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Health Care Use Among Elderly Mexicans in the United States and Mexico:

The Role of Health Insurance

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Abstract

The authors sought to contribute to public policy on U.S. immigrants by comparing patterns of health care use among the Mexican-origin population aged 70 and older in the United States and Mexico. They studied the role of health insurance in the propensity to have doctor visits and hospitalizations, controlling for aspects of health and the economic and sociodemographic characteristics of individuals. The authors found that the elderly of Mexican origin in the United States were more likely to be hospitalized than those in Mexico, regardless of health insurance. However, in the absence of health insurance, visits to doctors were more likely in Mexico than in the United States. The results indicate that although in both countries, the availability of health insurance is associated with a higher propensity to use any health care services, a lack of health insurance may have more negative consequences for primary health care in the United States than in Mexico.

Keywords

immigrant; aging; health care; Mexico

The older immigrant population in the United States is a particularly important group to study for various reasons. First, this group may be less likely to have used health care services than the native population during their childhoods in their countries of origin. Second, the immigrant population tends to have low socioeconomic status and at old age may be less likely to use health care services even under conditions of full health insurance coverage. Third, the immigrant population may have been disproportionately exposed to hard physical labor conditions during their young adult years. Because of these factors, the immigrant elderly may be in a particularly vulnerable position, with health outcomes that

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may produce old age with higher disability burden, more costly health care, and a lower quality of life than among the native population.

Because Mexico has been the leading source of migrants to the United States in recent years, international migration from Mexico to the United States will gain more importance for U.S. policy makers. Accurate counts of net immigration from Mexico (entries minus exits) are difficult to obtain, but conservative estimates of net immigration, documented or not, in the 1990s range from 300,000 to 500,000 immigrants per year (Bean et al. 2001; Hill and Wong 2005). The long-term consequences of migration need to be understood to design policies that help ameliorate or minimize the negative consequences of such a volume of population movement.

International voluntary migration is traditionally perceived as taking place with long-term gains in mind. The migrants themselves may or may not reap the majority of the benefits of movement immediately or shortly after they move, perhaps not even in their own lifetimes. The benefits could well be for future generations of migrants' families. One policy concern is the long-term consequences of migration from Mexico to the United States regarding the health of migrants in old age. Although it is assumed that there should be health gains for populations migrating from Mexico to the United States, little is known about the health in old age of those who migrate to the United States compared with those who remain in Mexico, and the mechanisms through which these differences may operate are still largely unexamined. One possible explanation for differences is that the population of migrants observed in old age in the destination country is the result of selection processes: They are healthier to begin with, and the healthier ones tend to stay. Better access to health insurance and a higher quality of services in the destination country may also be mechanisms through which health gains can be obtained. The argument is that perhaps because of the differential quality of services, migrants may change their patterns of service use and tend to use more services in the destination country than in their origin countries. An alternative argument is that the lack of knowledge, language barriers, and costs deter Mexican migrants from using health services in the United States.

To better understand the patterns of health care use of Mexican immigrants in the United States, we examined the behavior of comparative groups of populations in the origin country (Mexico) and the destination country (the United States). Controlling for aspects of health, access to health insurance, and the economic and sociodemographic characteristics of the individuals, we compared the patterns of health care use among the population aged 70 and older, highlighting the role of health insurance. This comparison sheds light on the possible mechanisms through which health differentials are obtained and allows for a better understanding of the health care behavior of the populations in both countries.

The overarching hypothesis of this research was that immigrant older adults would have better health care coverage in the United States than in Mexico, but this enhanced coverage would not necessarily translate into more use of health care services. The implications for public policy are vast, particularly because the old-age burden of disease may result in higher health care costs for the United States but also in worse old-age well-being for the immigrant populations. In this context, we expected that the effect of health insurance

availability on the propensity to use health care would be weaker among Mexican immigrants in the United States than among Mexicans in Mexico. This is because language and trust barriers for health care use should not be present in Mexico.

