U.S.-born children of immigrants may be less likely to receive some social services than are children of native-born immigrants, if foreign-born parents who are themselves ineligible are less likely to apply on their children's behalf. Researchers used retrospective data from a sample of about 2,400 low-income, predominantly Hispanic households in three U.S. cities to determine whether children with foreign-born caregivers were less likely than children with native-born caregivers to receive benefits from any of five programs over a 2-year period: Temporary Assistance for Needy Families (TANF), Supplemental Security Income, Food Stamps, Medicaid, and Special Supplemental Nutrition Program for Women, Infants and Children. The most significant disparities between children of citizen and noncitizen...
caregivers were in TANF and Food Stamp use. Overall, the gap in service usage between children with U.S.-born caregivers and foreign-born caregivers varied from program to program and depended, in part, on immigrant citizenship status, in addition to nativity status. (Contains 33 references.) (SM)
Public Assistance Use among U.S.-Born Children of Immigrants¹

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ABSTRACT

U.S.-born children of immigrants may be less likely to receive some social services than are children of native-born parents, if foreign-born parents who are themselves ineligible are less likely to apply on their children's behalf. We use retrospective data from a sample of about 2,400 low-income households in three U.S. cities to determine whether children with foreign-born caregivers are less likely than children with native-born caregivers to receive benefits from any of five programs over a two-year period: TANF, SSI, Food Stamps, Medicaid, and WIC. The most significant disparities between children of citizen and noncitizen caregivers are in TANF and food stamp use.
About one in ten families with children in the United States is a mixed-status family, defined as a family in which one or more children are U.S.-born citizens, but at least one parent is a noncitizen (Fix and Zimmermann, 1999). U.S.-born children in mixed-status families qualify for all social service programs, but may have limited access to them if their noncitizen parents are themselves unqualified, or perceive themselves as unqualified, and do not apply for services on behalf of their children. As qualification for social services becomes increasingly tied to citizenship status as a result of welfare reform, access to services among children of noncitizen parents may be further compromised (Fix and Passel, 2002).

In this paper, we examine whether and by how much native-born children of primarily Hispanic immigrants were less likely than children with comparable native-born parents to receive public assistance benefits for which they may have been eligible in the late 1990's. Specifically, we report on data collected in 1999 from about 2,400 randomly-selected low-income families in low-income neighborhoods in three cities, Boston, Chicago, and San Antonio. Interviews were conducted in English and Spanish. The data include a two-year retrospective history of public assistance use.

We investigate the potential gap in the receipt of assistance across five programs: Temporary Assistance to Needy Families (TANF, the main cash assistance program for low-income families with children), Supplemental Security Income (SSI, the program that provides cash assistance to children and adults with disabilities in low-income households), Food Stamps (the program that provides to low-income households coupons or electronic benefits transfers that can be used to purchase food), Medicaid (the program that provides health insurance benefits to certain low-income children and families), and the Special Supplemental Nutrition Program for Women,
Infants, and Children (WIC, which provides supplemental food to low-income pregnant and postpartum women, infants, and children up to age five). The gap could be due to a number of factors correlated with parents' immigrant status. Our multivariate models include controls for ethnicity, children's health, and mothers' age, education, marital status, and health.

Moreover, we investigate the extent to which the gap in receipt of assistance, if any, is a consequence of migration per se or of citizenship status. To do so, we divide children's caregivers into four categories based on migration and citizenship status. We separate children with native-born caregivers into two categories: those whose mothers were born on the U.S. mainland and those whose mothers were born in the U.S. territory of Puerto Rico. In the latter case, the mothers had migrated from Puerto Rico to Boston, Chicago, or San Antonio by the time of our survey. But because Puerto Ricans are U.S. citizens at birth, they are eligible to receive all social services. If the act of migration and the process of assimilation are the primary causes of differences in social service use, then, with proper controls, we would expect the usage rates among Puerto Ricans families in our sample to be similar to those of other Hispanic immigrant families. If, on the other hand, issues related to citizenship status are dominant, we would expect usage rates for Puerto Rican families to exceed those of noncitizen immigrant families. Because we cannot control for all differences between Puerto Ricans and other Hispanics, our comparisons must be taken as suggestive. We also separate foreign-born caregivers into two groups, noncitizens and naturalized citizens, to assess whether households with naturalized caregivers use services in a pattern more like other citizen subgroups or more like their foreign-born, noncitizen counterparts.
Finally, the two-year histories allow us to investigate differences in both the probability and duration of public assistance use. Observed differences in service use between two groups in a population may result from members of one group being less likely to enroll at all. Alternatively, members of the two groups may be equally likely to enroll in a service, but one group may use the service for a shorter time. In either case, we would observe that one group was enrolled for fewer months on average over a two-year period. We decompose service use patterns into two parts, the probability of enrollment and the number of months enrolled, to assess which component drives observed differences.

Context

U.S.-born children in immigrant-headed households are an important population both demographically and in terms of social welfare. About three-fourths of all children of immigrants are native-born, and the majority of them live in mixed-status families. Nationally in 1998, about nine percent of families with children were mixed-status families, and they composed about 14 percent of families living below 200 percent of the federal poverty level (Fix and Zimmermann, 1999). Although native-born children in low-income households qualify for social services, immigrant caregivers may be less likely to enroll them than would native-born caregivers for a variety of reasons, including confusion about who in the household qualifies, concerns about putting one’s own chances of permanent resident status or naturalization at risk, and in some cases, fears about drawing attention to a household that includes undocumented immigrants. Over time, systematic differences in enrollment between native-headed households and mixed-status households could lead to two classes of citizen children: those whose native-born parents are able to improve children’s well-being through participation in social service
programs, and those whose foreign-born parents enroll in fewer services on their children’s behalf or enroll in those services less often, at the expense of children’s well-being (Fix and Passel, 1999).

Observers have worried that these systematic differences might be exacerbated by the passage of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which substantially modified immigrant access to federally-funded social services, but was not intended to affect U.S.-born children of immigrants. Immediately after the passage of PRWORA, children in mixed-status households became much less likely to be enrolled in some services for which they remained eligible, compared to the children of native-born parents. For example, administrative data show that food stamp use dropped precipitously in mixed-status households compared to native-headed households between 1996 and 1997 nationally (Genser, 1999). And among all noncitizen-headed households, TANF and Medicaid enrollment rates also dropped faster than for native-headed households, although most states reinstated at least some social service benefits for noncitizens (Fix and Passel, 1999).

