Health Insurance Instability Among Older Immigrants: Region of Origin Disparities in Coverage

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Objectives. We provide a detailed analysis of how the dynamics of health insurance coverage (HIC) at older ages differs among Latino, Asian, and European immigrants in the United States.

Method. Using Survey of Income and Program Participation data from the 2004 and 2008 panels, we estimate discrete-time event history models to examine first and second transitions into and out of HIC, highlighting substantial differences in hazard rates among immigrants aged 50–64 from Asia, Latin America, and Europe.

Results. We find that the likelihood of having HIC at first observation and the rates of gaining and losing coverage within a relatively short time frame are least favorable for older Latino immigrants, although immigrants from all three regions are at a disadvantage relative to native-born non-Hispanic Whites. This disparity among immigrant groups persists even when lower rates of citizenship, greater difficulty with English, and low-skill job placements are taken into account.

Discussion. Factors that have contributed to the lower rates and shorter durations of HIC among older immigrants, particularly those from Latin America, may not be easily resolved by the Affordable Care Act. The importance of region of origin and assimilation characteristics for the risk of being uninsured in later life argues that immigration and health care policy should be jointly addressed.

Key Words: Citizenship—Health Insurance—Immigration—Region of origin.

In the past 20 years, the older foreign-born population of the United States has grown in number and ethnic diversity. Expanding from 2.7 million to 4.6 million people between 1950 and 2010 and expected to top 16 million by 2050 (Treas & Batalova, 2007), immigrants from Latin America and Asia are replacing earlier cohorts of immigrants who came primarily from European countries. This growth reflects the aging of immigrants who arrived as children or young adults pre- and post-1965 as well as a recent acceleration in the numbers of new immigrants who arrive at older ages through policies of family reunification (U.S. Department of Homeland Security, 2006).

More than one-third of these more recent arrivals come from Latin America, and another 30% come from Asia (U.S. Department of Homeland Security, 2004). Although the oldest members of our foreign-born population echo the European ancestry of the early 20th-century immigrants, those on the verge of old age reflect the Latin American and Asian ancestry of the post-1965 wave of arrivals. By 2050, the proportion of foreign-born elderly who are Hispanic or non-Hispanic Asian is expected to increase to about 70% (U.S. Census Bureau, 2003).

The assimilation literature argues that as foreign-born adults or immigrant children adapt to their new culture, they will experience greater economic success and be better integrated into mainstream social institutions (Bean, Leach, and Lowell, 2004; Waters & Jiménez, 2005). As assimilation is more difficult with age (Myers, Gao, & Emeka, 2009), less assimilated foreign-born adults—middle-aged and older—are at a disadvantage relative to those who are more integrated into U.S. culture, particularly when negotiating complex bureaucracies and understanding variable and changing rules and regulations. Securing health insurance coverage (HIC) can be one of the more complicated tasks. Further, because socioeconomic status (SES) is positively associated with HIC, assimilation and SES differences among adult immigrants may have long-term consequences for the health and well-being of this growing foreign-born population. Recent policy changes have made health insurance programs for foreign-born adults less common and more restrictive than those for foreign-born children and pregnant women (Zimmerman & Tumlin, 1999). While recent health care debates highlighted the rising number of uninsured, little attention was given to the gap in coverage between native- and foreign-born adults—particularly those from Asia and Latin American—as they approach later life. Although we assume that coverage from private plans (often employer sponsored) is replaced or supplemented by Medicare at age 65, for some previously uninsured people, this new coverage inaugurates a period of consistency in screening and treatments that often cost more than those used at earlier stages of illness (McWilliams, Meara, Zaslavsky, & Ayanian, 2007, 2009).

In this article, we provide evidence as to how the likelihood and consistency of HIC for preretirement aged foreign-born...
adults from Latin America, Asia, and Europe are stratified relative to their region of origin. We attend primarily to the differences among immigrant groups, while using coverage for native-born non-Hispanic Whites as a point of reference. Analyzing triennial data from the two most recent Survey of Income and Program Participation (SIPP) panels, we estimate models of HIC for respondents aged 50–64 to assess HIC disparities among those born in Latin America, Asia, and Europe. Then we estimate event history models of HIC losses and gains through two transitions to assess the relative duration of their coverage spells. By addressing the dynamic structure of HIC, we move beyond the classification of insurance status at one point in time to an assessment of coverage consistency. In identifying those who are intermittently insured, we demonstrate how a cross-sectional view of HIC among the older foreign-born underestimates the number of foreign born who experience spells without coverage or whose coverage may be short-lived. Further, this longitudinal perspective adds to our understanding of the stratification among the older foreign born, including but not limited to where they were born.

**Policy Contexts**

When Medicare and Medicaid were passed in 1965, the age structure of the foreign-born population was skewed toward those aged 60 and older, a reflection of the high rates of young European immigrants who arrived in the early part of the 20th century. In 1965, when the Hart–Cellar Act shifted immigration policy from quotas to family reunification, the number of immigrants from Asia and Latin America increased rapidly and began to gradually replace the older cohorts of European immigrants.