We argue that the immigrant population, even when they have health insurance, may be less likely to use health care than the native population. Under similar conditions of illness, the U.S. immigrant population is more likely to deal with episodes of illness or chronic conditions without seeking formal care. If this behavior were observed, one could argue that it is due to cultural norms or beliefs about the formal health care system. That is, because of tradition or culture from their countries of origin, individuals in old age would not make use of the formal health system to address their health care needs. Indeed, it could be argued that immigrants from Mexico are less likely to use formal health care because they tend to self-medicate or use traditional or alternative medicine methods (Goldman and Smith 2002). If the limiting constraint to use were cultural, we would expect that having health insurance should not represent a major facilitating factor and should not be associated with more health care use among Mexicans in Mexico and Mexicans in the United States. However, if the constraining factors are other barriers to use, such as language barriers and a lack of trust or knowledge of the health system in the United States, the effect of insurance on use should be stronger for Mexicans in Mexico than for Mexicans in the United States.

We analyzed the overall health care coverage of similar-age cohorts in Mexico and the United States and estimated comparable models of health care use. Controlling for factors that measure health care need, preferences for health and health care, and enabling factors, we estimated the marginal effect of having health insurance on the propensity to use health care for two outcomes of use: doctor visits and hospitalizations. We treated these two outcomes separately because they should be sensitive to the availability of health insurance in different ways given that their relative out-of-pocket costs are quite different.

Brief Summary of Aging and the Institutional Context in Mexico

Population aging has accelerated in Mexico since 2000, a pattern that characterizes most Latin American countries. The observed changes in life expectancy in Mexico in the past 65 years imply that the mortality risk declined by more than 80% from 1930 to 1995. Life expectancy at birth in 2000 has been estimated at 73.1 years for men and 77.6 years for women. The total fertility rate has continuously declined since the mid-1960s from 7.2 children per woman to about 2.5 in 2000 (Partida Bush 1999). Unless there is an increase in fertility or in old-age mortality to offset this momentum, the percentage of the population aged 60 or older will increase from 4.4% in the year 2000 to about 25% by 2050. By way of comparison, 13% of the U.S. population was aged 60 and over in 1950, and this percentage is projected to increase to about 25% by 2025 (Partida Bush 1999; U.S. Census Bureau 1998).

The changes in the relative and absolute size of the older population in Mexico are occurring during a period of “epidemiologic polarization,” that is, mortality regimes under which both infectious and chronic diseases are simultaneously prevalent (Garrido, Ramírez-Villalobos, and Gómez-Dantés 1999; Murray and López 1997). This means that the Mexican aging

process is affected by an unusual interaction of chronic conditions associated with modern health and mortality risks and conditions that are residual to a transitional regime. The aging processes under these peculiar conditions may be such that the set of symptoms, physical limitations, and functional disabilities would be expected to be higher in Mexico than in the developed world, with implications for active life expectancy and the volume of demand for health care.

The health care system in Mexico has a public sector orientation, but it includes both public and private components. The public sector is composed of institutions that provide health care for the population working outside of the formal sectors of employment or the uninsured. These are the Ministry of Health, the National Institutes of Health, the Social Security System Solidarity Program, the National System for Integral Family Development, and the Health Services of the Federal District. The public sector also covers the population employed in the formal sector with health insurance through a social security system: those belonging to the Mexican Institute of Social Security, the Institute of Social Security and Services for State Workers, Armed Forces Social Security, Mexican Oil Workers Social Security, and other health services for state and federal government employees. The private sector includes a variety of individuals and institutions working in a range of traditional and alternative medicine, mobile units, hospitals and clinics, private practices, and private medical insurance. In the late 1990s, social security institutions covered almost half of the Mexican population, institutions for the uninsured covered 40%, 5% used private services, and 11% had no access to the health system's facilities. Private pharmacies are a major source of informal care; pharmacists generally prescribe medicines and treatment in Mexico.

