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Health Insurance for Vulnerable Populations: Understanding Differences across Asian American and Latino Subgroups in the United States

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Abstract

Objectives: This study contrasts insurance outcomes (private, public, uninsured) for subgroups of Asian Americans and Latinos using the National Latino and Asian American Study (NLAAS).

Methods: The NLAAS is a national probability sample of Latinos and Asian Americans (18 + years) in the United States. Measures included insurance coverage, demographic and socioeconomic characteristics, and health and mental health status. To evaluate differences in insurance outcomes across ethnic subgroups, weighted multinomial logistic regression models were run .

Results: Uninsurance rates for Latinos (37%) were strikingly different across subgroups ($p < 0.001$), with the highest uninsurance rate observed among Mexicans (45%). All Asian subgroups had similar adjusted uninsured rates (about 13%), but Vietnamese had slightly double the adjusted rate of public insurance.

Conclusions: The NLAAS results confirm that Latinos are disproportional uninsured. Extensive differences in insurance coverage between subgroups of Latinos and Asian Americans cannot be eliminated even after controlling for a range of factors. Policies affecting access to public coverage function differentially across groups, suggesting that to close the gap in coverage will require targeting factors particular to each group.

Introduction

Reliance on public insurance or having no insurance is more common among racial/ethnic minorities, particularly recent immigrants, as compared to white, non-immigrant Americans. 22% of the United States (US)-born Latinos and 17% of blacks lack health insurance, in comparison to 9% of whites. The rate of uninsurance among all immigrants is 32% compared to 12% for those who are US born (1). Of an estimated 45 million uninsured Americans (2), approximately 21% are non-citizen immigrants (3). This study evaluates the role of vulnerabilities in insurance outcomes in Asian and Latino ethnic minorities. We follow the Economic Research Initiative on the Uninsured conceptual framework (1) that highlights race/ethnicity, immigration, health conditions, disability, and mental illness as placing individuals at risk for uninsurance (See also (4)).

Asian Americans and Latinos are rapidly growing segments of the U.S. population. Latinos will soon account for one of every three persons born in the U.S. (5) and the Asian American population will triple in size to more than 20 million by the year 2025 (6). The two groups share the experiences of recent immigration and language and acculturation issues, yet many of the insurance outcomes differ dramatically.

Immigrants' access to health insurance often depends upon many of the same factors as for US-born, including employment and socioeconomic conditions. However, immigrants face additional barriers such as experiencing a health care system that differs substantially from the systems in their home countries (7). Furthermore, immigrants often differ from US-born in human and social capital resources (8, 9), both of which affect job attainment, compensation and benefits.

Public policies, such as the 1996 welfare reform law, have also restricted many immigrants' access to public insurance programs, resulting in declines in coverage through Medicaid (10, 11). Patterns of coverage among non-elderly adults vary by employer (12, 13). Latinos and African Americans have substantially lower rates of job-based insurance than their white counterparts (14, 15). Limited data on Asian Americans' sources of coverage reflect great variations in patterns of insurance (8, 16).

In the US, various citizenship and immigration categories confer different rights. Whereas those qualifying for refugee status (e.g., Vietnamese, Cambodians) have options for health insurance coverage through public programs for seven years time post-arrival, most other immigrants (e.g., undocumented, legal permanent residents) must either obtain insurance through an employer, purchase individual insurance, or go without insurance (17). Non-citizen Latino workers were one half to two-thirds as likely to be offered insurance in the workplace as Latino citizen workers or white workers but were more likely to be uninsured even after statistically controlling for the influence of other factors such as employment, education and health status (3, 18).

Limited English proficiency may compound the difficulties confronted by immigrants in securing health insurance (3, 19). Geography and state variations in coverage may also affect access to insurance. For example, Medicaid eligibility is defined by the federal government but states may expand the scope of their programs or fund separate programs to provide insurance coverage to individuals who may be ineligible for other public programs. State uninsured rates vary from a low of 8% in Minnesota to a high of 24% in Texas (20). Regionally, the South and West have higher proportions of uninsured than the Midwest and Northeast (13).