In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) increased the significance of gaining citizenship as a marker of eligibility for public programs. Presented as welfare reform, PRWORA largely eliminated access to public assistance for new immigrants to reduce costs (Fix and Haskins, 2002). Prior to 1996, public assistance was available to legal permanent residents on similar terms as native born and naturalized citizens. Post-PRWORA, new immigrants were categorically ineligible for public assistance for 5 years (with few exceptions), with subsequent eligibility based on personal as well as their sponsors' income until they naturalized or completed 40 quarters of covered employment. PRWORA, therefore created a new and more complicated bureaucratic landscape for immigrants (Singer, 2004).

**Differences Among Immigrants**

In addition to their regions of origin, immigrants differ by legal status, education, work skills, family structure, and language ability. These characteristics shape their employability, economic success, interaction with federal and state bureaucracies, and the likelihood that they will become citizens, all of which can have important implications for HIC. Also, their age and year of arrival places them in a particular policy context that may further restrict their eligibility for government subsidized HI programs. Longer duration in the United States is positively associated with greater English proficiency (Bean & Stevens, 2003), although even longer term residents who arrived at older ages tend to be less fluent than those who relocate when younger (Alba & Nee, 2003; Jasso & Rosenzweig, 1990). Regardless of the number of years in the United States, Spanish speakers are less likely to develop fluency in English than those speaking other native languages (Carlmer, 2000). According to recent reports, one-third of Latino immigrants live in “linguistically isolated” households, in which none of the adults speak English well (U.S. Census Bureau, 2013).

Rates of naturalization also differ for these regional groups. The language requirements and costs of naturalization partially explain why immigrants from Mexico, for example, tend to naturalize at lower rates, even after satisfying the years of residency requirements (Hoefer, Rytina, & Baker, 2012). While close to two-thirds of European immigrants and almost 60% of Asian immigrants are citizens, only one-third of Latin American immigrants and less than one-quarter of those from Mexico have naturalized (Grieco et al., 2010).

Education, employment, and household income also differ across immigrant groups. Even among the native-born, more highly educated and higher income people have higher rates of HIC (DeNavas-Walt, Proctor, & Smith, 2013). Compared with other regional groups, Asian immigrants are more educated, have higher household income, and are more likely to work in jobs that offer private insurance (Schur & Feldman, 2001). And although full-time employment provides many people with access to HIC through employer-sponsored plans, full-time work in industries such as agriculture, household service, and construction—common employment for Latino immigrants—is less likely to offer such coverage (Bell, Kwasiga, & Berry, 2010; Alegría et al., 2006).

Finally, pan-ethnic immigrant groups differ in their legal status. Recent estimates suggest relatively few of the foreign-born population aged 55 and older may be undocumented (Capps, Bachmeier, Fix, & Van Hook, 2013), but Latino immigrants comprise over 80% of those who are undocumented (Hoefer, Rytina, & Baker, 2012). Because all these characteristics are linked to obtaining and keeping HIC, compositional differences across regions may produce unequal coverage rates for immigrant subgroups. Since Latin American immigrants are relatively disadvantaged on factors associated with HIC, older Latino immigrants may be at the greatest disadvantage in terms of securing HIC from any source.

**Preretirement HIC as Precursor to Health in Later Life**

Many screenings and recommended health checks are scheduled to begin at age 50. Cancer screenings (Centers
for Disease Control, 2013), lab work to check for risk factors associated with hypertension and cardiovascular disease, and bone density measurements, for example, make age 50 an especially important age for HIC. Preventing, detecting, or treating chronic diseases in early stages are considered more cost-effective approaches. However, studies have demonstrated that Medicare-funded screenings for the previously uninsured identify later stage diseases, which require more aggressive and more costly treatment (McWilliams et al., 2007). Medicare spending is significantly higher for previously uninsured individuals compared with those who had HIC (McWilliams et al., 2009). Foreign-born adults are more likely to work in jobs that offer no HIC; they may be ineligible for Medicaid because of legislative restrictions; and they are three times as likely as native-born adults to be uninsured (Buchmueller, Lo Sasso, Lurie, & Dolfin, 2007). This HIC disadvantage also holds for older immigrants, many of whom have lived in the United States for decades. Even so, information about subgroup differences in HIC among older immigrants is limited as is our understanding of subgroup differences in whether coverage, once obtained, is consistent or sporadic.

Research Questions

If lower rates of HIC among region of origin groups can be attributed to assimilation, education, and lower income, then once the relationship between these factors and HIC is addressed, subgroup differences should be reduced if not eliminated. If subgroup differences in HIC persist, do they extend to the stability of coverage? Is the primary hurdle of immigrant subgroups securing coverage, or do they also differ in the length of their spells of coverage? We hypothesize that what appears as a coverage gap between native- and foreign-born in cross-sectional analysis reveals only one dimension of disadvantage in HIC. If this is the case, we expect foreign-born to have greater risk of losing HIC and lower risk of gaining HIC. Stratification among older immigrants from different regions of the world places some groups at relative disadvantage even among the foreign born. Further, since Latino immigrants are least likely to have characteristics associated with HIC, we expect this subgroup to be doubly disadvantaged by both their immigrant status and their region of origin. So among immigrants we expect those from Latin America to lose HIC more quickly and gain HIC more slowly.

