The Incorporation of Hispanics into the US Health System Considering the Roles of Nativity, Duration and Citizenship:
A Case for Acculturation?

Over the past decade, demographic and public health literature has been marked by an explosion of interest in the relationship between race/ethnicity and health. While initially focused on black/white differentials, scholars are now expanding their scope to study health differentials among other ethnic groups of the United States. Due to increased data availability, the health outcomes of the Hispanic and Asian and Pacific Islander (API) populations are now being incorporated into scholarly research, with findings illustrating the wide disparities and variations in infant, child and adult health and mortality among a number of race/ethnic groups of the U.S. (Markides and Coreil 1986; Hummer et al 1999a; Hummer et al 1999b; Frisbie et al 2001).

While substantial literature on mortality and health differentials across racial/ethnic subpopulations abounds, demographic research on health care access among different segments of the population is not as well developed, especially at the national level (Weinick et al 2000; LeClere et al 1994). The inquiry into access to medical care among Hispanics remains especially limited. This research seeks to fill that gap by examining differences in access to health care of adults among major Hispanic sub-populations of the United States in comparison to non-Hispanic Whites and Blacks, while considering the influences of nativity, citizenship and the length of time lived in the United States. Differences between Hispanic groups may exist in access to care, grounded in particular socio-economic realities and political histories which shaped the unique migration and incorporation experience of each Hispanic group within the United States. These differences affect not only the migration processes but also the

incorporation of each Hispanic group within the United States. Consequently, it is crucial to explore Hispanic subgroups individually to assess the varying impact of their different socio-economic and political realities. Understanding access to care is crucial in gauging the incorporation of various Hispanic groups within the formal medical system of the U.S. Incorporating nativity, duration and citizenship will further allow for the exploration of the acculturation processes of different U.S. Hispanic groups within the United States.

PREVIOUS RESEARCH

The large-scale analysis of access to health care initially emerged as a way to probe the equality of the American health system (Aday and Anderson 1984). Access to health care first gained prominence as a concept within the sociology of medicine literature with the works of Ronald Andersen beginning in the late 1960s. Initially developed to understand why families do or do not use health services, the access to care model also probed equity within health care. The model assisted in developing policies to promote equitable access to medical care (Andersen 1968). Using data collected by the National Opinion Research Center from 1975-1976 (Andersen et al. 1981), Hispanics in the Southwest were found to have less access to medical care than the population as a whole. While this study was one of the first to explore Hispanics using a population-based representative data set, this study is limited in that Hispanic ethnicity does not take into account the effects of country of origin, nativity and duration.

Subsequent research explored nativity and the influence it may have on access to medical care. Using data from the 1976 Survey of Income and Education, foreign-born Mexican elderly were found to be highly dependent on Medicare (Alston and Aguirre 1987). While the limited sample sizes of elderly Mexican Americans, both native and

foreign born, presented problems with the reliability of estimates, Alston and Aguirre's research is notable for first highlighting the importance of nativity in the literature.

Additional studies explored the use of preventive health services as well as the use of medical services (Solis et al 1990; Trevino et al 1991) among Mexican American, Cuban American and Puerto Rican adults. Documenting the differences between Hispanic groups, Solis et al (1990) found that Mexican Americans used preventive-service facilities less recently than the other two Hispanic groups, with the exception of female examinations. In other research, the importance of country of origin in rates of uninsured persons is documented, as the study reported that while 16% of Puerto Ricans and 20% of Cuban Americans were uninsured for medical expenses, over 37% of Mexican Americans did not have insurance (Trevino et al 1991). Both the Solis et al (1990) and the Trevino et al (1991) studies emphasize the heterogeneity among Hispanic subgroups of the United States. However, each is limited in some ways, in that they do not probe the importance of nativity, duration and citizenship; in addition, they do not analyze socioeconomic factors in a multivariate framework.

Exploring the role of immigration status on access to care among Latinos in Orange Country, California, Hubbell et al (1991) discovered that all Latinos had less access to medical care than non-Hispanic whites. Latinos also more often lacked a regular provider of care and more Latinos had not visited a physician in the previous year regardless of legal status. Immigrant status was seen found to play a larger role, however, as undocumented Latinos were less likely than documented Latino to have health insurance. However, legal status did not affect access to care, as access did not differ between the two Latino groups. In another important work that not only accounted

for ethnicity but also effects of immigration status, LeClere and colleagues illustrated that recent immigrants are much less likely than the native-born or those immigrants of longer duration to use health care initially and also to have fewer total contacts by a physician (Leclere et al 1994). Recent immigrants have significantly fewer contacts with physicians than those immigrants who have been in the United States for a longer period of time. LeClere et al. do take into account Hispanic origin, but do not separately explore the utilization of health care for each group.

Two related articles, Zuvekas and Weinick (1999) and Weinick et al (2000), focused on Hispanic Americans' access to care over the last 20 years using data from the 1977 and 1987 National Medical Care Expenditure Survey as well as the 1996 Medical Expenditure Panel Survey. Both articles documented that while Whites and African Americans did not experience significant changes in the probability of having a usual source of care from 1977 to 1996, the proportion of Hispanic Americans lacking a usual source of health care rose substantially over this period, from 19.7% to 29.6%. The decrease in health insurance coverage among Hispanics is credited for this increase in lack access to regular health care. While making great contributions to our understanding of the growing importance of studying access to care for Hispanics, this research is limited by the grouping of all Hispanics into a single population and the lack of attention to nativity, duration and citizenship.

Corbie-Smith et al (2002) very recently examined having a usual source of care among adults of different racial and ethnic groups. Using data from the Household Component of the 1996 Medical Expenditure Panel Survey, the authors found many disparities between Hispanics and non-Hispanic whites. Hispanics were less likely to

receive breast exams and blood pressure and cholesterol screening than were non-Hispanic white respondents. Having a usual source of care was associated with each of these services, but controlling for a usual source of care did not eliminate differences between Hispanics and non-Hispanic whites. The study is limited in that it is unable to investigate differences in access to care for a variety of Hispanic sub-groups and does not take into account nativity, duration and citizenship.

In sum, the literature on access to health care among Hispanic adults finds that Hispanics are less likely to have access to care than non-Hispanic whites and are less likely to have health insurance. While a few exceptions exist, the literature is consistently limited by the lack of incorporation of specific Hispanic ethnicity, nativity, duration and citizenship. The literature does not explore how the heterogeneity of the Hispanic population and acculturation processes may affect access to medical care. Furthermore, the literature does not explore the differences that may exist in the types of care that may exist between various Hispanic subgroups in comparison to Non-Hispanic whites and black. In addition, the literature is marked by a lack of multivariate analysis using population-based data sets. This research will fill those gaps.

Working Hypotheses

Hypothesis 1: There will be basic race/ethnic differences in both the access to medical care and sources of medical care, without controlling for nativity, duration and citizenship status. Specifically, non-Hispanic whites will have the greatest access to care. In addition, non-Hispanic whites will be the most likely to utilize a private doctor relative to other types of medical care as their source of care.

Hypothesis 2: It is expected that the acculturation variables of nativity, duration and citizenship status will affect the access to and sources of care of the Hispanic population. Specifically, native-born Hispanics, those with increased duration in the United States, and those that have become naturalized U.S. citizens will have greater access to medical care and more likely to report a private doctor as their source of care. Thus, it is expected that the racial/ethnic differentials in health care access and types of medical care will subside when controlling for nativity, duration and citizenship. The decrease in differentials indicates that the longer foreign born individuals are in the United States (as they acculturate) the greater their odds of being incorporated into the medical system.

Hypothesis 3. Once the acculturation measures of nativity, duration and citizenship are controlled, it is thought that Cubans and Puerto Ricans will have greater access to care than Mexicans and Other Hispanics. Cubans' greater access to care is explained by their high rates of citizenship as well as their high socioeconomic status. While Puerto Ricans will benefit from their citizen status, they will be disadvantaged in access to medical care by their lower socioeconomic status. However, it is hypothesized that Puerto Ricans are more acculturated to the U.S. society than Mexican Americans and this will increase their access to a usual source of medical care.

The acculturation measures will also affect the sources of care for the Hispanic subgroups. Once nativity, duration and citizenship are controlled, it is hypothesized that all groups will increase their odds of reporting 'private doctor' as their source of medical care. It is hypothesized that Cubans are better incorporated into the U.S health system and therefore will have greater odds of reporting 'private doctor' as their source of care over

other Hispanic ethnic groups. It is hypothesized that Mexican Americans and Puerto Ricans will rely more on other types of care besides a private doctor.

Hypothesis 4. It is expected that controls for socioeconomic status will decrease the access to and sources of health care inequalities between race/ethnic groups. Specifically, the inequality in access to and sources of health care between Hispanic sub-groups and Non-Hispanic whites will decrease once socioeconomic status indicators are controlled.

DATA, MEASUREMENTS AND METHODS

Data. Data for these analyses are drawn from the Sample Adult File Supplement of the National Health Interview Survey (NHIS). We merge this data from the years 1999-2001, the first and last years in which the required information for this analysis is currently available. The analysis focuses on persons aged 25-64 (referred to as the "Adult Sample"), which yields an unweighted sample size of 65,061. Adults aged 25-64 are chosen to negate the effects of Medicare. Once reaching the age of 65, most individuals have access to the U.S. government health insurance program, Medicare. The sample is further limited to individuals aged 25 and older to repeal the "instability" that affects young adults as a result of early adult life changes, such as continuing education or instability in income. We only those respondents that are part of the race/ethnic groups that we am interested in studying.