The pervasiveness of uninsurance among certain subgroups of the population underscores the importance of understanding the factors that influence uninsurance. This study contrasts insurance outcomes for Asian Americans and Latinos using the National Latino and Asian American Study (NLAAS). The NLAAS design, sampling strategy and data collection procedures are described in detail elsewhere (21-24).

Methods

Sample Design

The NLAAS is based on a stratified area probability sample design of persons 18 years of age and older in the non-institutionalized population of the 50 states and Washington D.C. The sample includes an NLAAS Core sample, designed to provide a nationally representative sample of all national origin groups regardless of geographic residential patterns; and NLAAS-HD supplements, designed to oversample geographic areas with a moderate to high density (≥5%) of targeted Latino and Asian American households in the US. Weighting reflecting the joint probability of selection from the pooled Core and HD samples provides sample-based coverage of the full national population.

Procedures for Data Collection

The University of Michigan's Institute for Social Research (ISR) conducted data collection. Trained, multilingual interviewers administered the NLAAS battery. Interviews were administered using laptop computers with appropriate survey software. Recruitment into the initial NLAAS interview began with an introductory letter and study brochure mailed to the sample households. All study materials were translated into Spanish or Asian languages. Interviewers obtained written informed consent in the respondent's preferred language. .

Measures

Insurance coverage data includes information about the source of coverage, and the extent of coverage for health and mental health conditions. Demographic and social economic status information included age, gender, marital status, household income, education level, region, family employment status, nativity, English proficiency, time since arrival in US, self-reported general health status, self-reported mental health status, number of chronic conditions and type of disabilities. (See Table 1 for the categories for these variables.) Region was determined based on the US state in which respondents reside most of the time and coded into four categories. Health status was determined by asking a series of questions about chronic

conditions (e.g., arthritis, chronic back problems, heart attack) or being diagnosed by a doctor for a range of diseases (e.g., heart disease, diabetes, cancer). Diagnostic measures for lifetime and twelve-month prevalence of psychiatric disorders were determined from the World Mental Health Survey Initiative version of the World Health Organization Composite International Diagnostic Interview (WMH-CIDI (25)). The insurance variable was constructed by assigning respondents to one of four aggregated groups: uninsured, public insurance (Medicare, Medicaid), private insurance (private through employer or privately purchased), and other insurance.

Statistical Analysis

Tables 2 and 3 report insurance outcomes by variables of interest adjusted for other variables using a weighted multinomial logistic regression model. These tables show the model-predicted probabilities of insurance outcomes (with the small "other insurance category" omitted) calculated for a particular observed value of a measure of interest (e.g., gender equal to female) with other variables set to their overall weighted sample means. Significance tests were calculated using Wald tests of differences of multinomial logistic regression coefficient estimates with variance estimators computed using a first-order Taylor series approximation. Tables 2 and 3 include tests of significance for measures with more than two categories. Tests of pair wise differences among the categories were also computed using Wald tests and adjusted using a Bonferroni correction of $\binom{k}{2}$, where k is the number of categories of the measure. All analyses were conducted using the svy commands of the Stata statistical software package (26).

Results

Insurance Status Rates and Sample Characteristics

Latinos had much higher unadjusted rates of uninsurance and public insurance rates than Asians, while private insurance rates were much lower (Table 1). Uninsurance rates for Latinos (37%) were strikingly different across subgroups, with the highest uninsurance rate observed among Mexicans (45%) and the lowest among Puerto Ricans (17%). Rates of private insurance were very similar among Puerto Ricans, Cubans, and Other Latinos (52–54%) but lower among Mexicans (39%).

Table 1 here

Asians' insurance outcomes were similar among the Filipino, Chinese, and Other Asian American subgroups. Vietnamese , however, had higher uninsurance rates (21% vs. 13–14%) and higher public insurance rates (20% vs. 6–7%).

Some of the racial/ethnic difference in insurance coverage may be due to differences in demographic, socioeconomic, or health factors. Latinos were younger and more likely to be born in the US than Asians, while Asians had higher levels of income, education, and English proficiency, as well as higher rates of good/ excellent health and mental health status.

Among Latinos, Mexicans were younger, more likely to be male, and had lower household income and education than the other three subgroups. While only 18% of Cubans were born in the US, 58% of Puerto Ricans were born in the mainland US. Compared with other Latino groups, Puerto Ricans had a much greater likelihood of having a primary residence in the mainland US for longer than five years, as well as a higher level of English proficiency.