In sum, although population aging and its associated health care costs have received considerable attention in both research and policy circles, we know little about where and how subgroups of older foreign-born residents fit into this picture. Further, because the regional heritages and compositional characteristics of older immigrants have been shifting, an understanding of how the HIC prospects of immigrants may differ by region of origin and by characteristics associated with both assimilation and economic success is particularly relevant to current policy debates. Generic interventions to improve HIC among the adult foreign-born may be more effective for some regional groups than others, but the first step is to understand how the stratification among region of origin groups is structured.

Method

Data and Design

We study respondents aged 50–64 from the pooled 2004 to 2008 panels of SIPP, a longitudinal survey based on separate, independent samples of respondents who are interviewed every 4 months for up to 4 years. Once aged 65, eligibility for Medicare reconfigures HIC, in general, and the risk of losing coverage, in particular. As respondents turn 50, they age into our sample; respondents age out of the risk group when they turn age 65. By pooling the 2004 and 2008 panels, we gain a longer overall time span and sufficient power to disaggregate the foreign born by regions of origin. The 2004 respondents were interviewed a total of 12 times over a span of 4 years. Data from the 2008 panel are available through the 10th interview, collected in August 2011. We control for the fixed effects of these differences in panels in all models. Information on migration history and immigration status is collected in the second interview (4 months into the survey); therefore, we begin our observation period at that time.

SIPP has a number of strengths for studying changes in HIC. Respondents continue to be interviewed even when they no longer reside in the original households and have formed new ones. Information on their HIC is collected on current coverage status and retrospectively (in the initial survey on HIC), allowing us to address left censoring by controlling for the duration of their first observed HIC status. Also, because of the large size of the SIPP samples, the number of older immigrants is sufficient for subpopulation comparisons among immigrants by region of origin. Compared with 26,557 native-born non-Hispanic White respondents (NBNHW), we identified 2,992 immigrants aged 50–64: 1,260 from Latin America; 1,119 from Asia; and 613 from Europe. To provide a comparison with the native born, we also include NBNHWs as a separate subgroup.

SIPP has an attrition rate of about 35% over the 4 years of the survey; however, attrition rates between natives and immigrants are similar. Also, the discrete-time event history models incorporate information from all respondents from the second survey until they experience a change in insurance status or until they are lost to follow-up. More detailed information about attrition and seam bias can be found in the Supplementary Material.

Dependent variables.—Our analyses examine how the presence and stability of HIC is stratified across immigrant subgroups of older foreign born as they transition from late midlife to older age. We begin by assessing HIC at first observation. The dependent variable is a dichotomous
indicator coded “1” if respondents report having HIC. The final probit model for those aged 50–64 in this initial stage of analysis provides the estimates for the calculation of lambda (our adjustment for unobserved heterogeneity) in the discrete-time hazard models described below.

The second stage of analysis focuses on the process of gaining or losing HIC. The dependent variables for the hazard models for gaining or losing coverage are constructed from the monthly reports of HIC for each respondent and coded to reflect the event of interest. Each respondent continues to contribute person-observations until their insurance status changes or until they are censored through loss to follow-up or aging out (turning age 65).

We further divide our analyses into first and second transitions. For those with HIC at first observation, we model the process of losing coverage and, for those who lose coverage, how quickly coverage is regained. Among those without HIC at first observation, we model the process of gaining coverage and, among the gainers, how quickly coverage is lost. In this way, we observe the reliability of coverage once secured. Using the timing of transitions into and out of coverage reveals the regional subgroups with least stable HIC.

Independent variables.—Our primary interest is in comparing European, Asian, and Latin American foreign born to each other, using NBNHW, the majority group in the United States, as the reference group. We exclude immigrants from other regions, such as Africa, Canada, and Oceania, because they are both too small in number to treat separately and too heterogeneous to combine. In making this restriction, we also largely control for racial differences among the foreign born, since the number of Black immigrants from Latin America is quite small (<8%), and our results hold whether or not they are included. We estimate region of origin with a series of dichotomous variables coded “1” for immigrants from a given region and “0” for NBNHWs. This specification for region of origin allows us to judge how immigrant subgroups differ from the majority NBNHW group, but we can also assess how the subgroups differ from each other with postestimation Wald tests.

Immigrants also are characterized by level of assimilation. Naturalized citizenship is coded “1” for immigrants who have become citizens. English language ability is based on responses of “not well” or “not very well” versus “well” or “very well” to the question: “How well do you speak English?” Duration of residence in the United States indicates the number of years an immigrant has lived in the United States and was recentered at the mean. NBNHWs are coded “0” on all region of origin variables so the coefficients for assimilation variables apply just to immigrants and test whether and how citizenship, for example, is related to HIC among the foreign born. Finally, interpretation of the coefficients for region of origin must take into account the addition of the assimilation variables. Rather than comparing immigrants from a given region to NBNHWs, holding other variables constant, the coefficients for region of origin compare subgroups of immigrants who have a value of “0” on all the assimilation variables (not a citizen, who speaks English well/very well, and has been in the United States an average number of years) to the NBNHW when the assimilation variables are included (Cohen, Cohen, West, & Alken, 2003).