In summary, the provision of health services is largely the responsibility of the public sector. The Mexican government uses general revenues to pay for health care of middle- and low-income groups of the population, whereas upper-income households (a minority) use private insurance or resources to pay for private health care. Coverage by the social security system is determined largely by participation in the formal labor market; hence, the system tends to discriminate against agricultural workers and those living in rural areas, domestic workers, and small commerce industry workers. If a worker is covered by social security, however, his or her dependents are generally extended the benefit of health care.[1] As a result, the use of health care varies widely by income and education groups in Mexico (Lozano, Infante, and Frenk 1993; Parker and Wong 1997). Under this set of conditions, it is reasonable to argue that the population, particularly those with low socioeconomic status (among whom migrants to the United States are disproportionately selected), tend to have low exposure to the formal health sector in their countries of origin and may have a culture of not seeking formal care in case of illness. In addition, scholars have argued that language barriers and a lack of knowledge or trust in the health care system of the destination country may result in U.S. immigrants seeking care less often than their native counterparts.

[1]Recent changes have been implemented in the Mexican public health system, starting in January 2004. Under the proposed reform, "popular health insurance" is available to the general population, but its implementation will be gradual, and it is too early to assess the impact of the reform on the health care coverage of the overall population (Secretaría de Salud 2004).

Data

We used data from two surveys conducted in Mexico and the United States: the Mexican Health and Aging Study (MHAS) and the Hispanic Established Populations for Epidemiologic Studies of the Elderly (HEPESE). We formed four groups for the purposes of descriptive comparisons: in Mexico, using the MHAS, (1) former residents of the United States who are now residing in Mexico (U.S. migrants) and (2) residents of Mexico without histories of residence in the United States (non–U.S. migrants); and in the United States, using HEPESE, (3) U.S. residents who are Mexican Americans born in the United States and (4) U.S. residents born in Mexico.

Mexican Health and Aging Study

Funded by the National Institute on Aging, the MHAS is a nationally representative, prospective panel study of individuals aged 50 and over in 2000 in Mexico.[2] Data were collected on multiple domains of health; demographic traits, including the migration history of respondents, their parents, and their offspring; family networks and transfers exchanged; some work history; income, assets, and pensions; and aspects of the built environment. States with high rates of out-migration to the United States were oversampled. Instituto Nacional de Estadística, Geografía e Informática in Mexico completed baseline interviews with about 15,000 respondents from May to August 2001. These data were particularly useful for the purposes of this study because the survey gathered information on health, current income, the use of health services, and past migration to the United States, a characteristic that has been difficult to obtain for countries such as Mexico, in which migration to the United States can be an important strategy for survival. For the purposes of this study, we used the baseline 2001 data, and we selected individuals aged 70 or older who completed direct interviews. The age cutoff point was selected to increase comparability with the survey data that we used for the United States.

Hispanic Established Populations for Epidemiologic Studies of the Elderly

Also funded by the National Institute on Aging, HEPESE was based on an area-probability multistage sample of Mexicans and Mexican Americans aged 65 and over, noninstitutionalized, residing in the five southwestern states of Texas, New Mexico, Colorado, Arizona, and California.[3] About 85% of Mexican American elderly reside in these states, and this sample is representative of about 500,000 Mexican Americans and Mexicans residing in the study states. The baseline data were collected in 1993 and 1994 from 3,050 individuals (Markides et al. 1997). About half of the respondents were born in Mexico. Subjects were followed up through 2001, with three waves of data collection after the baseline, in 1995 and 1996, 1998 and 1999, and 2000 and 2001. For the purposes of this study, we used the third phase of the study (1998 and 1999) to consider the population of Mexican origin or background aged 70 or older in 1998 residing in the United States.

[2]The data and documentation can be obtained at http://www.mhas.pop.upenn.edu.
[3]The data and documentation can be obtained at http://www.icpsr.umich.edu/nacda.