The National Health Interview Survey is a cross-sectional survey and continuous sampling and interviewing are maintained throughout each year. Representative sampling of households is carried out within the sampling frame by employing a multistage area probability design. The annual response rate of NHIS is greater than 90

percent of the eligible households in the sample. Since 1995, the NHIS has oversampled for both Black and Hispanic households, which is ideal for this research.

Measurement

The dependent variables for this research are access to and sources of health care. Access to which is measured by whether or not a respondent reported having a usual source of care. Measuring access to care as having a usual source of care is the standard measure used by public health and demographic researchers (Weinick et al 2000). A direct indicator of access to health care is captured by the NHIS in the Adult File Supplements, which draws upon the item that probes whether respondents have a usual person/place for medical care[1]. Respondents are asked "Is there a place you usually go to when you are sick or need advice about your health?" Responses indicating one or more regular sources of care are coded "Yes," while those who report no regular source are coded "No." Cases with missing data on this item are omitted.

The second part of the analysis explores the source of care. We isolate those respondents who reply 'Yes' to having access to care and will further probe the *types of care* they usually receive when they are sick or need advice about their health. A direct indicator of source of health care is captured by the NHIS in the Adult File Supplements, which inquire, "If you have a usual source of care, what kind of place is it --- a clinic, a doctor's office, emergency room or some other place?"

[1] Respondents are asked "Is there a place you usually go to when you are sick or need advice about your health?" Responses indicating one or more regular sources of care are coded "Yes," while those who report no regular source are coded "No." This is considered by NIH to be *the measure* of health care access

Independent Variables The primary relationships of interest are between race/ethnicity, nativity, duration of residence in the United States, citizenship, and access to and sources of health care. For this research, we distinguish four Hispanic groups: Mexican/Mexican-American, Cuban, Puerto-Rican[2], and Other Hispanic[3]. Nativity is a dichotomous measure that distinguishes respondents being born in the United States or in another country. Duration considers how long each immigrant has been in the country and is broken down into the following categories: born in the United States; 0-4 years in the country; duration of 5-9 years; and duration of 10 years or longer[4]. Citizenship is a dichotomous variable, measuring which immigrants have become U.S. citizens.

We control for include demographic precursors and socioeconomic mediators, in an attempt to understand the overall differences in access to care across groups, as well as the effect of socioeconomic factors on the initial differences. The demographic precursors include age, sex, marital status (broken down as married (reference), widowed, divorced or separated and never married), geographic region (Northeast (reference), Midwest, South and West) and metro/non-metro residence (metropolitan statistical area central city (reference), metropolitan statistical area non central city and nonmetropolitan statistical area).

Socioeconomic factors are conceptualized as a key way by which race/ethnic groups are characterized by more or less access to care. And, of course, Hispanic groups

[2] NHIS only samples those Puerto Ricans that live on the mainland, not those that reside in Puerto Rico.
[3] Other Hispanic incorporates those respondents who are coded as Dominican, Central/South American and Other within the dataset.
[4] The duration measure is an extension of the nativity measure. The reference for duration is being born in the United States, just as in the nativity measure. Duration takes those that are foreign born and considers how long each immigrant has been in the United States. Due to issues of collinerity, "Nativity" and "Duration" categories are never included in the model at the same time; rather nativity is first included and then is replaced with duration.

both differ from each other socioeconomically as well as from non-Hispanic whites and blacks (Bean and Tienda, 1989). The socioeconomic mediators include education (measured as less than high school, some high school, high school graduate, some college, and college graduate), family income (groups of less than $10,000, $10,000-19,999, $20,000-34,999 and $35,000+, as well as non-reporting), employment status (Employed full time; Employed part-time; No Work, in school; No Work, taking care of home and family; No Work, retired; No Work Disabled or Unhealthy; No Work, Other; Unemployed) and insurance status (Private or HMO provided by Employer or Paid for by Individual; military; Other government insurance; and not insured). Health status is also taken into consideration.

Methods. Following a descriptive analysis, logistic regression and multionomial logistic regression are used to model the relationship between the dependent and independent variables. The effects are reported in the form of odds ratios. The models increase in complexity as more variables are controlled. The "full model" will examine include all variables of interest. The statistical package Sudaan is used to control for design effects.

ANALYTIC RESULTS

Access to Health Care

Table 1 a presents logistic regression coefficients, in the form of odds ratios, and displays the association between race/ethnicity and access to a regular source of health care under the context of a range of different models. Odds ratios below one less access to a regular source of medical care in comparison to the reference group; values above one indicate greater access to medical care in relation to the reference group.

[Table 1 Here]

Model 1 explores the basic relationship between race/ethnicity and access to a usual source of health care, which tests Hypothesis One (see page 44-45). The results show that Mexican Americans clearly experience the lowest odds of having access to a usual source of health care, as they have almost 70% lower odds of usual care than Non-Hispanic whites. Cubans have 48% lower odds of having access to medical care in comparison to Non-Hispanic whites. Interestingly, Puerto Ricans are not significantly different in access to a usual source of medical care from Non-Hispanic whites, which is somewhat surprising. Previous work suggests Puerto Ricans would be significantly less likely to have access to care than non-Hispanic whites. Puerto Ricans are more likely to be economically-disadvantaged which would decrease their access to a regular source of medical care (Solis et al 1990; Welch et al 1973). Other Hispanics have 57% lower odds of having access to care in comparison to Non-Hispanic whites. Non-Hispanic blacks are only 14% less likely to report having a usual access to care than Non-Hispanic whites.

The patterns of access to a regular source of medical care among different Hispanic groups are overall consistent with previous literature which indicates that Hispanic groups have less access to care (Zuvekas and Weinick 1999; LeClere et al 1994; Hubbell et al 1991; Trevino et al 1991). Hypotheses One stated that there will be basic race/ethnic differences in access to medical care, without controlling for nativity, duration and citizenship status. We find that Puerto Ricans are not significantly different from Non-Hispanic whites in regards to usual source of medical care without taking into consideration nativity, duration and citizenship influences. The lack of significance of usual access to care among Puerto Ricans is somewhat surprising in light of research that

has documented the extremely low socioeconomic and health profiles of this subpopulation.

Model 2 controls for basic demographic precursors in the relationship between race/ethnicity and access to a regular source of health care and these model additions do not have a major impact on the results. The exception is among Non-Hispanic blacks, who are now not significantly different than Non-Hispanic whites. These results also show that Mexican Americans are just 34% as likely to report having a usual source of medical care as Non-Hispanic whites. Cubans have 46% lower odds of having access to care in relation to the reference group. Puerto Ricans are again not significantly different from Non-Hispanic whites. Other Hispanics are 58% less likely to report a usual access to care in comparison to Non-Hispanic whites.

The relationship between access to a regular source of health care and various demographic precursors tend to work in the ways expected. Women report greater access to care than men (Merzel 2000; Verbrugge 1982) and those that are not married are less likely to report access to a regular source of health care as compared to those that are married (Zuvekas and Taliaferro 2003). Noteworthy results are shown in the region of the country variables. Those in the Midwest, South and West are all less likely to report access to a regular source of care than those in the Northeast. This may be a result of insurance rates, where it has been reported that uninsurance rates are lowest in the Northeast (Current Population Survey 2003). In addition, this may also be a result of a greater state role played in the Northeast to provide health assistance in comparison to other regions of the country.

Model 3, 4 and 5 introduce nativity, duration and citizenship, allowing for a test of Hypothesis Two (see pages 44-45) the impact of acculturation on reports of usual access to medical care within the United States. Model 3, which considers race/ethnicity and nativity, shows that foreign-born individuals have almost 47% lower odds of access to a regular source of medical care than US-born individuals. Previous work has hinted that immigrant status does not matter for reporting access to medical care (Hubbell 1991), but this work is hardly conclusive; other research has found that nativity does matter quite strongly for accessing medical care (Leclere et al 1994). The results here clearly show that nativity matters and quite significantly so. These results also support hypothesis two which state that the native-born will have greater access to regular medical than foreign born.

Interestingly, all of the racial/ethnic differentials change considerably from the previous model. Specifically, with nativity in the model, the odds of access to a usual source of medical care increases for all Hispanic sub-groups compared to Non-Hispanic whites. This increase demonstrates that nativity has a crucial impact on racial/ethnic differentials in access to a regular source of care in the United States. That is, the less favorable access to a regular source of medical care among most Hispanic groups relative to Non-Hispanic whites in comparison to Model 2 is strongly influenced by nativity. However, nativity does not eliminate all differentials in access to care between Hispanic groups and Non-Hispanic whites. Mexican Americans are still only 49% as likely to have access to a regular source of health care. In addition, Other Hispanics are 35% less likely to report access as compared to Non-Hispanic whites.

Foreign-born status does affect the access to a regular source of medical care of the Cuban population as Cubans now join Puerto Ricans as not being significantly different from the reference group in access to medical care. The lack of difference between Cubans and non-Hispanic whites in terms of a regular source of medical care is not as surprising. The high socioeconomic status of Cubans is well documented (Bean and Tienda 1988) and this may well explain their increased access to a regular source of medical care. This lack of difference between Cubans and Non-Hispanic whites also supports hypothesis three which hypothesized that Cubans would have greater access to a regular source of care than Mexicans and Other Hispanics. Non-Hispanic blacks again are no different than Non-Hispanic whites in reporting a regular source of medical care. Thus, nativity is a critical component to understanding differentials in access to a usual source of care among race/ethnic groups, but it does not completely explain away the existing differences.