Among Asian Americans, the age, gender, marital status, regional distribution, and employment status distributions were similar across the four sub-ethnic groups. Vietnamese Americans had the lowest household income and higher percentages of poor or fair English language proficiency. Vietnamese Americans had similar general and mental health status rates as Chinese, while Filipino and Other Asians reported better general and mental health status.

Adjusted Distribution of Insurance Outcomes among Latinos

Table 2 about here

Tables 2 and 3 provide adjusted rates of insurance status for three of the four insurance outcomes—privately insured, public insurance, and uninsured. Latino sub-ethnic differences in insurance outcomes, after controlling for the other measures shown in Table 2, were highly significant ($p < 0.001$). Mexicans had the highest adjusted uninsured rate and the lowest adjusted rate of public insurance (10%), slightly lower than Other Latinos (12%), but about half the rate of Puerto Ricans (21%) and Cubans (19%). Pair-wise differences in insurance outcomes were significant after a Bonferroni correction for Mexicans ($p<0.001$) compared to each of the other three Latino groups, but non-significant for each of the pair wise comparisons among Puerto Ricans, Cubans, and Other Latinos.

After adjustment for other covariates, age and marital status were not associated with insurance outcomes for Latinos. However, gender was highly significant ($p < 0.001$) with an almost three-fold greater adjusted rate of public insurance for females (20%) than for males (7%). Adjusted uninsurance rates between females and males, however, were very similar (38% and 40%, respectively).

Household income, education, and family employment were all highly significant ($p < 0.001$) . Examination of the pair wise differences among income categories showed that the only significant differences were between Latinos with incomes less than $15,000 compared to those with greater incomes. Pair wise differences among education categories were significant for all Latinos with less than a college degree compared to those with a college degree or greater, and also significant for those who did not complete high school compared to those with some college or more; all other differences were non-significant..

Recent Latino immigrants had significantly different insurance outcomes than immigrants with 5+ years in the US and the US-born. However, immigrants with 5+ years or more and the US-born were not significantly different, after controlling for other covariates. Recent immigrants had much lower adjusted rates of public insurance (about one third of the US-born rate) and much higher rates of being uninsured (20% higher than less recent immigrants). English

proficiency was also highly significant after controlling for other measures in insurance outcomes.

Regional differences in insurance outcomes remained significant after controlling for other variables, with the most significant pair wise difference being between Latinos in the South and those in the West. After adjusting for the other covariates, 51% of Latinos living in the South reported being uninsured compared to 34% of those living in the West.

Self-reported general and mental health status were not significant in the model, but disability was significant ($p < 0.01$), with an adjusted rate for public insurance among Latinos with disabilities of 48% compared to an adjusted rate of 11% for Latinos without any disabilities.

Adjusted Distribution of Insurance Outcomes among Asian Americans

Differences in insurance outcomes among Asian sub-ethnicities were significant ($p = 0.02$) after controlling for the other measures in Table 3. All Asian subgroups had the same adjusted uninsured rate (about 13%), but Vietnamese had slightly more than twice the adjusted rate of public insurance. Examination of pair wise differences showed that only the difference between Vietnamese and Chinese subgroups was significant after a Bonferroni correction. Since the Chinese, Filipino, and Other Asian subgroups all had similar adjusted insurance rates, the Vietnamese difference is effectively a difference between Vietnamese Americans and all other Asian Americans.

Table 3 about here

As was the case with Latinos, marital status and age were not significant for Asian insurance outcomes after controlling for other measures. Gender was significant ($p < 0.01$), but the differences in adjusted insurance rates were only slight; adjusted rates of public insurance were similar among Asian females (6%) and males (5%), but females had lower uninsured rates (10%) than males (16%). Asian females had higher adjusted rates of private insurance than males, s in contrast to Latinos, where females have lower adjusted rates of private insurance than males because of their much higher rates of public insurance.

Household income and family employment were both highly significant ($p < 0.001$). Public insurance rates were three fold higher for the unemployed (15%) compared to the employed (4%). Again as with Latinos, the only significant income differences were between Asians with incomes less than $35,000 compared to those with greater incomes, which higher rates of public insurance and uninsurance among those with the lowest income. Education was significant ($p < 0.01$), but tests of pair wise differences among education categories revealed that only Asians with a high school degree or less significantly differed in their insurance outcomes from those with some college or more; all other differences were non-significant.