Health Care Coverage of the Populations

As expected, the population in Mexico tended to have low health care coverage compared with those in the United States. About half of the population in Mexico lacked health insurance, although the elderly tended to have slightly higher coverage compared with other, particularly young, age groups (Instituto Nacional de Estadística, Geografía e Informática 2000). More than children or young adults, the elderly in Mexico tended to be covered because they were either workers or retirees or dependent spouses, widows, or parents of covered workers (Parker and Wong 2001). The weighted survey data show that the population aged 70 and older in the United States had much higher health care coverage than the comparable population in Mexico. In HEPESE, almost all (99.7%) of those born in the United States had any health insurance, compared with 97% of those born in Mexico. In contrast, the MHAS showed that 52% of those in Mexico who had never been migrants in the United States had some health insurance, compared with 54% of those who were former U.S. migrants. This is due to the almost universal health insurance coverage by Medicare in the United States. We also noted that more than 40% of the elderly in the United States reported coverage by Medicaid and that most of the covered elderly in Mexico subscribed to a public system; only 5% of the elderly were covered by private insurance.

Characteristics of the Populations

Table 1 presents the descriptive statistics for the covariates in the regressions. For individuals aged 70 or older in the United States, we found that women represented a higher share of the elderly among those born in the United States (about 60%) than among those born in Mexico (53%). The latter more closely resembled the share of women among residents of Mexico (50%). The educational level of the elderly was lower in Mexico than in the United States. Almost half of those in Mexico reported no formal education, compared with only 15% of those residing in the United States. Those in Mexico were a younger group than those residing in the United States. About 40% of those in Mexico were aged 70 to 74, compared with 27% of those in the United States.

The unadjusted prevalence of doctor visits in a 12-month reference period was higher among residents of the United States (88%) than those in Mexico (65%). A similar higher propensity was found for hospitalizations among Mexicans who were U.S. residents (20%) than those residing in Mexico (10%). Within the U.S. residents, however, the unadjusted prevalence of doctor visits and hospitalizations was similar for United States–born and Mexico-born elderly. Also, use was similar within Mexico if the contrast was between those who were former U.S. migrants and those who were not.

The results showed lower prevalences of self-reported diabetes, heart attacks, stroke, and cancer in Mexico than in the United States. The lower self-reported prevalences of these conditions among Mexicans in Mexico could be due to the lack of access to health care, which could yield a lower propensity to diagnose chronic conditions, or to the cultural practice of not disclosing the presence of certain illnesses to elderly patients. In contrast, self-reported functional limitation should not be sensitive to diagnosis or contact with the health system to declare it.

As indicators of functionality, we used self-reports of difficulty with at least one activity of daily living (ADL) and difficulty with at least one instrumental ADL (IADL). For comparability across the surveys, we used the corresponding common questions. For ADLs, we used difficulty with walking across a room, bathing, eating, getting in and out of bed, or using the toilet. For IADLs, we used reported difficulty managing money, shopping, taking medicines, or cooking a hot meal. It is worth mentioning that there was a slight variation in the wording of the questions between the two studies.[4] Nevertheless, the items were judged to be comparable to construct indicators of self-reported limitations across the two surveys.

With respect to ADLs, the elderly in Mexico reported a lower prevalence of at least one difficulty (16%) than those in the United States (19%). Among those residing in the United States, those born in the United States reported a lower prevalence (17%) than those born in Mexico (22%). Similar results were found for IADLs. The elderly in Mexico reported a lower prevalence (19%) than those living in the United States (28%). Overall, for the population aged 70 or older, the Mexico-born elderly in the United States and the non–U.S. migrants in Mexico reported the highest prevalence of functional limitations.

In summary, compared with the elderly of Mexican origin in the United States, the results imply better health indicators for Mexicans in Mexico. The results held for main chronic conditions and for functional limitations. Thus, differences in the use of health care services in the United States compared with Mexico could be in part due to the worse functionality and perceived health prevalent among the U.S. elderly.