Model 4 attempts to be more specific in accounting for the nativity effect that seems to contribute so importantly to care differentials for various Hispanic groups in comparison to Non-Hispanic whites. Duration, or the length of time foreign-born individuals have been in the United States, is now included, and is referenced against those who are U.S. born. Indeed, length of duration among immigrants in the United States increases the odds of reporting a usual source of access to medical care. Hypothesis two is again supported, as it stated that the longer foreign born respondents are in the United States, the greater their odds of reporting access to a regular source of health care. While immigrants that have been in the U.S. less than five years are 29% as likely to report access to a usual source of care in comparison to U.S. born persons,

immigrants that have been in the U.S. from five to ten years are 52% as likely to report having a usual source of care in comparison to the reference group. Further, immigrants that have been in the country for ten years or more are still significantly different from the U.S. born: they are 75% as likely to have access to a usual source of care. Thus, more so than a simple nativity dichotomy, access to a usual source of care is associated with length of time immigrants spend in the United States (Thamer et al. 1997; Leclere et al. 1994). This change in coefficients over the duration categories seems to support the acculturation argument. As immigrants acculturate into the United States, they will come closer to reflecting the medical care access patterns of Non-Hispanic whites. The longer foreign-born persons have been in the U.S., the greater their chances of reporting having access to a regular source of health care as compared to the native born

Duration also has an impact on differentials in having access to a usual source of care across race/ethnic groups. Mexican Americans are 56% less likely to have access to a regular source of medical care while Cubans return to being significantly less likely (23%) to report access to a regular source of care than Non-Hispanic whites. Other Hispanics are now 41% less likely to report access to a regular source of care than Non-Hispanic whites. Puerto Ricans and Non-Hispanic Blacks are still not significantly different from Non-Hispanic whites in reporting access to medical care.

The analysis continues by including citizenship status in the model. Model 5 *combines* citizenship with duration and reinforces the role of citizenship in access health care (Jang et al. 1999). The results shows that non-citizens in the country less than five years are 72% less likely to report access to a usual source of care than US born citizens. In comparison, foreign-born respondents who are in the country less than five years but

are citizens are 61% less likely to report access to a usual source of care in comparison to the reference group. Those that have been in the country between five and nine years and are not citizens are 44% as likely to report having access to a usual source of care while those in the country for the same tenure (five to nine years) but who are citizens are not different in reporting access to a usual source of care than those who are native born US citizens. Those non-citizens who have been in the United States ten or more years are still significantly less likely to have access to a usual source of care, as they are 41% less likely to report access to medical care. Foreign-born respondents who have been in the U.S. for more than ten years and are citizens, however, report no difference in having access to a usual source of medical care as US born citizens.

The results again bolster the ideas of acculturation and support my hypothesis that acculturation variables will affect the access to care of the Hispanic populations. Hypothesis two argued that as foreign born respondents acculturate to the United States, as measured by duration and citizenship, there would be an increase the likelihood of reporting access to a regular source of care. Model five supports this hypothesis. Individuals with greater acculturation into the United States are more likely to reflect the same access to care patterns as the native-born. As the duration and citizenship measures demark an "increase" in the Americanization of Hispanic groups (from initial duration and non-citizen all the way to ten or more years and citizen), the inequalities in access to a usual source of medical care decrease to non-significance. We again note that my data are, indeed, not longitudinal and thus we am not following individuals as they acculturate *overtime*. Nevertheless, these results provide intriguing cross-sectional evidence for an acculturation hypothesis.

Controlling for citizenship status[5], in combination with duration, results in an improvement in access to a regular source of health care for Mexican Americans and Other Hispanics relative to Non-Hispanic whites. Mexican Americans now show 54% lower odds in having a usual source of care and Other Hispanics display 39% lower odds of access to usual care in comparison to Non-Hispanic whites. Cubans are still 24% less likely to report a regular source of care than the reference group. The lack of large change from model 4 to model 5 illustrates that citizenship plays a somewhat of a weak role in explaining access to care differentials across Hispanic subgroups, at least above and beyond the influences of nativity and duration. This is most likely because of the relatively low levels of citizenship among most of the Hispanic groups.

Comparing Model 1 to Model 5, substantial closure for the access to care coefficient results are made. Hypotheses two and three posed that the acculturation measures of nativity, duration and citizenship status will affect the access to care of the Hispanic population. Specifically, native-born Hispanics, those with increased duration in the United States, and those that have become naturalized U.S. citizens will have greater access to health care. Results show that nativity, duration and citizenship do affect access to care. Together, the impact of nativity, duration and citizenship explain much of the differentials in access to a regular source of care among Hispanic sub-groups in

[5] I realize that exploring the role citizenship on access to care for the Puerto Rican samples leads to some confusion. Puerto Ricans *are* U.S. citizens. However, including citizenship makes sense for other Hispanic groups as well as making a valuable contribution to our understanding of acculturation. Including citizenship in the model does *not* affect or influence the outcome of the outcomes for Puerto Ricans. If you look from Model 4 (no citizenship variable included) to Model 5 (citizenship variable included), we see no difference in the significance level for Puerto Ricans. In addition, I ran the final model without the citizenship variable and the odds ratio for Puerto Rican changed only slightly. More specifically, with the combined duration-citizenship variable included, Puerto Ricans are 27% more likely to have access to care than the reference (see Model 8 on Table 4.1). With only duration and no citizenship variable included in the model, Puerto Ricans are 30% more likely to have access to care. Both odds ratios have the same significance level, of * or .05.

comparison to Non-Hispanic whites. The models show, however, that all disparities are not explained and also draw attention to the continued differences existing among Hispanic sub-groups in having access to a regular source of health care, even net of demographic factors and acculturation measures.

Model 6 includes socioeconomic status (SES) indicators, including education, household income, and employment status. The SES variables display patterns that are consistent with expectations. Education may facilitate an understanding of the importance of medical intervention as well as the nature of the medical care system (LeClere et al 1994). Those with less education than the reference group of sixteen plus years of education have lower odds of access to a regular source of care. In addition, income greatly affects the chances one has at access to the medical system as well as the sources of medical care (Kiefe et al 2000). Individuals in households with less than $35,000 (the reference group) have lower odds of access to a regular source of medical care and the employment indicators also work in the direction that is expected. That is, persons living in households with less money as well as unemployed persons are less likely to report having a usual source of medical care.

The inclusion of these variables alters the relationship between race/ethnicity, duration, citizenship and reports of access to a usual source of medical care, but not enough to completely erase the inequalities. This suggests that while socioeconomic status indicators do play a role in individuals having a regular source of health care, there are other factors that influence access to care. Non-citizens in the country less than five years are 65% less likely to report access to a usual source of care than U.S. native born. In comparison, foreign-born respondents in the country less than five years but who are

citizens are 56% less likely to report access to a usual source of care in comparison to the native born. Those that have been in the country between five and nine years and are not citizens are now 42% as likely to report having access to a usual source of care. Those non-citizens who have been in the United States ten or more years are still significantly less likely to have access to a usual source of care, as they are 25% less likely to report access to medical care. Citizens who have been in the country five to nine years as well as ten or more years are not different in reporting access to a usual source of care than those that are native born US citizens.

With the controlling of SES indicators, Mexican Americans are now 62% as likely to have access to medical care as Non-Hispanic whites and Cubans are 19% less likely to have access to a regular source of care. Other Hispanics are 31% less likely to have access to care. Interestingly, Non-Hispanic blacks are now 20% more likely to report having access to regular source of care than Non-Hispanic whites. This may be due to a reliance on emergency room (E.R.) and the tendency for African Americans to perceive the E.R. as a "regular source of care". Puerto Ricans are not significantly different in reporting access to a regular source of medical care in comparison to Non-Hispanic whites.

The findings from Model 6 lend support to support to Hypothesis 4, which stated that socioeconomic status indicators would be expected to decrease the access to health care inequalities between race/ethnic groups. Specifically, Hispanic sub-groups will have decreases in the inequality in access to care between themselves and Non-Hispanic whites once socioeconomic status indicators are controlled. This hypothesis is confirmed, as shown in Model 6.

Model 7 builds on Model 6 by including a measure of health insurance. Insurance has long been considered a crucial necessity to accessing the U.S. medical system and research has shown the dramatic inequalities in insurance coverage by race/ethnicity (Thamer 1997; Zuvekas and Weinick 1999). Insurance considerably alters the access to care differentials for the citizenship and duration indicators. Access to a regular source of health care for non-citizens in the United States less than five years is not markedly different than the previous model, as they are 41% less likely to report access than the native-born in this most complete model. Citizens in the US for the same amount of time are also 41% less likely to report having access to a regular source of care. Non-citizens in the country five to nine years as well as ten or more years are still less likely to report having access to a usual source of care, 30% and 19% respectively. The remaining immigrant categories are no different than the reference group.

Somewhat surprisingly, controlling for insurance does not completely eliminate the gap for Mexican Americans and Other Hispanics in comparison to Non-Hispanic Whites. In comparison, however, controlling for insurance does alter the findings for Cuban Americans, as they now are no longer different than Non-Hispanic whites in reporting access to a regular source of medical care. Mexican Americans are still only 70% as likely to have access to care and Other Hispanics are 81% as likely to have access to care than Non-Hispanic whites. Puerto Ricans now join Non-Hispanic blacks as being more likely to report having access to a regular source of care in comparison to Non-Hispanic whites. As with Non-Hispanic blacks, this may be due to a reliance on emergency room (E.R.). There could be a propensity for Puerto Ricans, highly concentrated in urban areas, to perceive the E.R. as a “regular source of care”.