But sharp differences in usage rates seem to have diminished over time. A comparison of TANF usage in 1995 and 1999 based on data from the Current Population Survey shows that rates of decline became less divergent over that period: by 1999, TANF use dropped by 53 percent in noncitizen-headed households with children (whether U.S.- or foreign-born), compared to 50 percent in citizen-headed households. Differences in the decline in Medicaid use were statistically insignificant between the two years. Differences in the decline in food stamp use remained more marked, however: between 1995 and 1999, enrollment by noncitizen-headed households with children dropped by 38 percent, compared to 28 percent for citizen-
headed households (Fix and Passel, 2002; also see Wilde et al., 2000). Across all programs, differences between immigrant and native households in enrollment declines are minor outside of California (Borjas 2002).

**Prior research on immigrants’ use of social services**

We consider how three prevailing issues in the literature on immigrant households’ use of social services pertain specifically to households with at least one U.S.-born child. These issues include whether immigrant-headed households use social services more often than do native-headed households; whether immigrant households that receive services remain on the rolls longer than native households; and whether the two groups use different services. We describe previous research on these issues below. We also discuss social service use patterns among Puerto Ricans, a unique group in our sample in that they are both U.S. citizens and migrants to the U.S. mainland.

**Service use.** Compared to all natives, immigrants are more likely to use federally-funded cash assistance such as Aid to Families with Dependent Children (AFDC) and SSI, according to analyses conducted prior to PRWORA. However, not all immigrants are equally likely to enroll in a cash assistance service. The immigrant population is heterogeneous, and service use is concentrated in a few groups. A disproportionate share of cash transfers to immigrants are directed to refugees, who immediately qualify for social services once in the United States (Fix, Passel, and Zimmermann, 1996); and to elderly recipients of SSI (Van Hook and Bean, 1999). Even prior to PRWORA, working-age legal immigrants overall were no more likely than their native counterparts to enroll for cash assistance, despite low average income (Fix, Passel and Zimmermann, 1996). But with time in the United States, both naturalized and noncitizen
immigrants become more likely than natives or recent immigrants to receive either cash or in-kind transfers (Borjas 1994, Borjas and Hilton, 1996, Borjas and Trejo 1991). Some research suggests that compared to earlier immigrants, recent immigrants are increasingly likely to use public assistance (Borjas and Trejo 1991). Since the 1970s, the population of refugees who are immediately eligible for social services has grown substantially, and since the 1960s, immigrant flows have shifted away from Europe to Latin America and Asia. However, when within-ethnic group comparisons are made, both recent and older immigrant cohorts use assistance at rates comparable to natives, with some exceptions (Jensen 1988).

**Dependence.** Latino immigrants are no more likely to exhibit welfare dependence or to experience multiple welfare spells than are the native-born, net of prior dependence, marital status, and socioeconomic status, according to a longitudinal study of welfare use in California between 1992 and 1996 (Ono and Becerra, 2000). Dependence in that study is defined as continuous enrollment between survey waves. These findings provide important new information about patterns of dependence between the native-born and foreign-born, but the research can be extended in three ways: by identifying the nativity status of children in the household; by using the total time on welfare in a fixed interval as a preferred measure of dependence in a population with frequent entries and exits from welfare (Gottschalk and Moffitt, 1994); and by considering varying enrollment patterns across other cash-transfer programs and in-kind transfer programs.

**Service types.** Poor households headed by non-refugee immigrants in most states were less likely to receive cash assistance than were poor households with native-born heads prior to PRWORA (Fix, Passel and Zimmermann, 1996). But poor immigrant-headed households (including refugees) were as likely or more likely to receive in-kind assistance including food...
stamps and Medicaid (Borjas and Hilton, 1996; Butcher and Hu, 2000). A study restricted to native-born children of Hispanic immigrants, using data from the early 1990s, found the same pattern with respect to receipt of cash benefits versus in-kind benefits (Hofferth, 1999). Our study updates research on cash and in-kind transfer programs for native-born children of immigrants in the post-PRWORA era.

Authors have speculated that immigrants are more likely to enroll in in-kind transfer programs that do not impinge on the likelihood of gaining legal permanent resident status or naturalization. The public charge doctrine, enforced by the Immigration and Naturalization Service, denies entrance to the United States or a change to legal permanent resident status to applicants who are perceived as dependent or potentially dependent on the federal government for assistance. The public charge doctrine is not applied to legal permanent residents seeking citizenship. Those who have received TANF, AFDC, or SSI in the past may be defined as public charges. Public charges do not include those who have received only Medicaid, food stamps, or WIC. In addition, some of the in-kind transfer programs, especially WIC, are easier to access and require minimal contact with the social service system.

Puerto Rican migrants. In contrast to international migrants, Puerto Rican household heads may arrive on the U.S. mainland already acquainted with the system of federal transfer programs. Many families in Puerto Rico rely on cash and in-kind transfers. In 1990, 57 percent of Puerto Rican families were living below the federal poverty line; estimates indicate that in the absence of federal transfer programs, the poverty rate would have been even higher, at 65 percent (Rivera-Batiz and Santiago, 1996). Annual transfers to Puerto Rico in 1992 totaled $5 billion, or $1,429 per capita. The most significant transfers are AFDC/TANF and the Nutritional
Assistance Program (NAP), which replaced the Food Stamp Program in 1982 (Weisskoff, 1985).

As a group, Puerto Ricans residing in the United States are better off economically compared to those who remain in Puerto Rico and compared to Mexican Americans, but the poverty level remains high compared to the national average (Rivera-Batiz and Santiago, 1996).

In sum, our study contributes to current research on social service use among children in low-income immigrant households in several ways. First, we focus on a comparison of native-born children of immigrant caregivers, a group that is legally entitled to social service benefits, and children of native-born caregivers. Second, we use retrospective calendar data to assess whether immigrant-headed households' lower usage of services is a function of less uptake or shorter spells of enrollment. Our analyses are based on multivariate models that control for important covariates. Third, we compare enrollment patterns in a variety of cash and non-cash transfer programs. Fourth, we attempt to distinguish the effects of migration per se versus citizenship status by examining Puerto Rican families separately from other Hispanic families, and by considering foreign-born citizens separately from noncitizens.

Data

The data for this analysis come from a study of low-income families in Boston, Chicago, and San Antonio begun in 1999. For one component of the study, a household-based, random-sample survey of children and their caregivers was conducted. In households with a child 0 to 4 years or 10 to 14 years of age, and with incomes below 200 percent of the federal poverty line, interviewers randomly selected one child and conducted an in-person interview with that child's primary female caregiver. In over 90 percent of the cases, the caregiver was the mother. Only people who spoke English or Spanish were interviewed because of the costs of translating the
interview into the many other languages immigrants speak. Thus, the vast majority of foreign-born persons in the sample were Hispanic, although a few were African or European. Most native-born caregivers in these neighborhoods were either second- or subsequent-generation Hispanic immigrants, Puerto Ricans, or African Americans. Because the majority of children in the sample live only with the female caregiver, we do not account for father’s nativity in the current analysis.