Demographic and SES variables are also included. Dimensions of SES such as education, employment, and income sort the population into those who may have access to employer-sponsored plans, those who can afford to purchase individual coverage, and those who may be eligible for public assistance. For this age group, access through employment is particularly important (Smolka, Multack, & Figueiredo, 2012).

We include age at last birthday, rescaled by subtracting 50; female, coded “1” for women; marital status, coded “1” for currently married; and metropolitan, coded “1” if living in an area containing “at least one urbanized area of 50,000 or more inhabitants”. Measures of SES include education, measured by a seven-category ordinal scale, ranging from less than a 6th-grade education (coded “1”) to having a high school diploma (coded “3”), a 4-year (Bachelor’s) degree (coded “6”), or an advanced degree (coded “7”). We use the natural log transformation of SIPP’s measure of income (total monthly personal income in thousands of inflation-adjusted dollars). We capture employment using three dichotomous variables, an indicator of any employment (coded “1”), an indicator of self-employment (coded “1”), and an indicator of full-time employment (coded “1”). In addition, we identified employed persons in a “low skill” occupation based on the detailed 2000 Standard Occupational Classification. Working in agriculture, construction, or household services, excluding managers, was coded “1”. These occupations represent manual labor jobs in which immigrants are often disproportionally represented and which are unlikely to provide HIC to employees.

Gaining and losing HIC.—We incorporate time into our analysis in three ways. First, we use time-varying covariates, allowing the values to change across observations. Our time-varying predictors include: naturalized citizenship, English ability, years in the United States, age, marital status, income, employment status, full-time versus part-time work, wage-and-salary versus self-employment, and employment in “low skill” occupations versus other jobs. The dummy variable for employment allows us to interpret full-time versus part-time employment and wage-and-salary versus self-employment as interactions between employment status and full-time/part-time, or between employment status and wage-and-salary/self-employment. Second, we use the log of elapsed time (in months) respondents are observed (observed duration) to specify the baseline hazard.
rate and control for the length of the (non)coverage spell. Finally, we distinguish the two SIPP panels with a dummy variable. We tested alternative specifications for the underlying hazard function and found the log-logistic distribution the best choice (Bennett, 1983).

To address the problem of left truncated spells, we specify recent HIC history using two additional independent variables in the first transition models. A dummy variable coded “1” for those who have been without HIC at some point in the past is included in the models of “loss.” Models of “gaining” HIC include a dummy variable coded “1” for those who have had HIC at some point in the past. A second pair of variables report months of (non)coverage leading up to the start of the observation window. A risk ratio less than 1 for the dummy variable (“ever had insurance”) in the “gaining” model indicates that never-insured respondents experience longer spells without coverage in that they gain coverage at a slower rate than those who were covered at some point in the past. A risk ratio less than 1 for the length of the uninsured spell (“time since last insured”) means that the rate of gaining HIC slows as the duration of noncoverage increases for those who had HIC at some point in the past. In other words, more recently initiated spell of noncoverage are resolved more quickly than spells that began in the more distant past. Finally, since bias can be introduced through the initial sorting of respondents into the two risk groups, we use the specification from our second model (from Table 2) predicting HIC at first observation to estimate the sample selection variable, lambda, to adjust subsequent estimates for sample selection bias (Heckman, 1978; Winship, 1986). More detailed information on the calculation of lambda can be found in the Supplementary Material.

Models.—We use maximum-likelihood discrete-time hazard models (Allison, 1995) to estimate risk ratios of changes in HIC and a probit model to estimate the likelihood of HIC at first observation. In the former models, our units of analysis are the person-interviews, which are spaced 4 months apart, with people remaining in the risk set until they either gain (lose) coverage, are lost to follow-up, or age beyond 64. Our hazard analysis sample includes multiple observations for 25,774 people. Analyses for those at risk of losing are based on 23,111 people, and analyses for those at risk of gaining HIC include 2,663 people. We use logistic regression to model HIC transitions as a function of time, region of origin and immigrant characteristics, SES characteristics, control variables, and HIC history (“always/never” responses and length of presurvey spells).

Our models for the second transition are based on the 1,517 people who lose the coverage they had at first observation (and might therefore regain it) and the 1,292 people who gain HIC (but might lose it again). The specification for these models is the same as before with one important exception: the HIC history variables are not included, since we know how long they have had (or have been without) HIC. Given the subgroup sample sizes reported earlier, any transition is experienced by a smaller number of foreign born than native-born respondents. Even so, the number of Latin American and Asian immigrants experiencing second transitions, which are less likely than first transitions, ranges from about 100–200 plus.

Results

To reflect our interest in differences among the three groups of foreign born as well as how each one differs from the NBNHW, we organize the tables to provide visual cues of significant subgroup differences. We concentrate our discussion on immigrants from Asia and Latin America. Across all tables, a bolded value indicates a significant difference between Latino immigrants and those born in Europe or Asia as well as NBNHW; an entry in italics indicates that Latinos and/or Asians are significantly different from NBNHWs and European immigrants, but not from each other.