Model 8 builds on the previous model by including a measure of health status. While less healthy people tend to report great access to care, the inclusion of health status into the models does virtually nothing to the previous odds ratios reported in Model 7. The acculturation variables are slightly altered, as those non-citizens in the country between five and nine years are now 74% as likely to report having access to a regular source of care in comparison to those that are US born while non-citizens in the country ten plus years are 84% as likely to report having access to medical care. Mexican Americans and Other Hispanics are 29% and 20%, respectively, less likely to report having access to a usual source of medical care. Puerto Ricans and Non-Hispanic blacks are still more likely to report having access to a regular source of care in comparison to Non-Hispanic whites.

These models have explored access to a regular source of care for a variety of Hispanic subgroups in relation to Non-Hispanic whites and blacks. They also explored the often-overlooked acculturation variables of nativity, duration and citizenship. These models document the differences between Hispanic subgroups in reporting access to a usual source of medical care. Under the full model, Mexican Americans and Other Hispanics are less likely to report having a usual source of medical care in comparison to Non-Hispanic whites. Puerto Ricans were more likely to report having access to a usual source of care in comparison to the reference while Cubans were not significantly different than Non-Hispanic whites. These models illustrate the heterogeneity among Hispanic subgroups in reporting access to a regular source of care.

In addition, the models illustrated the role acculturation plays in influencing access to a regular source of care. As duration in the United States increases, the odds of

reporting access to a regular source of care increase. In addition, citizenship status also enhances the odds of reporting access to a usual source of care. It was put forth that as groups acculturate (i.e, as immigrants to the United States spend longer time in the United States, and become U.S. citizens), they have greater odds of having access to medical care. These results support such an assertion.

Sources of Care

These models focuses on differences in sources (or types) of health care for adults among major Hispanic sub-populations of the United States in comparison to non-Hispanic Whites and Blacks, while considering the influences of nativity, duration and citizenship, as well as demographic precursors and socioeconomic factors. It builds on the previous findings by isolating those reporting having access to a regular source of care and further probes the source of care they regularly use, be it a private doctor, a clinic, the emergency room or other. Please note that for this analysis, unlike with the access to care analysis, Cubans will be combined with Other Hispanics due to limited cell sizes. This category is now referred to as 'Other Hispanics'.

[TABLE 2 Here]

Model 1 explores the baseline relationship between race/ethnicity and sources of health care, which assesses the hypothesis that there will be basic race/ethnic differences in the sources of medical care, without controlling for nativity, duration and citizenship status. The results show Mexican Americans are 2.13 times more likely than Non-Hispanic whites to report using a clinic as their usual source of health care relative to their use of a private doctor's office. In comparison, Puerto Ricans are only 1.66 times

more likely, and Other Hispanics 1.47 times more likely than Non-Hispanic whites, to report using a clinic as their usual source of health care relative to their use of a private doctor's office. Non-Hispanic blacks are only 1.38 times more likely than Non-Hispanic whites to report using a clinic in relation to their use of a private doctor's office.

The odds ratios increase tremendously for the use of emergency rooms as the usual source of care for all minority groups in relation to Non-Hispanic whites. Mexican Americans and Puerto Ricans are 2.69 and 4.79 times more likely than Non-Hispanic whites, respectively, to report the use of the E.R. as their usual source of care relative to their use of a private doctor's office. Other Hispanics are 3.81 times more likely than Non-Hispanic whites to rely on the E.R. as compared to a private doctor and Non-Hispanic blacks than Non-Hispanic whites are 4.21 times more likely to report the emergency room as their usual source of care.

In regards to those who report 'Other Medical Facility' as their usual source of care, Mexican Americans have 2.43 greater odds to report other than Non-Hispanic whites as compared to their use of a private doctor's office. In contrast, Puerto Ricans are not significantly different from Non-Hispanic whites in reporting Other as their usual source of care. Other Hispanics are 89% more likely and Non-Hispanic Blacks are 30% more likely to report Other as their usual source of care compared to Non-Hispanic whites.

The patterns seen here for sources of medical care reported among different Hispanic groups are largely consistent with postulations earlier made. Hypotheses One stated that there would be basic race/ethnic differences in the sources of medical care, without controlling for nativity, duration and citizenship status. We find that all Hispanic

subgroups, in comparison to Non-Hispanic whites, are much more likely to report clinics and emergency rooms as their primary source of care as compared to Non-Hispanic whites in use of a private doctor's office. Mexican Americans and Other Hispanics are also more likely to report the use of 'Other' as their regular source of care in comparison to Non-Hispanic whites relative to the use of a private doctor. Thus, there are *major* differences across groups in reporting sources of the *source* of regular access to health care.

Model 2 controls for basic demographic precursors in the relationship between race/ethnicity and sources of regular source of health care and these model additions have a key effect on the results. Specifically, the addition of the demographic precursors into the model *increases* the odds that Hispanic subgroups, relative to Non-Hispanic whites, are more likely to report the use of clinic or emergency room as their primary source of care as compared to a private doctor's office. That is, most differences are even wider than reported above.

The results show Mexican Americans are now 2.4 times more likely compared to Non-Hispanic whites to report using a clinic as their usual source of health care relative to their use of a private doctor's office, while Puerto Ricans are 2.69 times more likely than Non-Hispanic whites to do the same. In contrast, Other Hispanics are 2.16 times more likely than Non-Hispanic whites to report using a clinic as their usual source of health care relative to their use of a private doctor's office. Further, Non-Hispanic blacks are 1.65 times more likely than Non-Hispanic whites to report using a Clinic in relation to their use of a private doctor's office.

Mexican Americans have 2.8 greater odds than Non-Hispanic whites of reporting the use of an emergency room as the usual source of medical care relative to their use of a private doctor. Puerto Ricans and Other Hispanics are 4.98 times and 4.27 times, respectively, more likely than Non-Hispanic whites to report using an emergency rooms as the primary source of medical care. In addition, Non-Hispanic blacks are 3.84 times more likely than Non-Hispanic whites to report the emergency room as their usual source of care.

Finally, Mexican Americans are 1.99 times more likely than Non- Hispanic whites to report 'other' as their usual source of care as compared to their use of a private doctor's office. At the same time, Other Hispanics are 91% more likely than Non-Hispanic whites to report other. Non-Hispanic blacks now join Puerto Ricans as not being significantly different from Non-Hispanic whites in reporting other as their usual source of care as compared to a private doctor's office.

Model 3, 4 and 5 introduce nativity, duration and citizenship, allowing for a test of the impact of acculturation on sources of regular medical care within the United States. Model 3, which considers race/ethnicity and nativity, shows that foreign-born individuals are almost 68% more likely than native-born individuals to report using a clinic as their usual source of health care relative to their use of a private doctor's office. In comparison, immigrants are 41% and 78% more likely, respectively than the native born to report emergency room and other as their usual source of health care relative to their use of a private doctor's office. The results here clearly show that nativity influences the source of medical care that is regularly accessed in the United States. These results support Hypothesis Two, which stated that the native born would be less likely than

foreign born to report the uses of clinics, emergency rooms and other medical facilities relative to their use of private doctor's office as their regular source of care.

Interestingly, all of the racial/ethnic differentials change considerably from the previous model. Specifically, with nativity in the model, the differences between sources of medical care utilized by all Hispanic sub-groups as compared to Non-Hispanic whites decrease. This decrease reveals that immigration status has a key influence on racial/ethnic differentials in the type of medical care regularly used in the United States. That is to say, the "less favorable" sources of medical care (private doctor being considered the most favorable) among most Hispanic groups relative to Non-Hispanic whites in comparison to Model 2 is strongly influenced by nativity. Mexican Americans are now only 86% more likely than Non-Hispanic white to report using a clinic as a private doctor as the usual source of care as relative to a private doctor. Puerto Ricans, in contrast, are 2.12 times more likely than Non-Hispanic whites to utilize a clinic rather than a private doctor as their usual source of medical care. Other Hispanics and Non-Hispanic blacks are 52% and 61% more likely than Non-Hispanic whites to report clinic as the primary source of medical care, relative to using a private doctor.

Mexican Americans are 2.4 times more likely than Non-Hispanic whites to report using an emergency room as their source of care, while Puerto Ricans are still over 4 times more likely than Non-Hispanic whites to rely on an E.R. Other Hispanics now have 3.38 greater odds of reporting the emergency room as their primary source of medical care compared to Non-Hispanic whites. Thus, nativity is important in explaining differentials in sources of medical care across race/ethnic groups, but it does not completely explain away the existing inequalities.

Model 4 attempts to be more specific in conveying the nativity effect that seems to contribute to source of care differentials for various Hispanic groups in comparison to Non-Hispanic whites. Duration, or the length of time foreign-born individuals have been in the United States, is now included, and is referenced against those who are U.S. born. Undeniably, length of duration among immigrants in the United States affects the primary source of medical care and is a crucial component to understanding differentials between race/ethnic groups. Model 3 shows that foreign-born individuals who have been in the U.S. less than five years are almost 3 times more likely to report using a clinic (relative to their use of a private doctor) as compared to those who are native born. In comparison, immigrants in the country five to nine years are 2.44 times more likely to report utilizing a clinic than native-born individuals, while those foreign-born in the U.S. ten years are more are not significantly different than the U.S. born in using a clinic in relation to a private doctor.