Overall, 2,402 mother-child pairs were interviewed, including an over-sample of those receiving TANF. The interviews were conducted between March and December of 1999. The survey achieved a 74 percent response rate. Consistent with national data, the vast majority of children with foreign-born mothers in the sample (88 percent) were themselves born in the United States, and the analysis is restricted to consider households with U.S.-born children only. (For a detailed description of the survey protocol, see Winston, et al. 1999.)

The interviewer asked the caregiver whether she or her any of her children were receiving benefits or had ever received benefits from each of five public assistance programs: TANF, SSI (for children only), Food Stamps, Medicaid, and WIC. Other than SSI, the questions did not distinguish between mother’s receipt and children’s receipt, but it is unlikely that mothers would have received benefits from these programs without their children receiving them. The caregiver was asked to supply all of the dates she had entered or exited TANF, Medicaid, or Food Stamps in the last two years, and to provide the entry and exit dates for her most recent WIC and SSI spells.

From these spell data, we constructed a series of variables representing the number of months a caregiver’s household received benefits from the five public assistance programs during the
two years prior to interview. The 25-month calendar begins two years earlier in the same month that the respondent is interviewed and concludes with the month of interview. For example, a respondent interviewed in October, 1999 reported on each of her public assistance receipt spells since October, 1997. Each respondent may have received a service for anywhere from 0 to 25 months. We do not consider whether those months were accumulated in a single spell or in multiple spells.

We use normalized probability weights that give equal weight to each city in our analysis. When weighted, the sample represents the population of children in low-income households in low-income neighborhoods in Boston, Chicago, and San Antonio. (For a full description of the weighting design, see Cherlin et al. 2002.)

Welfare policies in the three cities

The U.S.-born children of immigrants in the sample qualify for all public assistance programs, but their parents’ eligibility varies by state. This variation may affect children’s access to services in the three cities we study. Massachusetts is the most generous of the three states in which the surveyed cities lie in terms of service availability to immigrants, and Texas the least (Tumlin, Zimmermann, and Ost, 1999). For example, Massachusetts and Illinois provide food assistance to immigrants who arrived before the implementation of PRWORA, but Texas does not. If these differences influence immigrant caregivers’ actions, we might see that children of immigrants in Boston and Chicago are more likely to receive food stamps than children in San Antonio. But because all three states provide Medicaid or the state equivalent, we would expect to see fairly constant use of Medicaid across the three cities. However, under
TANF, many states devolved decisions to local agencies, resulting in substantial within-state differences that may obscure state-level variation (Lurie, 2001).

**Analytic sample**

We restrict our sample to include children born in the mainland United States or Puerto Rico whose primary female caregiver was born in the mainland United States, Puerto Rico, or a foreign country. Among foreign-born caregivers, we include only those who first arrived in the United States for a stay of six months or more before August, 1996, the month in which PRWORA became law. Although post-enactment immigrants are an important part of the discussion about the impact of PRWORA on the foreign-born and their children, relatively few of the caregivers in our sample arrived after the legislation passed. The sample is further restricted to include households with non-Hispanic white, non-Hispanic black, or Hispanic caregivers only. We exclude all observations with missing data on any independent or dependent variable. The final sample includes observations on 2,127 children and their caregivers.

**TABLE 1 ABOUT HERE**

Table 1 shows the patterns of service use in sampled households by the caregiver’s nativity status. In each panel, the first row represents the proportion of households that received a given service sometime within the two years prior to interview. The first four columns indicate that households with mainland-born caregivers (panel 1) more often received TANF, SSI, food stamps, and Medicaid than did households with noncitizen caregivers (panel 4) (p<.01). The only service noncitizen caregivers report receiving more often than natives is WIC (p<.01), a program with universal eligibility in terms of citizenship. In contrast, households with Puerto
Rican caregivers (panel 2) receive all services except food stamps as much as or more often than households with mainland-born caregivers, although only the differences in group means for TANF and SSI use are statistically significant at p<.05. Households with foreign-born citizen caregivers (panel 3) have an intermediate pattern of use: they receive all services less than households with mainland caregivers (p<.01), but they receive SSI and food stamps more often than households with noncitizen caregivers (p<.01).

The average number of months a respondent receives a service for herself or for her children during a period of time represents the caseload burden a population imposes (Bane and Ellwood, 1994). Such estimates are useful for estimating public assistance expenditures. The second row in each panel of table 1 shows that households with foreign-born caregivers (panels 3 and 4) on average had fewer months of usage of almost all services during the last 25 months compared to households with native-born caregivers (panels 1 and 2), even where the probability of service receipt was similar across groups. For example, although mainland-born, Puerto Rican, and foreign-born citizen caregivers are almost equally likely to have received food stamps during the preceding two-year period, foreign-born citizen caregivers or their children received food stamps for about 2 fewer months per household than the other two groups. (That difference is not significant at p<.05, perhaps because of the relatively small number foreign-born citizens in the sample). A similar pattern holds for Medicaid. Only for WIC, the sole program noncitizen caregivers were more likely to receive, was the average number of months enrolled significantly higher (p<.01) than for U.S.-born caregivers.

The patterns in the first two rows of each panel pertain to all respondents, regardless of enrollment in a service. The third row of each panel is restricted to households who were
enrolled in a service. It shows how many months a household receives a service on average, conditional on enrollment. As with the averages for the group as a whole, noncitizen-headed recipient households have shorter spells of TANF, food stamps, and Medicaid receipt compared to households with mainland-born heads (p<.01). However, WIC and SSI spells are longer (p<.01). Foreign-born citizen caregiver households are closer to parity with U.S.-born caregivers in terms of the length of spells of TANF and SSI receipt.

In sum, table 1 shows differences in average service use among children who are U.S. citizens at birth according to whether their primary caregivers are mainland-born, Puerto Rican-born, or foreign-born. It suggests that children of both foreign-born citizen and noncitizen caregivers are less likely to receive TANF and SSI and children of noncitizens are also less likely to receive food stamps. Children of Puerto Rican caregivers are more likely to receive TANF and SSI than any other nativity group, and children of noncitizens are more likely to receive WIC. Differences in duration of service use follow similar patterns. These results suggest that variations in service use may be a function of differences both in the probability of enrollment and the duration of a spell of service usage. We use a tobit regression model to consider the effect of caregiver's nativity status on enrollment in a service and duration of service usage among U.S.-born children, controlling for important covariates.7

Table 2 presents the means for the control variables overall and by caregiver's nativity status.8 When all nativity statuses are combined (column 1), there is an equal proportion of respondents in Boston, Chicago, and San Antonio because, as previously noted, we have weighted the data to give equal weight to each of the three cities. However, our caregivers are unevenly distributed
by nativity status across the cities. Puerto Rican caregivers live mostly in Boston, a city that has historically been a receiving area for Puerto Rican migrants. A near majority of foreign-born citizen caregivers live in Boston and are most often from the Dominican Republic, although some are from West Africa or Central America. In the other cities, foreign-born caregivers are most often born in Mexico.

