HHS Public Access

Author manuscript

Child Youth Serv Rev. Author manuscript; available in PMC 2015 October 02.

Published in final edited form as:

Child Youth Serv Rev. 2015 October ; 57: 83–89. doi:10.1016/j.childyouth.2015.07.009.

IMMIGRATION ENFORCEMENT AND MIXED-STATUS FAMILIES: THE EFFECTS OF RISK OF DEPORTATION ON MEDICAID USE

Edward D. Vargas

Center for Women's Health and Health Disparities Research, University of Wisconsin-Madison 310 N. Midvale Blvd, Suite 201; Madison, WI 53705, USA

Abstract

As Congress priorities the immigration debate on increased border security, the fate of an estimated 11 million undocumented citizens remains uncertain. Stuck in between partisan politics and practical solutions are mixed-status families in which some members of the family are U.S. citizens while other members are in the country without proper authorization. This paper, examines the relationship between risk of deportation and Medicaid use drawing from a nationally sample of mothers from the Fragile Families and Child Wellbeing Survey. These data are then merged with data from the U.S. Citizenship and Immigration Services to create a contextual risk of deportation measure. Findings suggest that an increase in risk of deportation is associated with a decrease in Medicaid use. The implications of this work have tremendous impacts for health service providers and policy makers interested in preventing and reducing health disparities in complex family structures.

Keywords

Health Disparities; Mixed-Status Families; Immigration Enforcement; Program Evaluation

INTRODUCTION

As Congress priorities the immigration debate in terms of increased border security and work authorization, the fate of an estimated 11.1 million undocumented citizens remains uncertain. Stuck in between partisan politics and practical solutions are mixed-status families in which some members of the family are U.S. citizens while other members are in the country without proper authorization. As one would expect, living in the shadows of our society and avoiding detention and deportation is an extremely stressful event that may deter an individual from seeking public services or medical attention.

This phenomenal would be insignificant if the mixed-status family population was small, this however is not the case. According to the Pew Hispanic Center, of the 4.3 million babies born in the U.S. in 2008, eight percent or 340,000 of these children were born into mixed-status families (Passel, 2010). One explanation for this increase is an indirect consequence of immigration enforcement. For example, as the cost of unauthorized travel between

Corresponding Author:*edward.vargas@gmail.com*, +011 1 (608) 262-7573, fax +011 1 (608) 265-5947.

Mexico and the U.S. has increased, this has indirectly caused undocumented workers to remain in the U.S. longer and ultimately increasing their chances of a child born in the U.S.

Aside from sheer numbers, the need to study mixed-status families and their use of U.S. social services is important for several reasons. First, from a civil liberties perspective, mixed-status families are voiceless and a vulnerable population in our society. While, unauthorized parents live in the "shadows" of our society, the children do have standing as these children are US citizens and are protected under the 14th Amendment. "All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside..."

Second, children in mixed-status families are at-risk and precisely the types of clients targeted by many social services, social workers, and public health organizations. For example, Hispanics in general are less likely to be insured, within the pan-ethnic Hispanic population, immigrants without legal authorization are less likely to have employer coverage and are currently excluded from purchasing coverage from the federal exchange in the Affordable Care Act (Rutledge and McLaughlin, 2008; Kaiser, 2013). From, social exclusion standpoint (i.e. lack of access to a state identification card, bank accounts, and social services), mixed status families are at the margins and experience a multitude of dramatic stress and marginalization (Yoshikawa, Godfrey, and Rivera, 2008). To the extent that these individuals remain in the U.S., public policies can serve to either enhance or diminish their eventual contributions to the U.S. economy.