Overall tests of nativity and recent immigration, region, and English proficiency differences in insurance rates were not significant after controlling for the other measures. Nativity and time in country for immigrants showed the same trend for Asians as for Latinos: lower adjusted rates of public insurance and higher uninsured rates, but the absolute differences in rates are

smaller for Asians. The difference between recent Asian immigrants (≤5 years in country) and US-born Asians was significant for the uninsured outcome only, after a Bonferroni correction.

Self-reported general and mental health status were not significant for Asians , as is the case with Latinos. Although the size of the adjusted insurance-rate differences between Asians with disabilities and those without is relatively large, this finding did not reach statistical significance — likely because less than 2% of the Asians in the sample reported any disabilities (Table 1).

Discussion

The NLAAS data confirm results of earlier studies (3, 18, 27) showing that Latinos are disproportional uninsured (37%), particularly Mexicans (45%).Extensive differences in insurance coverage between subgroups of Latinos and Asian Americans cannot be eliminated even after controlling for age, gender, marital status, income, education, employment, nativity, region, English proficiency, general health status, mental health status, and disability status. Puerto Ricans and Vietnamese have higher public insurance rates within their ethnic groups, suggesting that their citizen or refugee status provides opportunities to access public benefits not available or needed by their counterparts. Mexican Americans appear to be in a disadvantageous position in comparison to the other Latino subgroups. Although Asian Americans as a whole do not differ much in insurance coverage, Vietnamese are the exception, with higher uninsurance and public insurance rates than the other three Asian American subgroups. The insurance outcomes of Asian Americans and Latinos diverge substantially.

There are several potential explanations for our findings. The Personal Responsibility and Work Opportunity and Reconciliation Act of 1996 (PRWORA) immigrant provision restricts states from using federal funds to provide Medicaid and State Children's Health Insurance Program (SCHIP) coverage for most immigrants who have resided in the US for less than five years. This restriction differentially affects low-income ethnic minorities who cannot enroll as refugees, particularly Latinos as compared to their Vietnamese counterparts. PRWORA's immigrant provision also requires that the income of recent immigrants' sponsors be "deemed" available to them in computing income eligibility for Medicaid even if the sponsor lives separately from the immigrant and does not contribute materially to the immigrant household. This requirement might threaten immigrants who have less stable jobs, as Latinos often do (28). A second potential explanation might be the differences in education between Latinos and Asian American groups. Asian Americans are more likely than any other racial/ethnic group to have a college degree (29), and consequently, obtain the type of jobs that include private insurance (e.g., computer, engineering occupations). In contrast, a higher percentage of Latino employees work in occupations less likely to include insurance coverage (e.g., agriculture, construction (18)).

While it is commonly believed that marital status and age affect access to public and private insurance (14), our results show a non-significant impact on insurance outcomes after controlling for some other covariates (Table 2). However, gender, household income, education, family employment, and region do relate to public insurance for Latino subgroups. A remarkable increase of Latinos in the US (58%) over the past decade when their growth was dramatically underestimated (30) could have undermined states' capacity to effectively

respond to Latinos' health demands, specifically in the South, where Latinos were 12% of the total population (31). One approach for addressing this unanticipated growth was to constrain the eligibility criteria of undocumented minorities in public programs, including Medicaid (11). Regional differences in the eligibility criteria for Medicaid and in the guidelines for coverage of health services to non-citizens might explain the regional variation of public insurance outcomes.

One important finding is that only immigrants (Latino and Asian) with less than five years in the US display significantly higher rates of uninsurance as compared to the US-born. PRWORA restricts Federal benefits for non-emergency care to most legally-admitted immigrants for the first five years they are in the US. Comparing the Latino groups by time in the US shows that unisurance might be related to health policy determinations of eligibility rules for public insurance, including Medicaid and SCHIP. Lack of English proficiency for Latinos, but not for Asians, also compounds the difficulties in obtaining private insurance (3). Language skills keep many ethnic groups from seeking public coverage (32) and English language proficiency may enable Latinos in the service industry to obtain jobs that provide health benefits (33). The fact that language proficiency does not impact health insurance for Asian Americans, suggests that language skills might not be imperative in their jobs.

