response rate to the survey; 34% by mail and 11% by telephone. The response rates were calculated as the proportion of eligible sample responding; cases with incorrect contact information are assumed eligible: Response Rate 1 (AAPOR 1998).

Mean Group Differences. Of the 17 individual items that make up the composite scores, 4 items demonstrated a significant difference across groups, but these differences were not all in the same direction nor were they confined to a single composite. The items that differed by group were 'waiting more than 15 minutes' in the Care Without Long Waits composite, 'finding information in written materials from the plan' in the Plan Customer Service scale, and 'doctors spending enough time' and 'doctors demonstrating respect for what patients have to say' from the Communications with Doctors scale.

As can be seen in Table 1, none of the composite scores differed by the cultural/language group of the respondents. All of the global ratings, however, demonstrated significant differences. There was a clear trend across groups, with non-Hispanic Whites consistently rated their personal doctors, specialists, health plan, and care received lower than either Hispanic group.

Internal consistency of report composites. Table 2 presents Chronbach's alpha scores for the composites for the 3 groups of Medicaid enrollees in the present study and for more than 166,000 privately-insured plan members (from a meta-analysis of a number of CAHPS surveys (Hargraves et al. 2000)). The Communication with Doctors composite showed the highest internal consistency across all groups (α 0.78 to 0.86). Both the Getting Needed Care and Care Without Long Waits composites demonstrated higher alpha scores in all of the Medicaid cultural/language groups than among the privately insured. The Office Staff Courtesy composite, however, demonstrated lower internal consistency among Hispanic respondents than with either non-Hispanic White Medicaid enrollees or the privately-insured.

Associations between composites and ratings. When the global rating of All Health Care is regressed on individual items for each composite,

the largest amount of explained variance across the 3 cultural/language groups was demonstrated for the Communication with Doctors items. With adjusted R squares ranging from 0.32 to 0.44, these Communication items explained the least amount of variance in the All Care rating in the Spanish respondent group and the most among non-Hispanic Whites.

Spanish-language respondents behaved more like non-Hispanic Whites with respect to the variance explained by the composites in 3 of the 4 other composites. In the Office Staff, Needed Care, and Care Without Long Waits composites, the Hispanic-English group responses explained less variance in the rating of All Care than either of the other two groups.

The Plan Rating on Plan Customer Service model was not significant for either Hispanic group. See Table 3.

Factor Analysis. Unrestricted factor analysis resulted in a 5-factor solution for the Hispanic groups and a 4-factor solution among non-Hispanic Whites. A 4-factor solution was then imposed on the Hispanic groups to see if the factors would hang together in ways that are similar to the non-Hispanic Whites. The 4-factor solution explained about the same amount of variance across the 3 groups; 54% in the Hispanic-English and White groups and 56% in the Spanish group.

Discussion

In this set of analyses, there was not much evidence that the CAHPS questionnaire works differently across the socio-cultural groups studied. The regressions hang together similarly with few exceptions and the factor loadings were remarkably consistent across all three groups.

The global ratings of people who answered in Spanish, however, tended to be higher than those responding in English. The rating questions translate easily to Spanish and we have no reason to think that the translation itself is causing a distortion. Whether there are cultural differences that contribute to the higher ratings is not clear. It may be that less acculturated Hispanics have a greater unwillingness to be critical.

References

AAPOR (1998) *Standard Definitions*. Ann Arbor, MI: American Association for Public Opinion Research.

Angel, R & P. Thoits. (1987) The Impact of Culture on the Cognitive Structure of Illness. *Culture, Medicine, and Psychiatry*, 11:465-494.

Gallagher, PM; Fowler, JF, and Stringfellow, VL. (2000) Notes from the Field: Experiments in Influencing Response Rates from Medicaid Enrollees. Presented at the 55th Annual AAPOR Conference. Portland, OR, May 2000.

Hargraves, JL, Palmer RH, Zapka J, et al. (1993) Using patient reports to measure health care system performance. *Clinical Performance Quality Health Care*;1:208-13.