In short, until recently there have been few studies that examine the risk of deportation on take-up rates by mixed-status families of a federally funded social program in the Personal Responsibility Work Opportunity Reconciliation Act (PRWORA) environment. One exception is a recent paper by Watson (2014) who examined immigration enforcement on Medicaid uptake among citizens and non-citizens. My approach differs from this work as it develops a risk measure that standardizes enforcement by the number of estimated undocumented citizens at the state level. Because, undocumented mothers are eligible for Medicaid when giving birth (emergency treatment), Medicaid then provides an exception to the general exclusion of services to this population and allows us to assess take-up rates as well as the effect of other federal policies related to unauthorized aliens on their willingness to apply for benefits. Using the Pew Hispanic Centers methodology to impute documentation status, we apply this methodology in the Fragile Families dataset to examine Medicaid use among mixed-status families (Passel 2005). The Fragile Families and Child Wellbeing sampling strategy required that the focal child in the survey be born in the U.S. – making them eligible for all social services provided that they meet program eligibility requirements.

Because mixed-status families are somewhat unique relative to most social service recipients, we expand the typical take-up model to consider one key variable of interest that is particularly relevant to this population: risk of deportation which can contribute to a "chilling" environment for undocumented workers. To measure risk of deportation we submitted a Freedom of Information Act request to Homeland Security to secure the

necessary information to compute deportation risks; this information has subsequently been made available online.

We fully recognize that there is likely to be considerable confusion about Medicaid eligibility among immigrants and mixed-status families. Additionally, the federal government allows states the discretion to expand eligibility for some social programs, at state expense. This complex environment has also led to confusion among some program administrators and operators who have mistakenly turned away some eligible immigrants from services (Broder and Blazer, 2011). Our models of Medicaid take-up reflect this current political and policy environment, not a simpler environment of across-the-board inclusion or exclusion.

BACKGROUND

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) was the first real attempt to restrict benefits to immigrants, radically altering the policy environment for services. Under the PRWORA (P.L. 104-193) and subsequent laws, eligibility restrictions were enacted to restrict certain programs to legal immigrants and deny access by unauthorized migrants to most federally funded government programs.

In general, PRWORA established an official distinction between ‘qualified ‘and ‘unqualified’ aliens. Qualified aliens are those who have legal permanent residency and/or refugee status. Unqualified aliens are unauthorized migrants who are residing in the U.S. without proper documentation. While qualified aliens are eligible for some federal benefits, unqualified immigrants are denied most federal benefits including, among others, Temporary Assistance to Needy Families (TANF), Medicare, Medicaid, State Child Health Insurance Programs (SCHIP), Supplemental Security Income (SSI) and the Supplemental Nutrition Assistance Program (SNAP, formerly Food Stamps).

Although clearly written in law, in practice, there is great confusion about what state level benefits are available to both qualified and unqualified immigrants. The fact that the programmatic restrictions can vary from state to state adds to confusion over eligibility for benefits on the part of unauthorized immigrants. This confusion may explain part of the disparity between program availability and program take-up that has been well documented even among documented immigrants (Blau, 1984; Borjas & Trejo, 1993; Boras & Trejo, 1999; Borjas & Hilton, 1996; Bean et al, 1997; Van Hook et al., 1999). This paper departs from this earlier stream of research by looking at the effects of a unique policy lever measure (risk of deportation) on the take-up rates of Medicaid among mixed status families.

The take-up literature up to this point has focused particularly on States’ program design, eligibility requirements, and state specific characteristics on the proportion of individuals enrolled in public health insurance programs against the proportion of low-income individuals eligible. Other Medicaid evaluation work has tested if SCHIP indirectly ‘crowds out’ private insurance coverage. For example, in a U.S. GAO study of ten states, Kronick & Gilmer (2002) examined how state public insurance programs influenced coverage of adults and examined the extent of crowd-out private coverage. Later work by LoSasso and Buchmueller (2004) used Current Population Survey data for 1996-2001 to examine the

overall success of SCHIP programs in increasing the coverage of children, the income level of the families most responsive to SCHIP, and the groups among which the greatest crowd-out occurred. Traditional barriers to program use in general include lack of transportation, lack of child care, and lack of information about program eligibility along with the perceived embarrassment of receiving a “handout” (Kahler et al., 1992).