Table 1 contains weighted descriptive statistics for the SIPP respondents included in our analysis for the four groups combined and by region of origin. Our sample of nearly 3,000 immigrants comprised of about 20% Europeans, with the remainder almost evenly divided between those born in Latin America and Asia. Almost 9 of 10 NBNHWs and Europeans and more than 8 in 10 Asians have HIC at first observation, significantly higher than the 6 in 10 Latin Americans. Latin Americans also have the highest proportion with public coverage—2.5 times as high as NBNHWs and Europeans. Of those with HIC, 7% of NBNHWs and Europeans are covered by public plans, with 13% of Asians and 25% of Latin Americans relying on government programs. The more striking differences across groups are in those without HIC and those with private coverage.

On many characteristics, European immigrants look much like the native born. Immigrants from Latin America and Asia were somewhat younger than those from Europe. Latinos had the lowest levels of education and lower average monthly incomes than other groups. Compared with immigrants from other regions, they were also least likely to be citizens and less proficient in English. Latino immigrants have been in the United States fewer years, on average, than Europeans, but longer than Asians. In contrast, immigrants from Asia had citizenship rates similar to European immigrants. Their English skills were better than Latinos, but worse than Europeans, and they were most likely to be married. These subgroup characteristics are consistent with those reported for the American Community Survey (Acosta & Patricia de la Cruz, 2011), and they suggest that European immigrants are in the most favorable and Latino immigrants in the least favorable circumstances, with Asian immigrants occupying some middle status.
Table 1. Descriptive Statistics at First Observation by Region of Origin, Aged 50–64

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>European</th>
<th>Latin American</th>
<th>Asian</th>
<th>Native-born non-Hispanic Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (%)</td>
<td>SE</td>
<td>Mean (%)</td>
<td>SE</td>
<td>Mean (%)</td>
</tr>
<tr>
<td>Health insurance</td>
<td>0.88</td>
<td>0.87</td>
<td>0.61</td>
<td>0.83</td>
<td>0.90</td>
</tr>
<tr>
<td>None</td>
<td>0.12</td>
<td>0.14</td>
<td>0.39</td>
<td>0.17</td>
<td>0.10</td>
</tr>
<tr>
<td>Public</td>
<td>0.09</td>
<td>0.06</td>
<td>0.15</td>
<td>0.11</td>
<td>0.06</td>
</tr>
<tr>
<td>Private</td>
<td>0.79</td>
<td>0.81</td>
<td>0.45</td>
<td>0.71</td>
<td>0.85</td>
</tr>
<tr>
<td>Age</td>
<td>56.28</td>
<td>0.02</td>
<td>56.48</td>
<td>0.17</td>
<td>55.64</td>
</tr>
<tr>
<td>Female</td>
<td>0.52</td>
<td>0.54</td>
<td>0.52</td>
<td>0.54</td>
<td>0.51</td>
</tr>
<tr>
<td>Married</td>
<td>0.06</td>
<td>0.74</td>
<td>0.69</td>
<td>0.82</td>
<td>0.70</td>
</tr>
<tr>
<td>Education</td>
<td>4.46</td>
<td>0.01</td>
<td>4.83</td>
<td>0.07</td>
<td>2.81</td>
</tr>
<tr>
<td>Income</td>
<td>3.205</td>
<td>0.24</td>
<td>3.398</td>
<td>0.206</td>
<td>1,708</td>
</tr>
<tr>
<td>Employment</td>
<td>0.69</td>
<td>0.71</td>
<td>0.60</td>
<td>0.71</td>
<td>0.71</td>
</tr>
<tr>
<td>Self employment</td>
<td>0.13</td>
<td>0.17</td>
<td>0.09</td>
<td>0.16</td>
<td>0.14</td>
</tr>
<tr>
<td>Low-skill job</td>
<td>0.03</td>
<td>0.04</td>
<td>0.12</td>
<td>0.04</td>
<td>0.02</td>
</tr>
<tr>
<td>Immigrant-specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td>0.65</td>
<td>0.71</td>
<td>0.53</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>Years in United States</td>
<td>22.69</td>
<td>0.23</td>
<td>26.65</td>
<td>0.64</td>
<td>22.72</td>
</tr>
<tr>
<td>Poor English</td>
<td>0.30</td>
<td>0.09</td>
<td>0.50</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>29,549</td>
<td>613</td>
<td>1,260</td>
<td>1,119</td>
<td>26,557</td>
</tr>
</tbody>
</table>

Notes. Chi-Square and t-tests are used to evaluate significant differences between regions of origin. Bold values indicate that Latin American immigrants are significantly different from NBNHW as well as European and Asian immigrants; italicized values indicate that Asian immigrants are significantly different from NBNBW as well as European immigrants.

*Indicates that Latino immigrants are significantly different from European immigrants, but not significantly different from Asians.

**HIC at First Observation**

To define the risk groups for the subsequent hazard analysis and calculate lambda, we first estimate probit models of HIC at first observation, which are reported in Table 2. In the initial model, the likelihood of coverage is greatest for NBNHWs followed by Europeans, Asians, and lowest for Latin Americans. When demographic and SES characteristics are included (model 2), the between-subgroup differences are somewhat smaller, but clearly stratified: Latinos have the lowest probability, followed by Asians, and the probability for European immigrants is 14% higher than for Latin American immigrants. Being older, more educated, and having higher income makes HIC more likely. Women and those married or employed full time are also more likely to have coverage. Employment in low-skill jobs and self-employment is associated with much lower rates of HIC.