Methods and Results

We used probit regression methods to estimate the probability of seeking health care in both countries. To highlight the role of health insurance and contrast its effect in Mexico compared with the United States, we used regression model estimates and calculated the estimated probability of using health care in both countries, with and without health insurance. Because we needed to estimate comparable models over both data sets, we were somewhat constrained in the specification of the model by the availability of common variables. However, we were able to control for the following explanatory variables and aimed to cover at least the following factors (illustrative variables are in parentheses): (1) preferences for health and health care (sex, education), (2) factors that enable the use of services and production of health (income, education), (3) prices or indicators of access to health services (the availability of health insurance, migration status in Mexico, nativity in the United States, urban or rural area of residence in Mexico), and (4) the need for health care services (age, type of illness reported).

Dependent Variable: Health Care Use

We estimated regression models for two different dependent variables of health care use: whether a respondent had one or more doctor visits and whether a respondent had one or

[4]The difference was that HEPESE asked if an individual needed help from a person, device, or equipment to perform each ADL, whereas the MHAS asked whether because of a health problem, a person had difficulty performing each activity.

more hospitalizations. The relevant questions for both surveys referred to the period of 12 months prior to the interview.

Table 2 presents the marginal effects obtained from the probit regression models. We summarize only a selection of the findings. With respect to the health conditions that we included in the models, we found that having had a heart attack showed the highest marginal effect on hospitalizations in both countries. Having diabetes had the largest marginal effect on visits to the doctor, particularly among those residing in the United States. Among those in Mexico, it appeared that cancer and diabetes exerted similar effects on visits to the doctor.[5]

The effect of health insurance coverage played a dominant role on the propensity to visit a doctor in the United States but not in Mexico. The marginal effect of health insurance was larger than the marginal effect of illness in the United States, whereas the presence of illness seemed to dominate the effect of health insurance in Mexico. This could be explained by the relative lower out-of-pocket cost of doctor visits in Mexico compared with the United States, and this is because the private health sector for medical consultations is quite active in Mexico at all levels of income. This active market could also be partly a result of the large proportion of the population without health care coverage in Mexico compared to the United States.

The results were quite different for the hospitalizations. Having health insurance was not significant to the propensity to be hospitalized in the United States. The effect of a health condition seemed to be the predominant determinant of hospitalizations, and this held for all four chronic conditions included in the model. In Mexico, however, having health insurance was significantly associated with a higher propensity to be hospitalized.

To highlight the effect of the availability of health insurance across the two countries, we estimated the probability of using health care, holding all other variables constant at the same value in both countries, allowing only health insurance to vary.[6] Those without insurance were more likely to visit a doctor in Mexico (0.67) than in the United States (0.55), whereas those with insurance were more likely to visit a doctor in the United States (0.91) than in Mexico (0.77). Thus, in contrast to those who had no health insurance, having health insurance was associated with a higher propensity to visit a doctor by 63% in the United States and by 15% in Mexico.[7] The results varied for the use of hospitalization, however. Holding all else constant, the use of hospitalization was higher in the United States for those both without and with insurance (0.16 and 0.23, respectively) than in Mexico (0.12

[5]We also estimated an alternative regression model that included a variable capturing the number of years in the United States for the immigrant population in the United States for HEPESE and former U.S. migrants for the MHAS. The results of the regression shown here were unchanged, and the number of years in the United States showed no significance; thus, we omitted this alternative model.

[6]We estimated the probability of having at least one visit to a doctor and at least one hospitalization for a man aged 70 to 74 with low education and low income who reported having been diagnosed with diabetes, but no heart attack, no stroke, and no cancer, who was an urban resident and never a U.S. migrant in the MHAS and born in Mexico in HEPESE. We also estimated the probabilities for other profiles of individuals (not shown), for example, when all values of the explanatory variables were held at the mean, and the results were similar. We chose to present these results for ease of interpretation.