Adjusting for the other covariates eliminates the significant sub-ethnic differences among Asian Americans in public insurance rates, except for Vietnamese, probably indicating that refugee status affords inclusion into public programs. The apparent opportunity of Asian Americans to obtain private health insurance without citizenship may be related to the professional and managerial jobs they hold. These positions may provide insurance for those with a green card or student visa (see (34)).

While the likelihood of private insurance is lower for Latino females than males, the opposite is true for Asian Americans. One explanation for these findings is that married Latinas may be more likely to have young children at home than Asians, keeping them out of the workforce Having more than a high school education appears tied to occupational opportunities that enable access to private health plans, but not to public insurance programs (35).

The fact that adjustments by health status and mental health status have minor effects on changing the distribution of insurance outcomes remains puzzling. It may be that health factors are more closely linked to barriers to care rather than barriers to insurance outcomes, particularly if insurance coverage is public or employment-based, with less opportunity for adverse selection.

A number of limitations apply to the present study. No information is available on insurance coverage from employers to determine if the high rates of uninsurance are due to differentials in coverage across employers. The extent to which these findings can be replicated in other immigrant populations requires verification. Despite the large total Latino and Asian sample sizes, statistical power might have been too small to detect differences across sub- ethnic groups. While this paper contrasted the patterns of insurance outcomes and potential vulnerabilities among Asians and Latinos, it is important to eventually add other population groups to the analysis.

Despite sharing some common potential vulnerabilities for poor insurance outcomes, health insurance coverage for Latinos and Asian Americans differ in systematic ways. The differential effect of language proficiency or of higher income across these groups raises important questions about the process by which integration of immigrants takes place in the US and what part of that experience is critical to obtaining public or private health insurance. More research is necessary to uncover the reasons for the differential impact of the factors influencing insurance outcomes. Our work so far provides evidence that policies affecting access to public coverage function differentially across groups. Closing the gaps in coverage for all groups will require a set of policies that take into account the set of factors particular to the group.

Table1. Insurance Outcomes, Sociodemographics, and Health Factors[1] for Latino and Asian Subgroups (Age <6:

	Puerto Rican	Cuban	Mexican	Other Latino	Total Latino	Vietnamese	Filipino	Chinese
Sample								
N	454	461	826	583	2324	471	461	558
% of ethnic sample	10.1	4.1	57.1	28.7	100.0	12.7	21.1	28.2
Insurance Status								
Private Insurance	52.4	52.1	39.2	54.3	45.4	56.9	73.3	74.3
Public Insurance	27.2	13.4	14.1	15.1	15.7	19.8	6.5	7.0
Other Insurance	3.5	3.0	1.9	2.5	2.3	2.6	7.1	4.4
Uninsured	17.0	31.5	44.8	28.1	36.6	20.7	13.0	14.4
Gender								
Female	54.7	51.6	45.8	52.1	51.3	49.2	53.0	51.2
Male	45.3	48.4	54.2	47.9	48.7	50.8	47.0	48.8
Age (y)								
18–24	17.3	12.2	22.9	20.6	21.3	13.8	18.4	12.0
25–34	24.6	21.5	31.2	31.2	30.2	23.2	24.3	23.6
35–49	38.0	33.7	33.1	34.0	33.8	38.7	33.2	41.3
50–64	20.1	32.6	12.8	14.3	14.7	24.4	24.2	23.1
Marital status								
Married	40.2	56.9	57.9	46.0	52.7	70.4	60.5	68.1
Divorced/separated/widowed	24.4	23.5	12.7	19.2	16.2	7.6	9.2	8.7
Never married	35.4	19.6	29.4	34.8	31.1	22.0	30.3	23.2
Household income ($)								
0–14,999	21.4	18.2	25.5	20.2	23.3	19.0	7.7	13.7
15,000–34,999	21.5	23.9	29.9	25.5	27.6	22.6	8.4	10.5
35,000–74,999	29.6	27.3	27.8	31.6	29.0	27.2	30.1	24.4
≥75,000	27.5	30.6	16.8	22.6	20.1	31.2	53.8	51.4
Education (y)								
Some high school or less (<12)	31.0	22.6	51.5	31.2	42.4	28.8	7.6	16.5
High school graduate (12)	29.3	26.1	24.8	24.6	25.2	22.1	21.1	15.8
Some college (13–15)	27.3	24.5	16.8	29.4	21.8	23.6	34.2	21.1
College degree or greater (≥16)	12.4	26.8	6.9	14.8	10.6	25.5	37.1	46.6

Subgroups (Age < 65 y) in the National Latino and Asian American Study.