Once characteristics specific to immigrants are included (model 3), we see not only the region of origin differences but also the influence of assimilation among immigrants. The stratifying effect of citizenship is apparent, as the group differences among region of origin subgroups shrinks, but does not disappear. Even among naturalized citizens with good language skills, the likelihood of coverage for Latino immigrants is much lower than for NBNHWs, almost that much lower than for either NBNHWs or for European immigrants, and it is close to one-third lower than for Asian immigrants.

We illustrate this disparity in Figure 1, which contrasts the predicted probability of HIC for region-specific immigrant groups with characteristics associated with being “more” (naturalized citizens with good language skills having lived in the United States for 29 years, the average for this subgroup) versus “less” (noncitizens with poor language skills who have been in the United States for 12 years, the average for this subgroup) assimilated. Latino immigrants are less likely to have coverage regardless of the level of assimilation. Among more assimilated immigrants, Europeans and Asians are quite similar. Although the predicted probability of HIC drops for all region of origin groups when comparing across levels of assimilation, the drop is largest for Latinos, with a predicted rate of coverage among the more assimilated almost double that for the less assimilated.

**Gaining HIC**

Having used HIC at first observation to divide our sample, we now address how quickly those without coverage can gain it and how long those with coverage can avoid losing it. Models for gaining HIC are reported in Table 3. The columns on the left are based on those with no HIC at first observation (2,663 people) and describe the first observed transition. The columns on the right are restricted to those observed “gaining” coverage (1,292 people) and describe the second transition (loss of just-gained coverage). The first model in Table 3 shows Latino immigrants gain coverage at the slowest rate. Model 2 indicates that age, income, and being a full-time wage and salary worker increase the rate at which coverage is gained, but that employment in low-skill jobs slows acquisition of HIC. Immigrants from Latin America continue to lag behind natives, Europeans, and Asians in securing coverage. In model 3, we add the set of assimilation measures. Immigrants with poor English skills are much slower to
OLDER IMMIGRANTS AND HEALTH INSURANCE IN THE UNITED STATES

GAIN COVERAGE, BUT THE MORE YEARS IMMIGRANTS HAVE SPENT IN THE UNITED STATES, THE QUICKER COVERAGE IS SECURED. IN ADDITION, CITIZENSHIP OFFERS AN INDEPENDENT ADVANTAGE FOR GAINING HIC QUICKLY. IN THIS MODEL, REGION OF ORIGIN COEFFICIENTS CONTRAST NONCITIZENS WITH GOOD ENGLISH SKILLS WHO HAVE BEEN IN THE UNITED STATES AN AVERAGE 22 YEARS TO THE NBNHWs. ALL REGION OF ORIGIN COEFFICIENTS INDICATE SIGNIFICANTLY SLOWER RATES OF ACQUISITION FOR THE FOREIGN BORN REGARDLESS OF WHERE THEY WERE BORN, WHICH UNDERSCORES THE IMPORTANCE OF NATURALIZATION FOR OBTAINING HIC. THE SHIFT IN THE SIGNIFICANCE LEVEL OF COEFFICIENTS FOR ASIA AND EUROPE FROM MODEL 1 TO 3 REFLECTS THE HIGHER RATES OF NATURALIZATION AMONG THESE GROUPS. THE HIC HISTORY INDICATORS SUGGEST THAT THOSE WHO JUST LOST COVERAGE HAVE NO IMMEDIATE ADVANTAGE IN THE SPEED OF REGAINING HIC; HOWEVER, AS THEIR SPELL OF NONCOVERAGE LENGTHENS, THEY GAIN COVERAGE MORE QUICKLY THAN THOSE WITH NO HISTORY OF COVERAGE. IN LOOKING AT THE TYPE OF HIC THEY WERE LIKELY TO GAIN, WE FOUND THAT ALL FOUR GROUPS WERE MORE LIKELY TO GAIN PRIVATE THAN PUBLIC COVERAGE, WITH EUROPEAN IMMIGRANTS AND NHBWs HAVING THE ADVANTAGE. ABOUT THREE IN FOUR OF NHBWs AND EUROPEAN IMMIGRANTS GAINED PRIVATE INSURANCE COMPARED WITH THREE OF FIVE ASIAN AND LATIN AMERICAN IMMIGRANTS.

In the right panel of Table 3, we address the second transition or the stability of coverage for those gaining HIC. We observed 1,292 people gain HIC, but we now see 284 of those people lose coverage and rejoin the ranks of the uninsured. The first model demonstrates the duration dependence of this process—the rate of relosing coverage declines as duration of coverage increases. Immigrants from Latin
America lose their coverage more rapidly than Asian immigrants. In Model 2, Latino immigrants experience more rapid losses than other groups, and working in low-skilled jobs also hastens the rate of loss.