[7]The estimated probability associated with no insurance was 0.55 and with insurance was 0.91 (a 63% change). For Mexico, the equivalent figures were 0.67 with no insurance and 0.77 with insurance (a 15% difference).

and 0.18, respectively). The increased propensity to be hospitalized associated with health insurance was about the same in both countries (about 49%).

The results indicated that in both countries, the availability of health insurance was associated with the higher use of health care services, and as expected, the effect of health insurance varied for doctor visits and for hospitalizations. Health insurance increased the propensity to be hospitalized by almost half in Mexico. On the other hand, the lack of health insurance prevented Mexicans in the United States from seeing a doctor to a larger extent than it did in Mexico. Another way to interpret this result is that the availability of health insurance encouraged Mexicans in the United States to visit a doctor to a larger extent than it did in Mexico, whereas it enabled Mexicans in Mexico to be hospitalized to a greater extent than it did in the United States.

Discussion

The purpose of this study was to model the propensity to use health care services across groups of elderly individuals of Mexican origin or background residing in Mexico and in the United States, with a focus on the role of the availability of health insurance. Because social security and public health care coverage for the elderly are quite limited in Mexico compared with the United States, a priori, we expected health insurance to play a more prominent role in the use of health care in Mexico than in the United States. We also expected that, conditional on having health insurance, the population residing in Mexico would be more likely to use health services than those living in the United States because the latter face language and other similar barriers that should be absent in Mexico. The evidence presented in this article supports both expectations only partly.

The hypothesis that Mexican elderly in the United States would use health services to a lesser extent than their counterparts in Mexico seems to hold only for those without health insurance and for doctor visits. Holding all else constant, regardless of health insurance, those in the United States are more likely to use hospitalizations. The results indicate also that for individuals aged 70 or older, the gains from having health insurance, measured by the relative increase in health care use, appear to be larger in the United States than in Mexico. Controlling for aspects of health, education, and ability to pay for services, the gains from having health insurance are larger in the country where the cost of out-of-pocket health care is larger. Furthermore, this appears to be even more pronounced for doctor visits than for hospitalizations. This could be the case because of the large role played by the private sector at all levels of income in the provision of care in Mexico. And this could apply more to doctor visits than to hospitalizations. The relative cost of care for hospitalizations may be more prohibitive for Mexicans in Mexico, so that the relative gain from having health insurance is larger for hospitalizations in Mexico. This could also reflect the possibility that people may delay visits to the doctor in Mexico until it is absolutely necessary to be hospitalized.

It is possible that there are unobserved factors omitted from the models that help explain the results. By comparing groups of Mexicans on both sides of the border, we accounted for some of the unobserved heterogeneity of the common culture. However, there could be other

sources of variation that are unobserved, for example, the medical practices in both countries may be such that more hospitalizations are encouraged in the United States than in Mexico, or the relative gain in the quality of services enabled by the availability of health insurance may be greater in the United States than in Mexico.

There are various limitations worth mentioning, in particular the fact that we used cross-sectional data for the analyses. Both studies now have panel data, and it would be possible to observe changes in health care use as health transitions occur. We also need to consider that the extent of the health insurance coverage (almost universal for the elderly in the United States, compared with about 50% in Mexico) may affect the results obtained. It is possible that when health insurance coverage reaches high levels among the population, the marginal gain obtained is higher than when coverage levels are low. As in many cross-national comparisons using multiple data sources, the results could also be affected to the extent that definitions vary across surveys, as well as fieldwork protocol and the wording of questions. Nevertheless, it seems to us that the potential for understanding the health processes of the elderly increases substantially when we make cross-national comparisons. In particular, when comparisons are made among groups that share cultural and socioeconomic backgrounds, such as migrants in the origin and destination countries, the analyses can be enriched to inform social policy. Further work needs to be done along these lines to understand the consequences of international migration for the well-being of the population in old age in both the origin and destination countries.