In terms of how Medicaid/SCHIPS affects immigrant children, research shows that children of immigrants are more likely than those with U.S. born parents to live in poverty and are less likely to be employed in an occupation that provides private health insurance. For example, first generation immigrant children are three times as likely as children from U.S. born parents to lack health insurance, and second generation are twice as likely to have it (Hernandez et al., 2011). According to the UCLA Center for Health, the uninsured rate for noncitizen children is triple that of children whose parents are native born or have become naturalized citizens. For U.S citizen children with noncitizen parents, the rate is double that of those whose parents are citizens. The UCLA Center for Health as found that that one in four uninsured children, or 2.8 million, lives in a non-citizen family (Brown et al, 1999).

As expected poverty is an important determinant in explaining lack of health insurance. In addition, unauthorized immigrants also tend to work in jobs that do not provide employee based health insurance and/or employed in occupations that pay off the books. Moreover, we can also expect that poor noncitizen children whose parents lack job-based coverage have lower rates of participation than poor citizen children of U.S. citizens. The lack of insurance for citizen children in mixed-status families means that these children are less likely to receive timely care for acute conditions, and less likely to have their chronic conditions diagnosed and appropriately managed. This lack of primary and preventive care has shown to exacerbate the cost of medical care in long run, particularly for undocumented immigrants who all though have U.S. children that are eligible for Medicaid/SCHIPS, but are not participating in the program because of fear of deportation (Kullgren, 2003; Amuedo-Dorantes et al. 2013). An interesting component of trying to understand immigrant participation in public assistance is on the nature or behaviors that drive take-up rates. For example, if families participate at lower rates given they are eligible, is this reason attributed to the anti-immigrant climate in their communities? How does the enforcement of immigration in the interior impact take-up rates?

Risk of deportation as it affects the uptake of social services among undocumented immigrants has also received relatively little attention in the literature. What we know so far is that unauthorized immigrants who report high levels of fear (of deportation) are more likely to report an inability to acquire medical and dental care (Berk & Schur, 2001). Asch, Leake & Gelberg (1994) also report that undocumented immigrants feared going to physicians because they thought that it could lead to trouble with immigration authorities. These undocumented immigrants were almost four times as likely to delay seeking care for more than two months compared to their citizen counterparts. Both of these papers are qualitative and never quantified risk of deportation and never statistically tested the relationships reported from their observational studies. Using these published manuscripts as our theoretical framework, we create a new measure called risk of deportation to look at

how immigration enforcement affects the uptake of Medicaid in mixed status families in the post-PRWORA environment.

Anti-Immigrant Climate

While social workers have concentrated most of the work on psychological phenomenal like stigma, we argue that risk of deportation is an additional indicator that is driving the differences between take-up rates and Medicaid participation for mixed-status families. Fear and risk of deportation can take various forms. One of the most salient signals of anti-immigrant backlash are the proposed English only laws spread across the states starting in the 1980's. While the majority of the legislative actions were defeated in states with substantial language minority populations, conservative states and states with mechanisms for direct democracy generally adopted such laws (Citrin et al. 1997; Preuhs, 2005). Work by Preuhs (2005) estimate that of the 50 states, around half have now adopted Official English laws. Arguably adoption of this law is closely tied to resentment toward racial/ethnic minorities particularly the foreign born (Schildkraut, 2001). Other anti-immigrant bans that have negatively affected undocumented families are laws banning the issuance of driver's licenses, laws banning day laborers sites, and measures which require proof of citizenship to rent or lease an apartment.