Foreign-born individuals who have been in the U.S. less than five years are 2.42 times more likely to report using the E.R. relative to their use of a private doctor as compared to those that are native born. As for immigrants in the country five to nine years, they have 2.44 greater odds than the native born of reporting emergency room as compared to the use of a private doctor. Foreign-born immigrants in the U.S. ten or more years are no different in their use of the E.R. in comparison to the native-born.

Immigrants in the country less than five years are almost 4 times more likely than the native-born to report using other medical care relative to a private doctor while foreign-born respondents in the United States between five and nine years are 2.8 times more likely than the native born to report using other. Immigrants in the country ten years

or more are only 21% more likely than the native-born to report using other medical care relative to a private doctor.

As immigrants acculturate to the United States (again, acculturate being defined as increased time in the U.S.), the differences in sources of medical care decreases. As a result, more so than a simple nativity dichotomy, the type of source of care is strongly associated with the length of time immigrants spend in the United States. This substantiates Hypothesis Two which declared that as immigrants acculturate into the United States, they will come closer to imitate the sources of medical care patterns of the native born. The longer foreign-born persons have been in the U.S., the greater their chances of reporting the same source of medical care as the native born.

Duration also has an impact on differentials in the category of medical care across race/ethnic groups. Mexican Americans are now only 90% more likely than Non-Hispanic whites to report the use of a clinic relative to their use of a private doctor Puerto Ricans are 2.2 times more likely than Non-Hispanic whites to rely a clinic over a private doctor, while Other Hispanics are 54% more likely compared to Non-Hispanic whites to report the use of a private doctor in relation. Non-Hispanic blacks are 62% more likely to report using a clinic as Non-Hispanic whites relative to the use of a private doctor.

Emergency room differences between the race/ethnic groups still strongly remain. Mexican Americans and Puerto Ricans are 2.4 and 4.4 times more likely than Non-Hispanic whites to report the use of an emergency room as the regular source of care relative to the use of a private doctor. Other Hispanics have 3.34 greater odds than Non-Hispanic whites of reporting the E.R. rather than a private doctor as their usual source of

care. Non-Hispanic blacks are 3.7 times more likely compared to Non-Hispanic whites to use the E.R. In regards to the use of Other Medical Facilities, Mexican Americans remain as the only group significantly different than Non-Hispanic whites.

The analysis continues by including citizenship status in the model. Model 5 unites citizenship with duration and shows that non-citizens in the country less than five years are significantly different in the sources of care they report. Those non-naturalized foreign born respondents in the U.S. less than five years are 3.2 times more likely than the native born to report using a clinic relative to a private doctor. In addition, they are 2.8 times and 4.15 times more likely than the native born to report using the Emergency Room and Other Medical Facility, respectively, relative to their use of a private doctor as their type of regular health care. Those immigrants in the United States less than five years that have naturalized[6], however, are no significantly different than the native born in their sources of care.

Non-naturalized immigrant respondents in the U.S. between five and nine years also report differences in the sources of care they report. They are 2.8 times more likely than the native-born to report using a clinic as the source of their usual care, and 3 times more likely than the native-born to report relying on the Emergency Room, relative to their use of a private doctor. In addition, those foreign born in the United States between five and nine years that are not citizens are 3.52 times more likely than the native-born to report Other Medical Facility as their source of medical care relative to the use of a private medical doctor. Those immigrants in the United States between five and nine years that have naturalized, however, are only significantly different as compared to the

[6] Note that this is a *very small group*. Only spouses of citizens are allowed to naturalize with less than five years of duration.

native born in their sources of care within the clinic category. Naturalized foreign-born respondents in the United States between 5-9 years are 51% more likely than the native born to report using a clinic as their usual source of care relative to a private doctor relative to those that are native-born.

Immigrants in the U.S. for more than ten years who have not naturalized continue to report significant differences in their sources of care; however we see a substantial decrease in the odds as compared to the previous duration measures. A non-naturalized foreign-born in the country for ten plus years are almost 2 times more likely than native-born respondents to report using a clinic as their primary source of care relative to a private doctor. They are 81% and 53% more likely than the native-born to report the use of an E.R. or other, respectively, as the source of medical care relative to a private doctor. Only within the clinic category are naturalized immigrants in the U.S. ten or more years significantly different from the native-born in the source of regular care; naturalized foreign-born respondents in the United States ten or more years are 17% more likely than the native-born to report clinic as their source of care relative to a private doctor's office.

The results again strongly support my hypothesis that acculturation variables will affect the sources of regular health care of the Hispanic populations. Hypothesis two argued that as foreign born respondents acculturate to the United States, as measured by duration and citizenship, there would be an increase in the likelihood of reporting a private doctor as the source of regular health care. Model five supports this hypothesis. Individual with greater acculturation into the United States are more likely to reflect the same sources of care patterns as the native-born. As the duration and citizenship measures demark an "increase" in the Americanization of Hispanic groups (from initial

duration and non-citizen all the way to ten or more years and citizen), the inequalities in the usual source of medical care decrease. We again note that my data are, indeed, not longitudinal and thus we am not following individuals as they acculturate *overtime*. Nevertheless, these results provide solid cross-sectional evidence for an acculturation hypothesis.

Controlling for citizenship status, in combination with duration, results in some changes in the sources of medical care reported. Mexican Americans and Other Hispanic are 79% and 51% more likely than Non-Hispanic whites, respectively, to report clinic as their regular source of care relative to a private doctor. Puerto Ricans are 2.5 times more likely than Non-Hispanic whites to report clinic as their usual source of care relative to a private doctor. Non-Hispanic blacks are still just over 60% more likely than Non-Hispanic whites to report a clinic as their main source of care relative to a private doctor.

In a slight improvement from the previous model, Mexican Americans are 2.27 times more likely than Non-Hispanic whites to report the emergency room as their source of medical care relative to their use of a private doctor's office. Puerto Ricans have 5.3 greater odds and Other Hispanics 3.2 greater odds of stating the E.R. as their usual source of care relative to a private doctor as compared to Non-Hispanic whites. Non-Hispanic blacks are 3.76 times more likely than Non-Hispanic whites to report the emergency room as the usual source of medical care relative to a private doctor. Mexican Americans again are the only race/ethnic group significantly different from Non-Hispanic whites in reporting Other Medical Facility over private doctor's office as a source of care (54% more likely). The lack of large change from model 4 to model 5 illustrates that citizenship plays a somewhat of a weak role in explaining sources of care differentials

across Hispanic subgroups, at least above and beyond the influences of nativity and duration. This is most likely because of the relatively low levels of citizenship among most of the Hispanic groups.

Hypotheses two and three posed that the acculturation measures of nativity, duration and citizenship status will affect the sources of care reported by the Hispanic population. Specifically, native-born Hispanics, those with increased duration in the United States, and those that have become naturalized U.S. citizens will have improved sources of care. Results show that nativity, duration and citizenship do affect the type of regular medical care utilized. Together, the influence of nativity, duration and citizenship elucidate some of the differentials in sources of regular source of care among Hispanic sub-groups in comparison to Non-Hispanic whites. Comparing Model 1 to Model 5, some improvements are made in decreasing the likelihood that Non-Hispanic whites will have greater access to a private doctor over other types of care in comparison to the Hispanic subgroups. The models show, however, that all disparities are not explained. The models also attract attention to the differences existing among Hispanic sub-groups in sources of regular health care.

Model 6 includes socioeconomic status indicators, including education, household income, and employment status. The SES variables display patterns that are consistent with expectations. As household income increases, the less likely the odds that one responds that the usual source of care is not a private doctor's office. The pattern is virtually the same for education.

The inclusion of these variables noticeably adjusts the relationship between race/ethnicity, duration, citizenship and reports of sources of medical care, but do not

wholly eradicate the inequalities. This indicates that while socioeconomic status indicators do play a role in the types of regular source of health care reported, there are other factors that influence access to care. The change in coefficients from Model 5 to Model 6, however, illustrate the remarkable gains are made in decreasing the likelihood that Non-Hispanic whites will report a private doctor as their usual source of care over Hispanic subgroups. Model 6 shows that all acculturation categories where the foreign-born respondents are naturalized, regardless of duration tenures, there are no longer significantly different in reporting one source of care over another in comparison to those native-born respondents. Foreign-born immigrants in the United States less than five years who have not naturalized are now 2.63 times more likely than the native-born to report a clinic as their usual source of medical care relative to the use of a private medical doctor. In comparison, non-naturalized immigrants in the U.S. for five to nine years are 2.4 times more likely than the native-born to report relying on a clinic relative to the use of a private doctor while those immigrants in the country ten or more years who are not citizens are just 63% more likely than the native-born to report a clinic as their primary source of medical care.

Non-citizens in the U.S for less than five years and those in the country five to nine years are, respectively, 2 times and 2.3 times more likely than native-born to report the emergency room as their usual source of medical care in relation to their use of a private doctor's office. Those non-citizens in the country more than ten years are 45% more likely than the native-born to rely on the E.R. as a private doctor's office. Immigrants who have not naturalized and have been in the U.S for less than five years are 3.2 times as likely to recount Other Medical Facility as their regular source of medical

care as compared to the native-born. Non-citizens in the country between five and nine years are 3 times as likely to rely on Other than a private doctor's office as their usual source of medical care while those non-naturalized foreign born respondents in the country ten or more years are not significantly different than the native born in their sources of care.