(Table 1 continued) Insurance Outcomes, Sociodemographics, and Health Factors[1] for Latino and Asian Subgrou
National Latino and Asian American Study.

	Puerto Rican	Cuban	Mexican	Other Latino	Total Latino	Vietnamese	Filipino	Chinese	C A
Family employment [2]									
Not employed	25.2	18.0	16.0	18.0	17.6	15.7	16.3	17.7	
Employed	74.8	82.0	84.0	82.0	82.4	84.3	83.7	82.3	
Nativity[3], time in country (y)									
US born	58.4	18.1	41.4	38.6	41.3	3.7	32.4	18.2	
Immigrant, >5	39.2	61.2	47.9	50.6	48.3	79.9	55.7	67.9	
Immigrant, ≤5	2.5	20.7	10.6	10.7	10.2	16.4	11.9	13.9	
Region									
Northeast	61.8	5.7	2.3	37.4	18.5	17.9	8.4	17.9	
Midwest	11.0	0.0	9.2	6.0	8.1	3.0	7.6	8.6	
South	18.9	92.0	30.6	24.9	30.3	19.3	7.4	4.1	
West	8.4	2.3	57.9	31.8	43.2	59.8	76.6	69.4	
English proficiency									
Poor/fair	26.9	51.1	54.7	41.1	47.9	67.8	15.3	44.8	
Good/excellent	73.1	48.9	45.3	58.9	52.1	32.2	84.7	55.2	
General health status (self-report)									
Poor/fair	25.5	18.6	31.9	18.1	26.8	20.6	9.0	19.5	
Good/excellent	74.5	81.4	68.1	81.9	73.2	79.4	91.0	80.5	
Mental health status (self-report)									
Poor/fair	11.0	10.4	13.4	7.9	11.4	10.9	5.9	12.4	
Good/excellent	89.0	89.6	86.6	92.1	88.6	89.1	94.1	87.6	
Disability									
None	94.4	95.4	96.6	97.7	96.6	96.1	98.5	99.4	
Physical and other	3.4	2.3	2.7	1.9	2.6	2.7	1.5	0.3	
Emotional	0.2	0.8	0.0	0.2	0.1	1.0	0.0	0.1	
Physical and emotional	2.0	1.5	0.7	0.2	0.7	0.2	0.0	0.2	

[1] All data except sample *N* given as weighted percentages.

[2] One or more members of household employed or all unemployed.

[3] Persons born Puerto Rico are US citizens; "US born," "immigrant," and "time in country" refer to mainland birthplace, is time in mainland residence, respectively.

Table 2. Adjusted[1] Distribution of Insurance Outcomes for Latinos (Age < 65) in the National Latino and Asian American Study.