Non-Hispanic white caregivers were interviewed only in Boston and Chicago. However, the sample of non-Hispanic white caregivers of any nativity status is small, a consequence of their outmigration from the sampled neighborhoods during the 1990s. Just over half of native-born caregivers are African-American, and about 40 percent are Hispanic.

In terms of marital status and disability status, foreign-born citizen and noncitizen caregivers look more like each other than they do like their mainland-born and Puerto Rican counterparts. The foreign-born are more often married and are less often prevented from working by a disability. Puerto Ricans stand out at the opposite end of the spectrum: 20.5 percent are married and 5.8 percent of Puerto Rican caregivers report a seriously limiting disability. Foreign-born citizen caregivers most often hold a high school diploma or general educational development certificate (GED), and Puerto Ricans the least. Among children, those with mainland-born or Puerto Rican caregivers are more often disabled compared to children with foreign-born caregivers, but levels of disability are low overall.

**Multivariate methods**

We estimate two-limit tobit regression models of the number of months a household received benefits from each of the five public assistance programs. Tobit analysis is useful when the dependent variable clusters at a limiting value, in this case 0 months and 25 months, for many
observations (Long, 1997). In our case, families that did not use a service can be considered as censored at 0 months because we did not observe them using the service. Moreover, families that had been receiving a service for more than 25 months can be considered as censored at 25 months by our time-limited, two-year history. Tobit regression is a more appropriate statistical procedure than estimating an OLS regression on only those observations with values on the dependent variable between the limits because it produces estimates corrected for censoring.

The tobit model assumes an underlying latent (i.e., unobserved) dependent variable $y_i^*$ which represents the propensity of children in a given family to be receiving benefits from a social service program. The latent variable is related to right-hand-side variables in the usual linear regression fashion:

$$y_i^* = \sum \beta_j x_{ij} + u_i, i = 1, 2, \ldots, n$$

where $n$ is the number of observations, the $x_{ij}$ are independent variables, the $\beta_j$ are parameters to be estimated, and $u_i$ is a normally-distributed error term with mean 0 and variance $\sigma^2$. However, we observe not $y_i^*$ but $y_i$, such that

$$
\begin{align*}
  y_i &= 0 & \text{if } y_i^* \leq 0 \\
  y_i &= \sum \beta_j x_{ij} + u_i & \text{if } 0 < y_i^* < 25 \\
  y_i &= 25 & \text{if } y_i^* \geq 25
\end{align*}
$$

The parameters $\beta_j$ and their standard errors can be estimated by maximum likelihood methods. The parameters and robust standard errors from each model are reported in table 3. (The robust standard errors result from using Huber-White sandwich estimators to adjust for
heteroskedasticity in weighted data (StataCorp, 1999)). The parameters may be interpreted as the effect of a one-unit change in the independent variable \( x_{ij} \) on the latent variable, \( y_{ij}^* \). The standard deviation of the error term \( \sigma \) indicates whether there is substantial clustering at the limits. Where \( \sigma \) is high (i.e., greater than the width of the observed interval), many of the observations in the sample are clustered at limiting values.

Although the tobit regression model corrects for censoring by positing the normally distributed latent variable, \( y_{ij}^* \), we only observe the variable \( y_i \), which is bounded at values of 0 and 25. To get a practical interpretation of our results we ask, based on our regression models, for how many months out of 25 would a household be enrolled in a given service, on average, in the absence of censoring? To obtain estimates of the expected value of \( y_i \) that account for censoring, we use the parameters from the tobit model to calculate the following equation for each service and each nativity group separately:

\[
E(y_i|x_i) = \left[ L \times \Phi(\delta_L) \right] + \left[ U \times \Phi(-\delta_U) \right] + \left[ \Phi(\delta_U) - \Phi(\delta_L) \right] \times \left[ \sum \beta_j x_{ij} + \sigma \left( \frac{\phi(\delta_L) - \phi(\delta_U)}{\Phi(\delta_U) - \Phi(\delta_L)} \right) \right],
\]

where \( L \) is the value of the lower limit (in this case, 0), \( U \) is the value of the upper limit (in this case, 25), \( \phi(\cdot) \) is the standard normal density function, \( \Phi(\cdot) \) is the cumulative standard normal distribution function, \( \delta_U \) is the quantity \( (U - \sum \beta_j x_{ij})/\sigma \), and \( \delta_L \) is the quantity \( (L - \sum \beta_j x_{ij})/\sigma \). This equation represents a sum of the expected values of \( y_i \) for households below, above, or between the limits, weighted by the probabilities of being below, above, or between the limits, respectively (Long 1997). Because the expected value of \( y_i \) for households below the limit is 0 in the current case, the first of the three terms drops out.
Furthermore, we can assess the relative magnitude of the effect of a change in nativity group on the probability of having a spell of use compared to the effect of a change on the expected length of that spell. Following the decomposition of McDonald and Moffitt (1980), we can decompose the total effect of a change in a variable into a portion due to the change in whether a household receives benefits from a program at all and a portion due to the change in the length of a spell for those who use the service. (See the appendix for a description of the decomposition method.) The decomposition allows us to assess whether differences in nativity and citizenship status affect the probability or the duration of service receipt or both.

Multivariate results

Column 1 of table 3 shows that children with foreign-born citizen and noncitizen caregivers are significantly less likely to receive TANF than their counterparts who have mainland-born caregivers. The coefficients for foreign-born citizen and noncitizen caregivers are, respectively, significant at the .01 and .05 levels. In contrast, children with Puerto Rican caregivers are more likely to receive TANF. This contrast between households with Puerto Rican and foreign-born caregivers suggests that the lower level of TANF receipt among the latter group result from differences in caregiver’s nativity status, rather than from something about the process of moving to the English-speaking U.S. mainland.

The pattern does not hold as strongly for children’s SSI receipt, as column 2 shows. After controlling for disability status, only children with noncitizen caregivers are significantly less likely to receive SSI than are those with mainland-born caregivers (p<.01). The strongest predictor is whether any child in the household has a disability (p<.01). The weak effects for
citizenship and nativity status may result from the relatively small number of households in our sample that were enrolled in the SSI program compared to other services. The large value of σ, the standard deviation of the error term, indicates that most observations are censored at 0 or 25.

Research conducted prior to PRWORA indicated that immigrants were about as likely as natives to receive in-kind transfers like food stamps and Medicaid. We find that children of foreign-born noncitizens less often receive food stamps (p<.01), but there is no difference in their likelihood of Medicaid receipt. We do not have comparable data prior to PRWORA’s implementation, so we cannot assess whether the lower likelihood of food stamp use is the result of restricting our analysis to a sample of children of immigrants that is not nationally representative, or the result of a change in usage patterns after PRWORA. However, because the majority of our foreign-born caregivers are Hispanic, our results might imply a decline in food stamp use among children of Hispanic immigrants compared to their use in the early 1990s as reported by Hofferth (1999).