With the controlling of SES indicators, Mexican Americans are now 41% more likely than Non-Hispanic whites to report Clinic, and 55% more likely than Non-Hispanic whites to report the Emergency Room, as their primary source of health care relative to a private doctor's office. Puerto Ricans are 2 times more likely than Non-Hispanic whites to report the clinic as their usual source of medical care relative to their use of a private doctor. In addition, Puerto Ricans are now only 3 times more likely than Non-Hispanic whites (in comparison to over 5 times more likely in the previous model) to report the emergency room as their source of medical care compared to a private doctor's office. Other Hispanics are 38% and 2 times more likely than Non-Hispanic whites to account Clinic and Emergency Room, respectively, as their source of usual medical car. Non-Hispanic blacks are still more likely to report a clinic and emergency room as their usual source of care as compared to Non-Hispanic whites. Mexican Americans remain as the only group more likely than Non-Hispanic whites to report Other Medical Facility as their usual source of medical care relative to a private doctor.

Hypothesis 4 stated that controlling for socioeconomic status indicators would decrease the odds of reporting clinic, emergency room and other medical facility relative to the use of a private doctor's office between race/ethnic groups. Specifically, non-

Hispanic sub-groups will have decreases in the inequality in sources of care between themselves and Non-Hispanic whites once socioeconomic status indicators are controlled. This hypothesis is strongly supported, as shown in Model 6.

Model 7 builds on Model 6 by including a measure of insurance. Insurance has long been considered a decisive requirement to accessing the U.S. medical system and research has shown the impressive variation in insurance coverage by race/ethnicity (Thamer 1997; Zuvekas and Weinick 1999). Insurance does dramatically alter the access to care differentials for the citizenship and duration indicators. Like the previous model, we again see that all naturalized respondents, regardless of duration tenures, are not significantly different in reporting one source of care over another in comparison to those native-born respondents. The non-naturalized categories have altered noticeably with the inclusion of insurance measures. Those foreign born immigrants in the U.S. less than five years who have not naturalized are 2.42 times more likely than the native-born to report a clinic as their usual source of medical care relative to their use of a private medical doctor. In comparison, non-naturalized immigrants in the U.S. for five to nine years and ten years plus are 2.16 times and 54% more likely, respectively, than the native-born to report clinic as their primary source of medical care relative to their use of a private doctor's office.

Non-citizens in the U.S for less than five years and five to nine years are now 75% and 90% more likely than the native-born (in comparison to over 2 times and 2.3 times, respectively, in the previous model) to report the emergency room as their usual source of medical care relative to their use of a private doctor. Those non-citizens in the

country more than ten years are now no longer significantly different in reporting the use of E.R. as the usual source of care in comparison to the native-born.

Immigrants who have not naturalized and have been in the U.S for less than five years are 2.7 times as likely than the native-born to recount Other Medical Facility as their place of primary care as compared to reporting a private doctor's office. Non-citizens in the country between five and nine years are now only 2.36 times as likely than the native-born to report other as their usual source of medical care relative to a private doctor. Those non-naturalized foreign born respondents in the country ten or more years are not significantly different than the native born in their sources of care.

Somewhat surprisingly, controlling for insurance does not completely eliminate the differences in source of usual medical care for Hispanic subgroups. Mexican Americans are still 33% and 36% more likely than Non-Hispanic whites to report clinic and the emergency room, respectively, as the usual source of medical care in comparison to a private doctor's office. Puerto Ricans are just over 2 times more likely than Non-Hispanic whites to recount clinic as their place of primary care as compared to stating a private doctor's office. In contrast, the emergency room is 3.7 times more likely to be reported by Puerto Ricans than Non-Hispanic whites as their source of care relative to a private doctor. Other Hispanics are 34% more likely than Non-Hispanic whites to state a clinic as the usual source of care, and 2.5 times more likely than the reference to name an emergency room, relative to a private doctor's office. Non-Hispanic blacks continue to differ from Non-Hispanic whites in naming clinics and E.R.s as their usual source of medical care over a private doctor's office.

Model 8 builds on the previous model by including a measure of health status. The inclusion of health status into the models does virtually nothing to the previous odd ratios reported in Model 7. The acculturation variables are hardly altered and it would be repetitive to detail the odds ratios here. In the full model, Mexican Americans are still 33% and 35% more likely than Non-Hispanic whites to report clinic and the emergency room, respectively, as the usual source of medical care relative to a private doctor's office. Puerto Ricans are now just 14% more likely to recount clinic as their place of primary care relative to a private doctor's office as related to Non-Hispanic whites. In addition, Puerto Ricans are still 3.7 times more likely than Non-Hispanic whites to report the emergency room as their source of care as compared to a private doctor's office. Other Hispanics are 24% more likely than Non-Hispanic whites to state a clinic as the usual source of care, and still 2.5 times more likely than the reference to name an emergency room, relative to a private doctor's office. Non-Hispanic blacks continue to differ from the reference in naming clinics and E.R.s as their usual source of medical care over a private doctor's office.

These models have explored the sources of regular medical care for a variety of Hispanic subgroups in relation to Non-Hispanic whites and blacks. It also explored the often-overlooked acculturation variables of nativity, duration and citizenship and how this affects the types of medical care that is accessed. Under the full model, Mexican Americans, Puerto Ricans and Other Hispanics are all less likely than Non-Hispanic whites to report relying on a private doctor's office than other types of care. In other words, all of these minority groups are more likely than Non-Hispanic whites to report

the use of a clinic and the emergency room as compared to a private doctor as their source of regular medical care. In addition, the differences are very wide.

In addition, the models illustrated the role acculturation plays in influencing access to a regular source of care. As duration in the United States increases, inequalities in the odds of reporting clinic, emergency room and other medical facility relative to the use of a private doctor's office between race/ethnic groups declines.

DISCUSSION

For access to a regular source of care among the adult sample, the outcome varied tremendously between the Hispanic groups. Mexican American and Other Hispanic adults were *less* likely to report access to a regular source of care in comparison to Non-Hispanic whites. In comparison, Cuban American adults are not significantly different from Non-Hispanic whites in reporting access to a regular source of care while Puerto Rican adults are *more* likely to report access to a regular source of care. Sources of regular health care varied significantly between race/ethnic groups in the adult sample. Mexican American, Puerto Rican and Other Hispanic adults were all less likely to report relying on a private doctor's office than other types of care in comparison to Non-Hispanic whites. All these groups were much more likely than Non-Hispanic whites to report the use of a clinic and the emergency room as compared to a private doctor as their source of regular medical care.

The acculturation variables of nativity, duration and citizenship contribute greatly to the incorporation of various Hispanic groups into the U.S medical system. More specifically, within the adult sample, these variables explain much of the differentials in

access to and sources of regular health care initially documented among Hispanic sub-groups in comparison to Non-Hispanic whites. These findings are not wholly unexpected, as nativity, duration of residence and citizenship of Hispanics will hinder or facilitate access to medical care, as recent research has shown (Thamer et al 1997; Shettterly et al 1996; LeClere et al 1994; Jang et al 1998). The variables of nativity, duration and citizenship may measure an acculturation process whereby immigrants become more incorporated into the U.S. socio-political economic system. As immigrants gain greater knowledge of the health system, specifically as well as either private insurance or government assistance, they are able to better utilize the health care system (Frisbie et al 2001).

The data presented bolster the idea of acculturation and support our hypothesis that acculturation variables affect the access to and sources of regular medical care of the Hispanic populations. Hypothesis two proposed that as foreign-born respondents acculturate to the United States, as measured by duration and citizenship, there would be an increase the likelihood of reporting access to a regular source of care. As the duration and citizenship measures demark an "increase" in the Americanization of Hispanic groups (from initial duration and non-citizen all the way to ten or more years and citizen), the inequalities in access to a usual source of medical care decreased. These results support such an assertion and applied to both adult and child samples. Comparing Model 1 to Model 5, noteworthy gains were made in decreasing the likelihood that Non-Hispanic whites will have greater access to care than Hispanics. Not all disparities dissipate, however, and these models draw attention to the continued differences existing

among Hispanic sub-groups in having access to a regular source of health care and sources of health care, even after the inclusion of demographic and acculturation factors.

Together, through nativity, duration and citizenship statuses, my research takes into account 'direction' towards the US core culture and that as one acculturates (immigrates to the United States, spends longer time in the United States, and naturalizes as a U.S. citizen), individuals have greater odds of having access to and better sources of medical care. However, this research lacks longitudinal data and does not follow individuals as they acculturate *over time*. Nevertheless these results provide solid cross-sectional evidence for an acculturation hypothesis.

An additional finding of very important note is the continued differences in access to and sources of care after controlling for socioeconomic status precursors and health insurance. While hypothesized that SES and insurance would have great bearing on access to and sources of regular medical care, the current analysis clearly demonstrates that other factors are influencing the incorporation of Hispanics into the U.S. medical care system. While socioeconomic mediators and health insurance status were shown to have a great influence on the relationship between race/ethnicity and access to medical care, disparities continued to exist between race/ethnic groups once these were controlled. The reasons for these continued inequities are unknown. Limited familiarity with the medical care system or a lack of Hispanic and Spanish-speaking doctors may contribute to these persistent inequalities.