When we add the assimilation measures, the coefficient for Latin America stays roughly the same, with Latino immigrants losing their recently gained coverage more rapidly. In contrast, marriage, education, and income provide protection against loss, as does full-time employment and wage and salary jobs, but not low-skill jobs. Immigrant citizens retain their coverage longer; but neither English ability nor duration shape this part of the process. The negative coefficient for lambda suggests that those who are atypical of the uninsured on observed characteristics gain HIC at a faster pace and hold onto that coverage longer than their counterparts.

Losing HIC

Models on the left of Table 4 refer to loss of coverage among those with HIC at first observation; models on the right describe how quickly just-lost coverage was regained. Many characteristics associated with higher odds of coverage at first observation also are protective against losing coverage once it has been secured. In model 1, the rate of losing HIC is similar among European, Asian, or Latino immigrants as is the gap between these groups and NBNHWs. Model 2 demonstrates that being female, older, married, more educated, or higher income was associated with a slower rate of loss. For immigrants, however, once demographic and SES characteristics are controlled, spells of coverage are shorter, with immigrants from Latin America losing most quickly and immigrants from Europe and Asia losing more quickly than NBNHWs.

Among the currently employed, full-time or wage and salary workers are more secure in their coverage than the part-time, self-employed, or workers in low-skill jobs. Those who report a history of continuous coverage also lose coverage at much slower rates. Among those whose coverage had lapsed sometime in the past, the risk of loss increases as their current coverage spell lengthens, suggesting a pattern of intermittency in HIC. The assimilation variables in model 3 are also related to coverage stability among immigrants. Naturalized citizens with more years in the United States and good English skills lose HIC at slower rates than their counterparts. The losses of HIC were more likely to be in private versus public coverage, with no significant differences across the immigrant subgroups.

Table 3. Hazard Models of Gaining and Relosing Health Insurance, Aged 50–64

<table>
<thead>
<tr>
<th>Region of origin</th>
<th>Gaining</th>
<th>Relosing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>European</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latin American</td>
<td>0.710*** (0.122)</td>
<td>0.520** (0.118)</td>
</tr>
<tr>
<td>Controls for assimilation among immigrants*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td>1.569* (0.335)</td>
<td></td>
</tr>
<tr>
<td>Poor English</td>
<td>0.605*** (0.102)</td>
<td></td>
</tr>
<tr>
<td>Years in United States</td>
<td>1.018 (0.007)</td>
<td></td>
</tr>
<tr>
<td>SES*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income (logged)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time employment</td>
<td>1.701*** (0.240)</td>
<td>1.851*** (0.266)</td>
</tr>
<tr>
<td>Low-skill job</td>
<td>1.565* (0.132)</td>
<td>0.503** (0.118)</td>
</tr>
<tr>
<td>Other controlsb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever had HI</td>
<td>0.972 (0.123)</td>
<td>1.004 (0.127)</td>
</tr>
<tr>
<td>Time since had HI</td>
<td>1.051*** (0.005)</td>
<td>1.052*** (0.005)</td>
</tr>
<tr>
<td>Female</td>
<td>0.930 (0.092)</td>
<td>1.099 (0.098)</td>
</tr>
<tr>
<td>Married</td>
<td>1.053 (0.127)</td>
<td>1.333* (0.179)</td>
</tr>
<tr>
<td>Lambda</td>
<td>1.117 (0.127)</td>
<td>0.678 (0.143)</td>
</tr>
<tr>
<td>Observed duration</td>
<td>0.021*** (0.006)</td>
<td>0.020*** (0.006)</td>
</tr>
<tr>
<td>N</td>
<td>12,033 (2,663 persons)</td>
<td>5,574 (1,292 persons)</td>
</tr>
</tbody>
</table>

Notes. All models also include controls for panel and age; lambda is calculated using results from Table 2, model 3. For region of origin coefficients, a Wald test is used to test for significant differences; bold values indicate that Latin American immigrants are significantly different from European, Asian, or Latin American.

The immigrant specific characteristics operate as embedded variables and can be interpreted as the influence of assimilation characteristics on HIC among the foreign born.

These coefficients are averaged across the entire sample. Exponentiated coefficients with SE in parentheses are reported with significance levels indicated as follows: *p < .05, **p < .01, ***p < .001.
or between immigrants and NHBWs. In all cases, about three in five people lost private coverage compared with two in five who lost public coverage. This imbalance between lost public versus private coverage may also be reflected in the coefficient for lambda. Before we introduce SES covariates, the lambda coefficient is positive and indicates that those who are (on observed factors) “atypical” relative to the insured lose their coverage more quickly. However, once we control for SES and also for assimilation differences, the coefficient for lambda shifts to negative, which indicates that being “atypical” is associated with longer retention; this somewhat counterintuitive finding may reflect the importance of unobserved factors that aid respondents in navigating the public assistance bureaucracy.