All households with U.S.-born children in our sample are equally likely to receive Medicaid, regardless of caregiver’s nativity status, perhaps because in each of the three cities, immigrant caregivers who arrived before PRWORA was enacted are eligible for Medicaid. From these results, we can infer that at least in mixed-status households and households with naturalized citizen caregivers in the low-income neighborhoods of three U.S. cities, there was little change in Medicaid use across the 1990's (see Borjas and Hilton, 1996 and Hofferth, 1999), despite upheaval in the administration of other social services. At least in these cities, the unexpected falloff in Medicaid enrollment that occurred after welfare reform (Ellwood and Ku, 1998; Ku
and Bruen 1999) does not appear to have affected U.S.-born children of immigrants more than children of mainland-born or Puerto Rican parents.

Unlike the other services, WIC is more commonly used by children of foreign-born noncitizens than by children of the mainland-born (p<.05). This pattern reflects the near-universal eligibility for WIC. Women who are themselves ineligible for other programs like food stamps may feel more comfortable seeking WIC coverage for their citizen children, rather than trying to obtain benefits through a program with different rules for citizens and immigrants. WIC is also a relatively easy program to access. Parents may enroll in the WIC program at the time of a child’s birth or at a WIC center, without the paperwork involved in establishing eligibility for benefits at a welfare office.

We also estimated a set of models that included interactions between nativity status and city of residence. As noted earlier, each city has distinct eligibility criteria for immigrants for at least some services. Also, immigrants in each city may be exposed to different outreach programs and information sources, which may deter or enhance immigrants' access to services on behalf of their children. Nevertheless, we did not find a strong or consistent set of interactions.¹⁰ (Results are available from the authors on request.)

*Estimated service use*

Figure 1 graphs the results of the regression models. All control variables are set at their means, and only nativity status varies. Each cluster of bars represents the number of expected months a household with a U.S.-born child would receive a particular service, and within each cluster, each bar represents a different nativity status for the caregiver in the household.

**FIGURE 1 ABOUT HERE**
The figure indicates that the expected months of service use varies by nativity group across all types of services. Beginning with the leftmost set of bars, caregivers born in Puerto Rico have the highest expected number of months of TANF enrollment: 14.1 out of 25, meaning that controlling for other measurable characteristics, households of U.S.-born children with Puerto Rican caregivers would be enrolled in TANF for more than half of a two-year period. Caregivers born in the mainland United States follow with an expected value of 9.2 months. Foreign-born caregivers are expected to receive TANF for about 43 to 53 percent less time on average: 5.2 months for households with noncitizen caregivers, and 4.4 months for those with naturalized citizen caregivers.

The average period of SSI enrollment is low across citizenship and nativity groups, as it is in the non-elderly population in general. Children with Puerto Rican caregivers have the highest SSI enrollment, averaging 3 months out of 25. This calculation might not be reliable, though, because the sample includes relatively few Puerto Rican and non-Puerto Rican SSI recipients, and the coefficient for Puerto Rican nativity status in our model predicting children’s SSI receipt is not significant.

In the case of TANF and SSI, households with naturalized citizen caregivers and noncitizen caregivers look more like each other than they do like either of the other groups: both use fewer services. In contrast, in terms of food stamp use, households with naturalized citizen caregivers look more like households with mainland-born and Puerto Rican caregivers than like households with noncitizen caregivers. The expected number of months of food stamp receipt for households with noncitizen caregivers in our low-income population is 8.9 out of 25. Households with naturalized citizen caregivers are more like the other groups of U.S. citizens:
they have an expected value of 14.8 months, nearly equal to the expected value for households with Puerto Rican caregivers (16.1 months).

The third and fourth sets of bars indicates greater parity among nativity/citizenship groups in the other in-kind transfers, Medicaid and WIC receipt. On average, households with a mainland-born caregiver, naturalized citizen or noncitizen caregiver receive Medicaid for about the same length of time (17.4 months, 16.9 months and 16.5 months, respectively). Puerto Rican households receive Medicaid for 20.8 out of 25 months on average, a figure about 20 percent greater than that for mainland-born caregivers. Mixed-status households (those with noncitizen caregivers and U.S.-born children) receive WIC for substantially longer periods compared to the other nativity groups. On average, households with low-income noncitizen caregivers and their U.S.-born children receive WIC for 14 months out of 25, compared to 9.4 months for low-income U.S.-born caregivers and their children.

Overall, the observed pattern of service usage indicates that households with noncitizen caregivers are less likely to receive food stamps, and all households with immigrant caregivers are less likely to receive TANF. The differences in TANF and food stamps use between caregiver nativity groups suggest that households with a U.S.-born child enroll in services at least in part according to the caregiver's eligibility, rather than according to the child's eligibility only. However, households with immigrant caregivers are as likely to receive Medicaid and WIC as households with mainland-born caregivers. From a policy perspective, the similarity in rates of Medicaid receipt is important to emphasize, because it suggests that this program has been effective in achieving parity in service enrollment across parental nativity groups.

Decomposing differences in probability and duration
Among nativity groups, how much of the difference in the expected number of months enrolled in a service results from differences in the probability of being enrolled at all, and how much results from differences in duration? A shorter period of enrollment among immigrant families could result from less dependence, more frequent sanctions, or more frequently disrupted contact with the social service system. We use an extension of the tobit decomposition proposed by McDonald and Moffitt (1980) to the case with upper and lower limits. We hold all variables, including nativity status, at the mean. Table 4 shows the results from our decomposition.

**TABLE 4 ABOUT HERE**

Across services, the vast majority of the difference in the expected number of months enrolled results from differences in the probability of being enrolled at all, rather than from differences in the duration of enrollment. Only 1 to 7 percent of the variation in service use results from differences in the length of time a household is enrolled. This suggests that the lower observed participation in some services among children in immigrant households results from differences in the likelihood of enrolling, rather than from a shorter period of enrollment. From a policy perspective, the findings from our decomposition suggest that access to services by citizen children in immigrant households can be improved through mechanisms to initiate rather than to maintain enrollment.

**Discussion**

Our first set of findings showed that native-born children with low-income immigrant caregivers in the poor neighborhoods of our three cities – Boston, Chicago, and San Antonio – are less likely than children with U.S.-born caregivers to receive some services. Specifically,
children of naturalized and noncitizen immigrant caregivers are less likely to receive TANF; and
children of noncitizen caregivers are also less likely to receive food stamps. But children of
immigrants are equally likely or more likely to receive Medicaid and WIC. Our results are
consistent with the literature on immigrants’ own receipt of services, and show that despite
differences in eligibility status, native-born children of immigrants have less access to some of
the social services for which their parents are ineligible.