TABLE 1: Odds Ratios for the Effects of Demographic and Social Factors on a Usual Source of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Race/ethnicity [Non-Hispanic White]								
Mexican American	0.31 ***	0.34 ***	0.49 ***	0.44 ***	0.46 ***	0.62 ***	0.70 ***	0.71 ***
Puerto Rican	0.97	0.86	1.14	1.02	0.90	1.13	1.31 *	1.27 *
Cuban American	0.52 ***	0.54 ***	0.86	0.77 **	0.76 **	0.81 *	0.89	0.88
Other Hispanic	0.43 ***	0.42 ***	0.65 ***	0.59 ***	0.61 ***	0.69 ***	0.81 **	0.80 **
Non-Hispanic Black	0.86 ***	1.02	1.06	1.04	1.05	1.20 ***	1.33 ***	1.31 ***
Nativity [U.S. Born]								
Foreign Born			0.53 ***					
Duration [U.S. Born]								
Less than Five Years				0.29 ***				
Five to Nine Years				0.52 ***				
Ten or More Years				0.75 ***				
Duration and Citizenship [US Born]								
Less than Five Years and Citizen					0.39 **	0.44 **	0.41 **	0.41 **
Less than Five Years and Noncitizen					0.28 ***	0.35 ***	0.41 ***	0.42 ***
Five to Nine Years and Citizen					1.09	1.17	1.25	1.30
Five to Nine Years and Noncitizen					0.44 ***	0.58 ***	0.70 ***	0.74 ***
Ten or More Years and Citizen					0.91	0.93	0.91	0.92
Ten or More Years and Noncitizen					0.59 ***	0.75 ***	0.81 **	0.84 *
Sex [Male]								
Female		2.41 ***	2.40 ***	2.41 ***	2.41 ***	2.69 ***	2.57 ***	2.55 ***
Age (continuous in years)		1.04 ***	1.04 ***	1.04 ***	1.04 ***	1.04 ***	1.03 ***	1.03 ***
Marital Status [Married]								
Widowed		0.55 ***	0.55 ***	0.55 ***	0.55 ***	0.66 ***	0.76 **	0.75 **
Divorced or Separated		0.56 ***	0.55 ***	0.55 ***	0.55 ***	0.62 ***	0.70 ***	0.70 ***
Never Married		0.56 ***	0.55 ***	0.55 ***	0.55 ***	0.61 ***	0.68 ***	0.68 ***
Country Region [Northeast]								
Midwest		0.64 ***	0.61 ***	0.62 ***	0.62 ***	0.62 ***	0.58 ***	0.57 ***
South		0.59 ***	0.57 ***	0.58 ***	0.58 ***	0.60 ***	0.62 ***	0.61 ***
West		0.67 ***	0.65 ***	0.65 ***	0.65 ***	0.65 ***	0.66 ***	0.65 ***

TABLE 1: Odds Ratios for the Effects of Demographic and Social Factors on a Usual Source of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Residence Local [Large Urban Area MSA size of 250,000+]								
Small Urban Area (MSA under 250,000)		0.91	0.89	0.89	0.89	0.94	0.98	0.98
Non-Urban Area (non-MSA)		0.94	0.91	0.91 *	0.91 *	1.05	1.14 *	1.13 **
Education [College and Beyond]								
Up to 8th Grade						0.51 ***	0.76 ***	0.68 ***
Some High School						0.56 ***	0.78 ***	0.72 ***
High School Degree						0.71 ***	0.82 ***	0.80 ***
Some College						0.91 *	1.00	0.99
Unknown						0.53 ***	0.79	0.76
Household Income [$35,000 or more]								
Less than $9,999						0.67 ***	1.14 *	1.04
$10,000-19,999						0.54 ***	0.87 **	0.83 ***
$20,000-34,999						0.69 ***	0.85 ***	0.83 ***
Income Not Reported						0.73 ***	0.88	0.88
Employment Status [Employed Full Time]								
Employed Part-time						0.79 ***	0.90 **	0.91 *
Unemployed						0.48 ***	0.71 ***	0.72 ***
Not in Formal Labor Force -- Homemaker, Taking Care of Children						0.70 ***	0.88 *	0.90
Not in Formal Labor Force -- School						0.81	1.11	1.16
Not in Formal Labor Force -- Retired						0.91	0.95	0.98
Not in Formal Labor Force -- Disabled						2.79 ***	3.08 ***	2.43 ***
Insurance [Private]								
Misc. Government							0.38 ***	0.36 ***
Not Insured							0.19 ***	0.18 ***
Health Status [Excellent]								
Good								1.09 **
Fair/Poor								2.11 ***
*** p<.001 ** p<.01 *p<.05								
N=65061 -2LL (Intercept Only)	53690.48	53680.48	53672.10	53680.48	53680.48	53680.48	53680.48	53680.48
-2LL (Full Model)	52541.76	49289.93	49026.94	48956.43	48903.46	47834.61	45236.44	45003.50
X^2	1138.72	4390.56	4645.16	4724.05	4777.02	5845.87	8444.04	8676.98
Degrees of Freedom	5	15	16	18	21	36	38	40

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001 (9 pages total)

	Model 1			Model 2			Model 3		
	Clinic	ER	Other	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]			[Private Doctor's Office]		
Race/ethnicity [Non-Hispanic White]									
Mexican American	2.13 ***	2.69 ***	2.43 ***	2.40 ***	2.88 ***	1.99 ***	1.86 ***	2.44 ***	1.50
Puerto Rican	1.66 ***	4.79 ***	1.07	2.69 ***	4.98 ***	1.28	2.12 ***	4.29 ***	0.99
Other Hispanic	1.47 ***	3.81 ***	1.89 ***	2.16 ***	4.27 ***	1.91 **	1.52 ***	3.38 ***	1.29
Non-Hispanic Black	1.38 ***	4.21 ***	1.30 *	1.65 ***	3.84 ***	1.12	1.61 ***	3.76 ***	1.08
Nativity [U.S. Born]									
Foreign Born							1.68 ***	1.41 ***	1.78
Duration [U.S. Born]									
Less than Five Years									
Five to Nine Years									
Ten or More Years									
Duration and Citizenship [US Born]									
Less than Five Years and Citizen									
Less than Five Years and Noncitizen									
Five to Nine Years and Citizen									
Five to Nine Years and Noncitizen									
Ten or More Years and Citizen									
Ten or More Years and Noncitizen									
Sex [Male]									
Female				0.92 **	0.47 ***	0.46 ***	0.92 **	0.47 ***	0.46
Age (continuous in years)				0.99 ***	1.01	0.98 ***	0.99 ***	1.01	0.98
Marital Status [Married]									
Widowed				1.37 ***	2.31 ***	2.30 **	1.37 ***	2.32 ***	2.30
Divorced or Separated				1.34 ***	2.36 ***	1.76 ***	1.36 ***	2.39 ***	1.79
Never Married				1.42 ***	3.11 ***	2.14 ***	1.45 ***	3.16 ***	2.19

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 1			Model 2			Model 3		
	Clinic	ER	Other	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]			[Private Doctor's Office]		
Country Region [Northeast]									
Midwest				2.61 ***	1.10	1.65 **	2.72 ***	1.14	1.73
South				1.19 *	0.94	1.86 ***	1.23 **	0.97	1.95
West				2.14 ***	1.22	1.84 ***	1.89 ***	1.25	2.20
Residence Local [Large Urban Area MSA size of 250,000+]									
Small Urban Area (MSA under 250,000)				2.12 ***	1.41 *	1.61 **	2.17 ***	1.43 **	1.65
Non-Urban Area (non-MSA)				2.09 ***	1.47 ***	0.95	2.15 ***	1.50 ***	0.99
Education [College and Beyond]									
Up to 8th Grade									
Some High School									
High School Degree									
Some College									
Unknown									
Household Income [$35,000 or more]									
Less than $9,999									
$10,000-19,999									
$20,000-34,999									
Income Not Reported									
Employment Status [Employed Full Time]									
Employed Part-time									
Unemployed									
Not in Formal Labor Force -- Homemaker, Taking Care of Children									
Not in Formal Labor Force -- School									
Not in Formal Labor Force -- Retired									
Not in Formal Labor Force -- Disabled									

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 1			Model 2			Model 3		
	Clinic	ER	Other	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]			[Private Doctor's Office]		
Insurance [Private]									
Misc. Governemnt									
Not Insured									
Health Status [Excellent]									
Good									
Fair/Poor									

*** p ** p<.01 *p<.05

N=65,601			
-2LL (Intercept Only)	69621.93	69621.93	69621.93
-2LL (Full Model)	68692.32	65836.83	65675.10
X^2	929.60	3785.10	3937.35
Degrees of Freedom	12.00	42.00	45.00