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Biographies

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Monica Higgins is currently a researcher and senior data manager of the New Immigrant Survey at Princeton University. She received a master’s degree in population and development from the Institute of Social Studies in the Netherlands. She has served as lecturer in the Department of Economics at Princeton University and worked as an associate investigator at the University of Pennsylvania Population Studies Center. Her research

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Table 1

Descriptive Statistics, Population Aged 70 and Older by Nativity and Migration Status in the United States and in Mexico

	Mexicans in the United States		Mexicans in Mexico	
Variable	**U.S. Born**	**Mexico Born**	**Non–U.S. Migrants**	**U.S. Migrants**
Number of observations	698	898	2,389	334
Visited a doctor (%)	87.9	87.5	64.4	66.3
Stayed in a hospital overnight (%)	19.3	20.5	9.3	12.9
Any health insurance (%)	99.7	97.0	51.7	54.4
Gender female (%)	60.9	53.3	54.0	16.4
Education (%)				
1 to 5 years of schooling	39.1	55.4	30.9	39.1
6 or more years of schooling	45.9	26.5	22.2	19.7
Age (%)				
70 to 79	66.2	63.8	69.9	76.4
80 or older	33.8	36.2	30.1	23.5
Residence, urban (%)			41.7	42.0
Income (%)				
Medium level	38.7	27.3	33.8	31.5
High level	12.6	9.4	20.5	31.2
Health (%)				
Heart attack	16.4	16.5	3.2	6.5
Stroke	10.1	13.2	3.1	3.9
Cancer	11.8	7.8	1.7	1.9
Diabetes	32.3	30.3	15.5	14.0
Difficulty with one or more ADLs	16.9	21.7	16.0	12.3
Difficulty with one or more IADLs	23.9	32.5	20.4	10.2

Source: Authors' calculations using Hispanic Established Populations for Epidemiologic Studies of the Elderly (1998) for the United States and the Mexican Health and Aging Study (2001) for Mexico.

Note: Weighted statistics. ADL = activities of daily living; IADL = instrumental ADL.

Table 2

Probit Regressions, Marginal Effects of Visits to the Doctor and Hospitalization

	Visited a Doctor		Hospitalization	
Variable	**United States**	**Mexico**	**United States**	**Mexico**
Any health insurance	.381***	.108***	.072	.048***
Male (reference group: female)	−.036**	−.092***	−.004	−.001
Education (reference group: no schooling)				
1 to 5 years of schooling	−.031	.085***	−.030	.016
6 or more years of schooling	−.018	.056**	−.054*	−.034**
Age (reference group: 85 or older)				
70 to 74	.016	−.024	−.079**	−.032
75 to 79	.002	.005	−.049	−.010
80 to 84	.024	−.010	−.035	−.028
Urban (reference group: rural)		−.017		.011
Income (reference group: low)				
Medium	.067***	.055**	−.007	−.005
High	.045*	.045*	−.092***	.002
Health				
Heart attack	.035	.150***	.122***	.190***
Stroke	−.002	.004	.081**	.045
Cancer	.013	.218***	.081**	.146***
Diabetes	.060***	.198***	.083***	.041**
Mexico born (reference group: U.S. born)	.027		−.005	
U.S. migrant (reference group: non–U.S. migrant)		.024		.020
Observations	1,565	2,720	1,565	2,720
LR chi-square test	55.898	209.058	79.269	86.678
Observed probability	.868	.667	.223	.124

Source: Authors' calculations using Hispanic Established Populations for Epidemiologic Studies of the Elderly (1998) for the United States and the Mexican Health and Aging Study (2001) for Mexico.

Note: Population aged 70 and older. LR = likelihood ratio.

*Significant at 10%.

**Significant at 5%.

***Significant at 1%.