The finding that children of noncitizens are less likely than children of citizens to receive
food stamps contradicts research conducted prior to PRWORA (Borjas and Hilton, 1996;
Hofferth, 1999). If our results do indeed represent a change in the behavior of immigrant
households, it could relate to changes in food stamp eligibility in the welfare reform legislation.
The initial revocation of benefits for immigrants already in the United States launched a broad
public discussion about the responsibilities of federal and state government to foreign-born
residents and about the relationship between citizenship and entitlement to publicly funded
services. The publicity that surrounded the changes in food stamp eligibility for immigrants
under PRWORA might have triggered what has been referred to as a “signaling effect” (Nathan
and Gais, 1999). Specifically, immigrants may have heard the message that the nature of the
social service system, and their access to it, had changed profoundly as a result of welfare
reform. Although food stamp eligibility for certain groups was subsequently reinstated, and
most states provided food assistance to immigrants out of their own funds after PRWORA (see
Carmody and Dean (1998) for a summary of state substitutions for food stamps for immigrants),
food stamp receipt in immigrant-headed households has continued to decline more sharply than
in native-headed households. Our results indicate that anxiety or uncertainty about food stamp
eligibility among noncitizen caregivers, possibly generated by the publicity about welfare reform and the resulting signaling effect, may carry over to their citizen children's benefit use as well.

Our estimates of SSI use by U.S.-born children of immigrants or native-born parents are less conclusive compared to our findings regarding other services because of the modest number of SSI cases. If there are truly no significant differences in SSI use between the children of foreign-born and mainland-born caregivers, these results may indicate that foreign-born caregivers are better able to or more inclined to access benefits on behalf of their children when children are especially ill or when the benefits program provides financial support not subject to a time limit. However, these findings contradict earlier research about immigrants' use of cash assistance, and we might have expected foreign-born caregivers to report less frequent SSI receipt for a variety of reasons.11

Second, our comparison of Puerto Rican and foreign-born citizen and noncitizen caregivers indicates a complex relationship between the factors of migrant status and citizenship. We expected that households with Puerto Rican and foreign-born caregivers would have been similar if the act of migration was paramount in explaining service use patterns among those not born on the U.S. mainland. But if citizenship status played a more critical role, service use patterns in households with Puerto Rican or foreign-born heads would diverge. Overall, we found that citizenship status had the stronger association: households with noncitizen caregivers were less likely to receive TANF, SSI, or food stamps compared to households with mainland-born or Puerto Rico-born caregivers. However, as we stated earlier, these findings should be taken as suggestive, as we are not able to control for all attributes that distinguish Puerto Rican migrants and foreign-born immigrants other than citizenship status.
Households with naturalized foreign-born caregivers were less consistent. In the case of food stamp and WIC receipt, they more closely resembled households with caregivers who were U.S. citizens at birth. But in the case of TANF and SSI receipt, they more closely resembled households with noncitizen caregivers. What might explain this pattern? Perhaps a selection effect is at work for naturalization. Recall that the public charge doctrine considers dependence or potential dependence on TANF or SSI when evaluating applications for entry to the United States or for a transition to permanent resident status. Use of the other services we have studied is not considered. Perhaps immigrants who expected to naturalize may have been more likely to avoid TANF or SSI, either because they were aware of the public charge doctrine, or because they were relatively successful in the United States. Therefore, households with children of naturalized citizens may be more like those with mainland-born citizen or Puerto Rican caregivers in terms of their use of services that the Immigration and Naturalization Service disregards, but less likely to use TANF or SSI.

Our third set of findings results from decomposing differences in service use among caregiver nativity groups. We find that differences result from variation in the probability of service enrollment, rather than from the length of time a household receives a service. Households with foreign-born caregivers are no more or less likely to be dependent on any of the services considered, where dependency is defined as continuous enrollment over an observed period. But those households are much less likely to take up services at all, even after controlling for correlates of migration status like marital status, education, health, and number of children.
In sum, our results lead us to conclude that concerns about the emergence of two classes of U.S.-born children – one with full access to social services, and the other with limited access – should be qualified. The differences are strongest with regard to TANF, the main cash assistance program. For food stamps, we observed a difference just for children with noncitizen caregivers. For Medicaid and other services we did not observe a difference that favored children with mainland-born caregivers. The gap in service usage between children with U.S.-born caregivers and foreign-born caregivers varies from program to program and depends, in part, on immigrant caregivers’ citizenship status, in addition to nativity status.
APPENDIX: DECOMPOSING EFFECTS IN THE TWO-LIMIT TOBIT MODEL

For the one-limit tobit model, McDonald and Moffitt (1980) provide a decomposition of the marginal effect of a unit change in regressor $x_y$ on the expected value of the observed $y_i$, $\frac{\partial E(y|x)}{\partial x_y}$, into two parts: the proportion of the effect due to changes in the probability of being in the observed range and the proportion due to changes in the value of $y_i$ for cases that are in the observed range. The decomposition can be generalized to the two-limit tobit model (Long 1997).

We begin by differentiating equation (1) in the text:

$$\frac{\partial E(y|x)}{\partial x_j} = \left( \frac{\beta_j}{\sigma} \right) \left( \Phi(\delta_{ij}) - \Phi(\delta_i) \right) + \left( \frac{\beta_j}{\sigma} \right) \left( \phi(\delta_{ij}) - \phi(\delta_i) \right) \left( \sum \beta_i \phi(\delta_{ij}) + \sigma \frac{\phi(\delta_{ij}) - \phi(\delta) - \delta_{ij} \phi(\delta_{ij}) - \delta \phi(\delta)}{\Phi(\delta_{ij}) - \Phi(\delta)} \right)$$

$$+ \left[ \phi(\delta_{ij}) - \phi(\delta) \right] \beta_j \left( 1 + \frac{\delta \phi(\delta_{ij}) - \delta_{ij} \phi(\delta_{ij})}{\Phi(\delta_{ij}) - \Phi(\delta)} - \frac{\phi(\delta_{ij}) - \phi(\delta)}{\Phi(\delta_{ij}) - \Phi(\delta)} \right)^2$$

The first term on the right side of equation 2 represents the effect of a unit change in $x_y$ on the probability of being above or below the observed range, weighted by the expected values at the limits and the probabilities of being at the limits. The second term represents the effect of a unit change in $x_y$ on the probability of being within the observed range, weighted by the expected value of $y$ in the observed range. In our model, they jointly represent the effect of a unit change in $x_y$ on the probability of having an observed spell of program usage. The third term represents the effect of a unit change in $x_y$ on the value of $y_i$ for cases with spells in the observed range, weighted by the probability of having an observed spell. In our model, this term represents the
effect of a unit change in $x_{ij}$ on the number of months of program usage for those who had an observed spell of usage. Thus, we can decompose the marginal effect of $x_{ij}$ into an amount that is due to changing the probability of using a program during our study (the sum of the first two terms) and an amount that is due to changing the duration of usage for those who used it (the third term).