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 4			Model 5			Model 6		
	Clinic	ER	Other	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]			[Private Doctor's Office]		
Race/ethnicity [Non-Hispanic White]									
Mexican American	1.90 ***	2.46 ***	1.61 **	1.79 ***	2.27 ***	1.54 **	1.41 ***	1.55 ***	1.39 *
Puerto Rican	2.23 ***	4.45 ***	1.10	2.55 ***	5.33 ***	1.20	2.06 ***	3.50 ***	1.07
Other Hispanic	1.54 ***	3.34 ***	1.38	1.51 ***	3.20 ***	1.35	1.38 ***	2.70 ***	1.33
Non-Hispanic Black	1.62 ***	3.76 ***	1.10	1.61 ***	3.76 ***	1.10	1.44 ***	2.97 ***	1.04
Nativity [U.S. Born]									
Foreign Born									
Duration [U.S. Born]									
Less than Five Years	2.96 ***	2.42 ***	3.99 ***						
Five to Nine Years	2.44 ***	2.40 ***	2.82 ***						
Ten or More Years	1.43	1.21	1.21 ***						
Duration and Citizenship [US Born]									
Less than Five Years and Citizen				1.19	0.40	3.24	1.06	0.33	2.87
Less than Five Years and Noncitizen				3.27 ***	2.83 ***	4.15 ***	2.63 ***	2.13 ***	3.24 ***
Five to Nine Years and Citizen				1.51 *	0.94	1.03	1.38	0.86	0.94
Five to Nine Years and Noncitizen				2.87 ***	3.10 ***	3.52 ***	2.40 ***	2.39 ***	3.01 ***
Ten or More Years and Citizen				1.17 *	0.96	1.07	1.13	0.94	1.03
Ten or More Years and Noncitizen				1.99 ***	1.81 ***	1.53 *	1.63 ***	1.45 *	1.34
Sex [Male]									
Female	0.92 **	0.47 ***	0.46 ***	0.92 **	0.47 ***	0.46 ***	0.86 ***	0.40 ***	0.39 ***
Age (continuous in years)	0.99 ***	1.01 *	0.98 ***	0.99 ***	1.01 *	0.98 ***	0.99 ***	1.00	0.98 ***
Marital Status [Married]									
Widowed	1.37 ***	2.32 ***	2.31 **	1.38 ***	2.33 ***	2.31 **	1.09	1.58 **	1.99 *
Divorced or Separated	1.37 ***	2.41 ***	1.82 ***	1.37 ***	2.41 ***	1.82 ***	1.14 **	1.76 ***	1.59 ***
Never Married	1.46 ***	3.18 ***	2.20 ***	1.46 ***	3.18 ***	2.20 ***	1.27 ***	2.44 ***	1.98 ***

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, A80continued

	Model 4			Model 5			Model 6		
	Clinic	ER	Other	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]			[Private Doctor's Office]		
Country Region [Northeast]									
Midwest	2.71 ***	1.13	1.70 ***	2.71 ***	1.14	1.71 ***	2.76 ***	1.16	1.72 ***
South	1.22 **	0.97	1.90 ***	1.23 **	0.98	1.91 ***	1.17 *	0.91	1.84 ***
West	1.89 ***	1.25	2.20 ***	1.90 ***	1.26	2.21 ***	1.90 ***	1.26	2.16 ***
Residence Local [Large Urban Area MSA size of 250,000+]									
Small Urban Area	2.17 ***	1.43 *	1.65 **	2.18 ***	1.44 **	1.66 **	2.09 ***	1.32 *	1.58 **
Non-Urban Area (non-MSA)	2.15 ***	1.50 ***	0.98	2.15 ***	1.50 ***	0.98	1.92 ***	1.17	0.91
Education [College and Beyond]									
Up to 8th Grade							1.74 ***	1.92 ***	1.15
Some High School							1.41 ***	2.11 ***	0.89
High School Degree							1.11 *	1.40 ***	0.85
Some College							1.06	1.23 *	1.00
Unknown							1.44 *	1.76	1.28
Household Income [$35,000 or more]									
Less than $9,999							2.27 ***	3.20 ***	2.00 ***
$10,000-19,999							2.02 ***	3.15 ***	2.13 ***
$20,000-34,999							1.33 ***	1.89 ***	1.44 **
Income Not Reported							1.14	1.48 **	1.71 **
Employment Status [Employed Full Time]									
Employed Part-time							1.21 ***	1.23 *	1.44 ***
Unemployed							1.65 ***	2.74 ***	1.90 ***
Not in Formal Labor Force -- Homemaker, Taking Care of Children							1.18 **	1.59 ***	1.81 ***
Not in Formal Labor Force -- School							1.69 ***	1.06	2.73 ***
Not in Formal Labor Force -- Retired							0.89	1.07	0.57
Not in Formal Labor Force -- Disabled							1.03	1.45 *	0.97

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 4			Model 5			Model 6		
	Clinic	ER	Other	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]			[Private Doctor's Office]		
Insurance [Private]									
Misc. Government									
Not Insured									
Health Status [Excellent]									
Good									
Fair/Poor									

*** p ** p<.01 *p<.05

Intercept	69621.93	69621.93	69621.93
-2 Log L	65586.45	65511.58	64262.05
df	4035.48	4110.35	5359.87
model significance	51.00	60.00	105.00

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 7			Model 8		
	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]		
Race/ethnicity [Non-Hispanic White]						
Mexican American	1.33 ***	1.36 *	1.18	1.33 ***	1.35 *	1.19
Puerto Rican	2.11 ***	3.72 ***	1.14	1.14 ***	3.57 ***	2.09
Other Hispanic	1.34 ***	2.55 ***	1.25	1.24 ***	2.52 ***	1.34
Non-Hispanic Black	1.44 ***	2.98 ***	1.05	1.44 ***	2.91 ***	1.05
Nativity [U.S. Born]						
Foreign Born						
Duration [U.S. Born]						
Less than Five Years						
Five to Nine Years						
Ten or More Years						
Duration and Citizenship [US Born]						
Less than Five Years and Citizen	1.12	0.39	3.33	1.11	0.39	3.33
Less than Five Years and Noncitizen	2.42 ***	1.75 *	2.77 ***	2.44 ***	1.86 **	2.70 ***
Five to Nine Years and Citizen	1.34	0.75	0.84	1.35	0.78	0.83
Five to Nine Years and Noncitizen	2.16 ***	1.90 **	2.36 **	2.18 ***	1.98 **	2.35 **
Ten or More Years and Citizen	1.13	0.93	1.02	1.13	0.95	1.02
Ten or More Years and Noncitizen	1.54 ***	1.24	1.15	1.55 ***	1.29	1.14
Sex [Male]						
Female	0.86 ***	0.42 ***	0.40 ***	0.86 ***	0.41 ***	0.40 ***
Age (continuous in years)	0.99 ***	1.01	0.99 **	0.99 ***	1.00	0.99 **
Marital Status [Married]						
Widowed	1.06	1.45 *	1.83 *	1.06	1.44 *	1.83 *
Divorced or Separated	1.10 *	1.63 ***	1.40 **	1.10 *	1.60 ***	1.42 **
Never Married	1.21 ***	2.23 ***	1.73 ***	1.20 ***	2.19 ***	1.74 ***

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, A80continued

	Model 7			Model 8		
	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]		
Country Region [Northeast]						
Midwest	2.81 ***	1.22	1.83 ***	2.80 ***	1.21	1.83 ***
South	1.14	0.85	1.73 ***	1.13	0.84	1.72 ***
West	1.93 ***	1.33 *	2.28 ***	1.92 ***	1.32 *	2.27 ***
Residence Local [Large Urban Area MSA size of 250,000+]						
Small Urban Area	2.07 ***	1.28	1.54 **	2.07 ***	1.28	1.54 **
Non-Urban Area (non-MSA)	1.87 ***	1.09	0.84	1.86 ***	1.07	0.85
Education [College and Beyond]						
Up to 8th Grade	1.58 ***	1.60 ***	0.87	1.52 ***	1.42 **	0.90
Some High School	1.30 ***	1.80 ***	0.69 *	1.26 ***	1.63 ***	0.71 *
High School Degree	1.07	1.27 **	0.75 *	1.05	1.21 *	0.77 *
Some College	1.04	1.16	0.92	1.03	1.11	0.94
Unknown	1.24	1.36	0.86	1.22	1.28	0.88
Household Income [$35,000 or more]						
Less than $9,999	2.11 ***	2.77 ***	1.65 **	2.05 ***	2.47 ***	1.69 **
$10,000-19,999	1.79 ***	2.53 ***	1.57 ***	1.76 ***	2.35 ***	1.60 ***
$20,000-34,999	1.26 ***	1.71 ***	1.24	1.25 ***	1.66 ***	1.26
Income Not Reported	1.09	1.32 *	1.49 *	1.09	1.31	1.49 *
Employment Status [Employed Full Time]						
Employed Part-time	1.16 ***	1.08 *	1.25 *	1.16 ***	1.09	1.26 *
Unemployed	1.41 ***	1.97 ***	1.29	1.40 ***	1.97 ***	1.31
Not in Formal Labor Force -- Homem	1.11	1.35 **	1.51 *	1.11 *	1.39 **	1.50 *
Not in Formal Labor Force -- School	1.55 **	0.88	2.18 **	1.56 **	0.90	2.17 **
Not in Formal Labor Force -- Retired	0.89	1.07	0.57	0.89	1.11	0.56
Not in Formal Labor Force -- Disable	1.11	1.75 ***	1.23	1.05	1.42 *	1.30

TABLE 2: Odds Ratios for the Effects of Demographic and Social Factors on Sources of Health Care Among Race/Ethnic Groups, U.S. Adults Aged 25-64, 1999-2001, continued

	Model 7			Model 8		
	Clinic	ER	Other	Clinic	ER	Other
	[Private Doctor's Office]			[Private Doctor's Office]		
Insurance [Private]						
Misc. Government	5.39 ***	7.40 ***	2.98 ***	5.71 ***	7.21 ***	3.01 ***
Not Insured	6.94 ***	8.31 ***	2.72 ***	7.25 ***	8.14 ***	2.73 ***
Health Status [Excellent]						
Good				0.78 **	1.16 *	1.06
Fair/Poor				0.55 ***	1.25 *	0.96

*** p ** p<.01

Intercept	69621.93	69621.93
-2 Log L	62230.49	62193.79
df	7391.44	7428.13
model significance	111.00	117.00