The right columns report whether those who lost coverage were able to regain it quickly. Of the 1,517 people who lost their coverage, we now observe 544 people regain it. Before controlling for SES variables, Latin American immigrants wait longer to regain coverage. In model 2, women, more educated, married, and higher income respondents regain HIC at faster rates than their counterparts. Employment is a key factor in regaining coverage, particularly for full-time wage and salary workers, who regain at twice the rate of those not employed; however, those in low-skill jobs regain more slowly. Also duration dependent, the chances of regaining coverage decline as the spell without HIC lengthens. Immigrants regain insurance more slowly than NHBWs, and the pace grows progressively slower as we compare European to Asian to Latino immigrants, other things equal. This picture is largely unchanged when we control for the level of assimilation among immigrants, although noncitizen European immigrants look less like natives and more like the other foreign born. Poor language skills are associated with a slower pace, while additional years in the United States and citizenship grants look less like natives and more like the other foreign born.

**Conclusions**

The size and diversity of the older foreign-born population in the United States has been increasing, but we know little about how immigration, health care, and aging policies intersect or whether compositional changes in the foreign-born population are creating pockets of vulnerability among those who moved to the United States (Treas & Batalova, 2007). In this article, we address how HIC for preretirement aged foreign-born people differs by region of origin. As an indicator of reliable access to health care, HIC can promote...
early diagnoses and timely treatment, which can improve health while reducing overall health care costs through early intervention (Maciosek, Coffield, Flottemesch, Edwards, & Solberg, 2010; Miller, Vigdor, & Manning, 2004; Wilper et al., 2009).

Using SIPP data allowed us to focus on the processes of losing and gaining HIC over a multiyear period and address stability versus intermittency in HIC. Because the foreign born are a composite of immigrants from many different regions, we took an additional step of disaggregating the foreign born by region of origin. As in prior research, we found a sizeable coverage gap between natives and the foreign born, regardless of region of origin. But we also found that Latino immigrants were disadvantaged relative to immigrants from Europe and Asia in most stages of the process. Second, SES is clearly important in shaping the dynamics of HIC, and Latin American immigrants are less educated, lower income, and more likely to work in lower-status jobs than other immigrants. However, the significant gap in coverage between Latin American immigrants and other immigrants persisted despite these controls. Third, assimilation was also part of the story. Citizenship and facility with English increased the likelihood of HIC and provided protection against loss of HIC, thereby reinforcing covering stability.

What appears as a coverage gap in a cross-sectional analysis reveals only one dimension of the disadvantage experienced by immigrants, in general, and Latin American immigrants, in particular. While noncoverage at one point in time indicates higher health risk, immigrants retain their HIC for a shorter time, thereby increasing the number of people who experience a spell without HIC at some point in their preretirement years. Rather than having stable, long-term HIC, Latin American immigrants are least likely have coverage at any given time, and when they do, they retain HIC for shorter periods of time and move more rapidly into (or back into) the ranks of the uninsured. Although all immigrants appear at risk of spells without coverage in their pre-retirement years, this risk is particularly high for those who have not naturalized or have poor language skills (Lopez & Gonzalez-Barrera, 2013).

Among adults who are old enough to warrant routine screening but are too young for Medicare, episodic coverage can be particularly disruptive for care and treatment. For those who age into Medicare, diagnoses and treatments may occur at later stages of disease. But while the eligibility of natives for Medicare is near universal, insufficient employment histories in the United States can exclude older immigrants from Medicare entitlement, as well. Closing the native-immigrant coverage gaps for people in their preretirement versus postretirement (after age 65) years may require different solutions; however, addressing inequities based on type of work may allow progress for both groups.

Grouping the foreign born by region of origin does not create entirely homogeneous categories, but disaggregating regions into specific countries requires a more detailed, larger, or strategically sampled data set. While our approach may conceal heterogeneity within pan-ethnic groups, the regional differences we identified are reliable. Even so, regional differences in legal status also are implicated in our findings. Current estimates of undocumented immigrants range from fewer than 14% of those 50 and older (Hoefner et al., 2012) to only 7% of those 55 and older (Capps et al., 2013); however, scholars agree that the older undocumented population is growing and that Latino immigrants are more likely to be undocumented. Also, although we follow respondents for a maximum of only 4 years, by incorporating information on prior spells of HIC, we can see consistency in patterns of (non)coverage. Finally, in asking respondents to update their information every 4 months, the SIPP data show considerable seam bias. By limiting our study to transitions that occur only at the seam, we retain those reports that are most current and likely most accurate; however, we lose about 10% of total transitions respondents mentioned.

As the older foreign-born population expands, the importance of addressing issues at the intersection of aging, immigration, poverty, and health care will increase. Immigration policies that encourage family reunification have resulted in a growing number of foreign-born residents who have aged in the United States and an inflow of older immigrants coming to the United States to join their adult children and grandchildren. Although the Affordable Care Act creates additional pathways to HIC, it does not address a number of health policy features that affect all immigrants, but especially Latino immigrants. Employment designation and compensation, a 5-year federal moratorium on public assistance, the need to navigate complex bureaucracies, and the importance of an employment history for later life benefits may continue to place reliable HIC out of reach for many older immigrants. Legislation to create a path to legal status and citizenship is currently under discussion. As the nation considers the implications of population aging and health care policies, acknowledging the vulnerability of long-ignored but growing segments of our increasingly diverse population and including their needs in these discussions will be an important step in equalizing HIC.

Supplementary Material

Supplementary material can be found at: http://psychsocgerontology.oxfordjournals.org/

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