We can normalize these two amounts so that they sum to 1.0. The left-hand side of equation 2 can be shown to equal $[\Phi(\delta_U) - \Phi(\delta_L)]\beta_j$. Therefore, we can sum the first two right-hand-side terms and divide by $[\Phi(\delta_U) - \Phi(\delta_L)]\beta_j$ to calculate the proportion of the effect of $x_{ij}$ that is due to a change in the probability of using a program; and we divide the third right-hand-side term by $[\Phi(\delta_U) - \Phi(\delta_L)]\beta_j$ to calculate the proportion of the effect of $x_{ij}$ that is due to a change in the duration of usage for those who used it. In these calculations we evaluate the vector $\Sigma \beta_j x_{ij}$ by setting all variables equal to their mean value; and we set $L=0$ and $U=25$. We report these proportions in table 4.
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Fix, M. and J. S. Passel


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Fix, M. and W. Zimmermann


Genser, J.

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Hofferth, S. L.


Jensen, L.


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Table 1. Proportion enrolled in selected public assistance programs, 1997-1999

<table>
<thead>
<tr>
<th>Panel 1: U.S. mainland-born caregivers (N=1669)</th>
<th>TANF</th>
<th>SSI</th>
<th>Food stamps</th>
<th>Medicaid</th>
<th>WIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion enrolled</td>
<td>.523</td>
<td>.107</td>
<td>.636</td>
<td>.764</td>
<td>.564</td>
</tr>
<tr>
<td>Average # of months on, all respondents</td>
<td>9.846</td>
<td>2.161</td>
<td>13.292</td>
<td>16.854</td>
<td>9.672</td>
</tr>
<tr>
<td>Average # of months on, given enrollment</td>
<td>18.890</td>
<td>20.183</td>
<td>21.640</td>
<td>22.055</td>
<td>17.530</td>
</tr>
</tbody>
</table>

| Panel 2: Puerto Rican-born caregivers (N=135)    |       |       |             |          |       |
| Proportion enrolled                             | .624  | .240  | .617        | .783     | .571  |
| Average # of months on, all respondents          | 12.483| 5.407 | 13.078      | 19.009   | 11.777|
| Average # of months on, given enrollment         | 20.012| 22.497| 21.960      | 24.302   | 20.981|

| Panel 3: Foreign-born citizen caregivers (N=86)  |       |       |             |          |       |
| Proportion enrolled                             | .180  | .035  | .596        | .638     | .524  |
| Average # of months on, all respondents          | 3.349 | .757  | 11.213      | 13.373   | 10.063|

| Panel 4: Foreign-born noncitizen caregivers (N=241)|       |       |             |          |       |
| Proportion enrolled                             | .197  | .025  | .359        | .633     | .669  |
| Average # of months on, all respondents          | 3.218 | .614  | 6.047       | 12.496   | 14.298|
Table 2. Weighted mean value of independent variables, by female caregiver’s nativity status

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Native</th>
<th>Puerto Rican</th>
<th>Foreign-born citizen</th>
<th>Foreign-born noncitizen</th>
</tr>
</thead>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston</td>
<td>.333</td>
<td>.265</td>
<td>.904</td>
<td>.614</td>
<td>.450</td>
</tr>
<tr>
<td>Chicago</td>
<td>.333</td>
<td>.380</td>
<td>.094</td>
<td>.145</td>
<td>.199</td>
</tr>
<tr>
<td>San Antonio</td>
<td>.333</td>
<td>.355</td>
<td>.002</td>
<td>.242</td>
<td>.352</td>
</tr>
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<td><strong>Race/Ethnicity</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>.052</td>
<td>.064</td>
<td>.000</td>
<td>.007</td>
<td>.017</td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td>.439</td>
<td>.535</td>
<td>.000</td>
<td>.231</td>
<td>.097</td>
</tr>
<tr>
<td>Hispanic, any race</td>
<td>.509</td>
<td>.402</td>
<td>1.000</td>
<td>.763</td>
<td>.886</td>
</tr>
<tr>
<td><strong>Caregiver characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caregiver’s age</td>
<td>30.737</td>
<td>30.818</td>
<td>30.624</td>
<td>32.013</td>
<td>29.994</td>
</tr>
<tr>
<td>Caregiver is married</td>
<td>.301</td>
<td>.247</td>
<td>.205</td>
<td>.491</td>
<td>.605</td>
</tr>
<tr>
<td>Caregiver has at least HS diploma or GED</td>
<td>.617</td>
<td>.623</td>
<td>.559</td>
<td>.656</td>
<td>.599</td>
</tr>
<tr>
<td>Respondent has serious disability</td>
<td>.033</td>
<td>.038</td>
<td>.058</td>
<td>.002</td>
<td>.007</td>
</tr>
<tr>
<td><strong>Households characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of minors in household</td>
<td>2.111</td>
<td>2.075</td>
<td>2.367</td>
<td>2.521</td>
<td>2.124</td>
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<tr>
<td>Age of youngest child (years)</td>
<td>2.859</td>
<td>2.810</td>
<td>3.420</td>
<td>3.426</td>
<td>2.799</td>
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<tr>
<td>Focal child has serious disability</td>
<td>.025</td>
<td>.029</td>
<td>.021</td>
<td>.002</td>
<td>.011</td>
</tr>
<tr>
<td>N (unweighted)</td>
<td>2127</td>
<td>1667</td>
<td>135</td>
<td>86</td>
<td>239</td>
</tr>
<tr>
<td>N (weighted)</td>
<td>2127</td>
<td>1664</td>
<td>107</td>
<td>70</td>
<td>286</td>
</tr>
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Table 3. Beta coefficients and robust standard errors from tobit regressions predicting social service receipt, 1997-1999