Hibbard, JH, Harris-Kojetin L, Mullin P, et al. (2000) Increasing the impact of health plan report cards by addressing consumers' concerns. *Health Affairs*; 19:138-43.

Marin, G. (1987) Attributions for tardiness among Chilean and United States students. *Journal of Social Psychology*, 127, 69-75.

Marin, G & Marin, B. (1991) *Research with Hispanic Populations*. Newbury Park, CA: Sage Publications.

National Center for Health Statistics (2000). *Health, United States, 2000*. Hyattsville, MD: U.S. Department of Health and Human Services.

Table 1. Mean Ratings and Composite Scores by Group.

	White/Non-Hispanic- English	Hispanic - English	Spanish
Global Ratings			
Rating of Personal Doctor	8.6	8.8	9.0*
Rating of Specialist	8.6	8.6	9.1*
Rating of All Health Care Received	8.5	8.6	9.1*
Rating of Health Plan	8.4	8.6	9.3**
Composite Scores			
Getting Care Quickly	3.3	3.2	3.2
Doctors Communicate	3.6	3.6	3.6
Office Staff Helpful	3.6	3.6	3.6
Getting Needed Care	2.8	2.8	2.8
Plan Customer Service	2.8	2.9	3.0

* $p<0.05$; ** $p<0.001$ by t-test.

Table 2. Internal Consistency of Reporting Composites by Medicaid Group & Privately Insured (nation-wide): Chronbach's Alpha Scores

	White/Non-Hisp.-English	Hispanic - English	Hispanic - Spanish	Privately Insured*
Dr. Communicates	.85	.78	.83	.86
Office Staff Courteous & Helpful	.79	.58	.62	.75
Getting Needed Care	.70	.79	.80	.62
Care without Long Waits	.72	.77	.69†	.58
Customer Service	.45	.69†	.23†	.51

†Fewer than 40 cases

*Meta-analysis of data collected nationally from 306 health plans (Hargraves, et al. 2000)

Table 3. Global Ratings Regressed on Reporting Composite Items.

Composite	Non-Hisp White-English	Hispanic-English	Hispanic-Spanish
Dr Communicates (4 items)[1]			
Significance	.000**	.000**	.000**
Adjusted R Square	.440	.344	.316
Office Staff Courteous & Helpful (2 items)[1]			
Significance	.000**	.000**	.000**
Adjusted R Square	.289	.134	.282
Getting Needed Care (4 items)[1]			
Significance	.000**	.061†	.001**
Adjusted R Square	.221	.129	.251
Care Without Long Waits (4 items)[1]			
Significance	.000**	.030*	.000**
Adjusted R Square	.410	.110	.557
Customer Service (3 items)[2]			
Significance	.000**	.060†	.413
Adjusted R Square	.339	.334	.053

[1] Dependent Variable=Rating of All Care
[2] Dependent Variable=Rating of Health Plan
Significance of the model: †p<0.10; *p<0.05; **p<=0.001

Table 4. Primary Factor Loadings Across Groups: 4 Factor Solution

Composite Items	Factors			
	1	**2**	**3**	**4**
Dr Communicates				
Drs. listen carefully	All			
Drs. explain things	All			
Drs. respect what you say	All			
Drs. spend enough time	All			
Office Staff Courteous & Helpful				
Treated with courtesy & respect	All but Spanish		Spanish	
Office staff helpful	All			
Getting Needed Care				
Problem finding personal dr.		Spanish		All but Spanish
Problem getting referral to spclst		All		
Problem getting needed care		All		
Problem with approvals delaying care		All		
Care Without Long Waits				
Got needed advice			All	
Got Urgent Care as soon as wanted			All	
Got appt as soon as wanted			All	
More than a 15 min wait in office			All	
Customer Service				
Finding info in plan's written mat'ls	Spanish			All but Spanish
Problem filling out forms				All
Problem to get help from customer svc		All but Spanish		Spanish