	Private insurance %	Public insurance %	Uninsured %
All Latinos[2]	48.0	12.0	40.0
Subgroup***			
Puerto Rican	55.5	19.0	25.5
Cuban	49.6	20.8	29.7
Mexican	41.9	10.4	47.7
Other Latino	56.1	11.8	32.1
Gender***			
Female	41.8	20.1	38.1
Male	52.7	7.1	40.2
Age (y)			
18–24	39.9	11.7	48.4
25–34	45.7	12.2	42.0
35–49	49.4	13.4	37.2
50–64	60.8	8.8	30.4
Marital status			
Married	50.3	13.1	36.5
Divorced/separated/widowed	46.1	12.9	41.0
Never married	44.7	9.9	45.5
Household income ($)***			
0–14,999	29.7	19.4	50.8
15,000–34,999	41.4	16.5	42.1
35,000–74,999	59.5	8.5	32.0
≥75,000	61.7	6.2	32.2
Education (y)***			
Some high school or less (<12)	38.5	14.8	46.6
High school graduate (12)	48.7	13.0	38.2
Some college (13–15)	55.9	8.8	35.3
College degree or greater (≥16)	68.3	6.5	25.2
Family employment [3] ***			
Not employed	28.1	29.0	42.9
Employed	52.1	9.7	38.2
Nativity[4], time in country (y)**			
US born	49.0	15.0	35.9
Immigrant, >5	49.0	11.7	39.3
Immigrant, ≤5	35.9	5.0	59.1
Region***			
Northeast	42.7	15.8	41.4
Midwest	63.8	9.5	26.7
South	41.9	6.8	51.4
West	50.3	15.9	33.8
English proficiency***			
Poor/fair	38.7	10.9	50.4
Good/excellent	56.5	12.6	30.9
General health status (self-report)			
Poor/fair	43.1	13.8	43.2
Good/excellent	49.9	11.4	38.7

Mental health status (self-report)			
Poor/fair	49.7	12.8	37.4
Good/excellent	47.8	11.9	40.3
Disability**			
Any	24.0	47.6	28.4
None	48.7	11.3	40.0

[1] Table gives predicted probabilities from a multinomial logistic regression with the effect of each covariate adjusted to the mean of all other covariates shown in table.

[2] Adjusted to the mean of all covariates.

[3] One or more members of household employed or all unemployed.

[4] Persons born Puerto Rico are US citizens; "US born," "immigrant," and "time in country" refer to mainland birthplace, island birthplace, and time in mainland residence, respectively.

* p <-0.05, ** $p < 0.01$, *** $p < 0.001$, for overall test of differences among indicated covariate(s).

Table 3. Adjusted[1] Distribution of Insurance Outcomes for Asians (Age < 65 y) in the National Latino and Asian American Study.

	Private insurance %	Public insurance %	Uninsured %
All Asians[2]	81.7	5.3	12.9
Subgroup[*]			
Vietnamese	75.8	11.2	13.0
Filipino	81.5	4.9	13.6
Chinese	84.2	3.8	12.0
Other Asian	81.3	5.5	13.2
Gender[**]			
Female	83.5	6.1	10.4
Male	79.5	4.7	15.8
Age (y)			
18–24	82.6	4.2	13.2
25–34	81.7	5.0	13.3
35–49	81.5	5.9	12.5
50–64	81.3	5.8	12.9
Marital status			
Married	85.4	4.7	9.9
Divorced/separated/widowed	78.1	6.5	15.5
Never married	70.7	6.8	22.5
Household income ($)[***]			
0–14,999	65.6	13.0	21.4
15,000–34,999	71.4	7.8	20.8
35,000–74,999	82.3	3.5	14.1
≥75,000	85.8	4.9	9.3
Education (y)[**]			
Some high school or less (<12)	74.2	7.6	18.3
High school graduate (12)	73.5	9.4	17.1
Some college (13–15)	77.2	7.6	15.2
College degree or greater (≥16)	87.7	3.1	9.3
Family employment [3] [***]			
Not employed	64.7	15.3	20.0
Employed	83.8	4.4	11.8
Nativity, time in country (y)			
US born	86.5	3.8	9.6
Immigrant, >5	81.6	5.8	12.7
Immigrant, ≤5	72.7	6.2	21.1
Region			
Northeast	77.9	5.3	16.8
Midwest	87.9	1.8	10.2
South	78.9	3.9	17.2
West	81.4	6.5	12.1
English proficiency			
Poor/fair	76.8	5.6	17.7
Good/excellent	83.6	5.2	11.2
General health status (self-report)			
Poor/fair	77.8	8.6	13.6
Good/excellent	82.2	5.0	12.8

Mental health status (self-report)			
Poor/fair	72.7	6.9	20.4
Good/excellent	82.3	5.2	12.4
Disability			
Any	62.6	14.8	22.6
None	81.9	5.2	12.8

[1] Table gives predicted probabilities from a multinomial logistic regression with the effect of each covariate adjusted to the mean of all other covariates shown in table.

[2] Adjusted to the mean of all covariates.

[3] One or more members of household employed or all unemployed.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, for overall test of differences among indicated covariate(s).

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