<table>
<thead>
<tr>
<th></th>
<th>WELFARE</th>
<th>CHILDREN'S SSI</th>
<th>FOOD STAMPS</th>
<th>MEDICAID</th>
<th>WIC</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
<td>Robust</td>
</tr>
<tr>
<td>R's nativity status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R born in US (omitted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R's other characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R reports disability</td>
<td>17.376 * 7.507</td>
<td>15.574 24.183</td>
<td>30.922 ** 11.67</td>
<td>34.73 ** 11.088</td>
<td>3.585 6.182</td>
</tr>
<tr>
<td>R unmarried (omitted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R's age</td>
<td>-0.510 ** 0.161</td>
<td>2.587 ** 0.857</td>
<td>-1.091 ** 0.355</td>
<td>-0.578 * 0.292</td>
<td>-0.941 ** 0.176</td>
</tr>
<tr>
<td>White (omitted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of youngest child in hh of minors in hh</td>
<td>-0.895 0.636</td>
<td>5.202 * 2.624</td>
<td>0.233 1.228</td>
<td>-1.575 1.139</td>
<td>-5.201 ** 0.672</td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boston (omitted)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Intercept</td>
<td>8.597 6.334</td>
<td>-235.424 ** 59.474</td>
<td>17.401 12.353</td>
<td>52.084 ** 11.455</td>
<td>47.342 ** 6.632</td>
</tr>
<tr>
<td>Sigma</td>
<td>31.050 2.074</td>
<td>96.469 16.77</td>
<td>51.384 4.273</td>
<td>45.802 3.875</td>
<td>26.712 1.821</td>
</tr>
</tbody>
</table>

**p<.01, *p<.05, ^p<.10

Uncensored: 633 65 464 435 596
Left censored: 918 1915 589 343 952
Right censored: 576 147 1074 1349 579
Table 4: Proportion of difference in program enrollment due to probability and length of enrollment

<table>
<thead>
<tr>
<th>Service</th>
<th>Probability</th>
<th>Length of enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>TANF</td>
<td>.947</td>
<td>.053</td>
</tr>
<tr>
<td>SSI</td>
<td>.994</td>
<td>.006</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>.980</td>
<td>.020</td>
</tr>
<tr>
<td>Medicaid</td>
<td>.976</td>
<td>.024</td>
</tr>
<tr>
<td>WIC</td>
<td>.929</td>
<td>.071</td>
</tr>
</tbody>
</table>
Figure 1: Expected months of enrollment (E(y|x)), by service

- Mainland-born caregiver
- Puerto Rican caregiver
- FB citizen caregiver
- FB noncitizen caregiver

- Medicaid
- WIC
- Food stamps
- SSI
- TANF
1. Paula Fomby is Associate Research Scientist and Andrew J. Cherlin is Benjamin H. Griswold III Professor of Public Policy in the Department of Sociology at Johns Hopkins University. This research was supported by the following organizations. Government agencies: National Institute of Child Health and Human Development; Office of the Assistant Secretary for Planning and Evaluation; Administration on Developmental Disabilities; Administration for Children and Families; Social Security Administration; and National Institute of Mental Health. Foundations: The Boston Foundation; The Annie E. Casey Foundation; The Edna McConnell Clark Foundation; The Lloyd A. Fry Foundation; Hogg Foundation for Mental Health; The Robert Wood Johnson Foundation; The Joyce Foundation; The Henry J. Kaiser Family Foundation; The W. K. Kellogg Foundation; The Kronkosky Charitable Foundation; The John D. and Catherine T. MacArthur Foundation; The Charles Stewart Mott Foundation; The David and Lucile Packard Foundation, and The Woods Fund of Chicago. We are grateful to Robert Moffitt for methodological assistance.

2. PRWORA legislation distinguishes between immigrants who arrived before passage of the law on August 22, 1996, and those who arrived later. "Pre-enactment" immigrants qualify for SSI, and select groups, including children, the disabled, and the elderly, also qualify for food stamps. (All pre-enactment immigrants were initially barred from receiving food stamps, but eligibility was reinstated for some groups under the Balanced Budget Act of 1997 and the Agricultural Research Act of 1998.) Decisions about funding other social programs for pre-enactment immigrants, including TANF and Medicaid, devolved to the states. The legislation also barred "post-enactment immigrants" permanently from receiving SSI or food stamps, and from other services for the first five years in the United States, with states having the option to provide services later (Zimmermann and Tumlin 1999). Most states have used funds from the TANF block grant or from other resources to reinstate services at least for pre-enactment immigrants.

3. Ninety-three percent of the block groups that were selected for the sample had poverty rates of 20 percent or more.

4. Children who were solely in the care of a father or other male relative were not interviewed. Population estimates suggested that the numbers of such families would have been too small to provide reliable statistics.

5. That is to say, of all the eligible child-caregiver pairs that were identified, interviews were completed with 74 percent of them.
6. According to the sampling design, the unit of analysis is a child in a household. However, the question wording for the items from which we draw our dependent variables suggest that the unit of analysis is more accurately described as the family household, as the respondent is asked only about the social service history of her and her children. Prior research indicates that household-level comparisons of service receipt have overstated the use of AFDC and understated the use of SSI because of differences between immigrant- and native-headed households in household size, recipient clustering and nativity homogeneity that compound individual-level differences in service receipt (Van Hook, Glick, and Bean 1999). We expect that by limiting our analysis to a single family within a household, we avoid the bias contained in a household-level analysis. However, to the extent that foreign-born and non-foreign born children of the same caregiver receive services at different rates, we may overestimate or underestimate social service receipt for non-foreign-born focal children.

7. Prior research has indicated that in addition to nativity status, a foreign-born respondent's time in the United States is an important indicator of service use (Borjas and Hilton 1996). Including such indicators in our multivariate analysis did not consistently improve model fit.

8. To establish causal ordering, we have lagged time-varying variables by two years where possible. For some items, we do not have complete histories, however, and for those items we use the status reported at interview. They include marital status, child's health, caregiver's health, the number of minors in the household, and the age of the youngest minor in the household. Respondent's age and education are lagged. We compared our multivariate models to models including lagged values for time-varying variables where we had that information, and the results were not significantly different from those reported here.

9. Based on 1990 Census tract data about the racial and ethnic concentration in poor neighborhoods in the three cities, the investigators expected to find more non-Hispanic whites in selected neighborhoods.

10. In the case of TANF and food stamps receipt, there is a significant difference for the children of foreign-born caregivers living in Chicago. Those children are significantly less likely to be enrolled in TANF (p<.05) or food stamps (p<.10) than are comparable children in Boston or San Antonio. In predicting SSI receipt, the interaction between city and nativity status in San Antonio is significant at the p<.05 level.

11. Children of Hispanic immigrants may experience less need for SSI if they maintain the same relatively good health as their caregivers. First-generation immigrants typically have an advantage in health quality compared to
low-income natives (Hummer, Rogers, Amir, Forbes, and Frisbie 2000). Alternatively, immigrants might have been less likely to apply for SSI on behalf of their children because of the many hurdles involved: most first applications are denied, applicants frequently require legal assistance to make their case for eligibility, and the SSI application process may require a greater knowledge of English because applicants need to communicate with physicians and lawyers, as well as case managers. Also, immigrants might have been rejected for SSI more often than natives even when they persisted in the application process. Due to the high value of sigma and the large coefficients and standard errors in our regression model, we cannot conclusively support any of these explanations of SSI use.
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