Deportations through removal saw large increases during the Clinton administration years from 70,000 in 1996 to 115,000 in 1997, and have continued to increase over time (DHS, 2014). Deportations through returns saw large decreases from the late 1900's and an upswing after 2002 as returns began to increase which peaked in 2004 to 1,666,576 immigrants (DHS, 2014). The difference between deportation through removal and through returns has to do with how immigrants are counted by the Department of Homeland Security. In general, deportation through removal is much more severe as it calls for a judge order and comes with stiffer penalties and deportation through returns can be individuals who return without penalty and immigrants who are ‘catch and released’ when caught at the border (Vicens, 2014) Despite, the bureaucratic semantics, it is estimated that under the Obama administration around 438,421 undocumented immigrants were deported through removal in 2013 (DHS, 2014) giving the President the title Deporter-in-Chief. As expected this heighted enforcement has negatively affected the Latino community. A poll conducted by the Pew Hispanic Center (2007) shows over half of Latinos worry they, a family member, or close friend can be deported. Moreover, 67 percent of the foreign born respondents in this same poll feel that they are negatively affected by the increased enforcement and attention to illegal immigration. Moreover, since the enactment of Section 287(g) of the Immigration and Nationality Act[1], which legalizes the deputation of local law officials to act as federal immigration law enforcers, deportations have been more visible in the undocumented community. As of 2011, there were agreements with 69 law enforcement agencies in 24 states that have enacted 287(g). The 287(g) program has sense been phased out in 2012, but evidence has shown that this program has been negative in terms of immigrants reluctance to trust law enforcement and the numerous claims made by legal-aid organizations stating

[1]Officially passed under the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 but states did not start adopting 28 7(g) agreements until 2008.

that the program is unjustly racially profiling Hispanic Americans. The end result of this program however has taken its toll and has forced undocumented immigrants further into the shadows.

In addition to federal action, states have been active in passing anti-immigrant legislations which make it unlawful to be in the state without proper documentation. For example, Oklahoma, South Carolina, Arizona, and Alabama have all passed anti-immigrant legislation which is forcing the undocumented to either flee or go further underground. In sum, as the number of deported aliens reached an all-time high in 2009 the presence of local foot soldiers has caused an increased climate of fear and risk of deportation amongst undocumented immigrants living in the interior.

While, there are undocumented immigrants from every corner of the world, deportations naturally affect Mexican immigrants disproportionally. In fiscal year 2005 for example, around 85 percent of the 1,291,142 deportable immigrants from the U.S. were from Mexico (DHS, 2005). This of course is largely a function of the flow of undocumented aliens from Mexico and our historical relationship with our southern neighbor. What is not clear is of those deported, how many of these unauthorized migrants have children who are American citizens. Thus far, the Urban Institute has produced the only study that has focused on the outcomes of immigration raids. The study found that of the 900 unauthorized immigrants detained in 2007 worksite raids, over 500 children were affected (Urban Institute, 2007). As noted by the study the majority of these children were in fact U.S. citizens.

What has yet to be tested is how risk of deportation affects the likelihood of a mixed-status mother's use social services? We posit that as anti-immigrant sentiment increases this then would deter a mixed-status mother to not to participate in a government program in which her child is eligible to receive. In sum, this is the first empirical analysis to first disaggregate mixed-status mothers and quantify risk of deportation on the probability of social service take-up in mixed-status families.

METHODOLOGY

The main question in this study is how risk of deportation (Γ) in mixed-status (M) families affects the probability of Medicaid uptake? To test this question, we will estimate a series of logistic regressions with data from the Fragile Families and Child Wellbeing Study. The final model is as follows[2]:

$$Medicaid_i = \mathrm{M}_i\beta_1 + \Gamma_i\beta_2 + \Delta_i\beta_3 + X_i\beta_4 + \varepsilon_i$$

Where: M=Family Categories; Γ= Risk of Deportation; Δ= Medicaid specific disabling factors; X=Vector of mother-specific characteristics (Age, Education, Marriage Status, Number of Children, Experience with Economic Hardship and Employment).

[2]Various derivations of this model have been tested for specification, multi-collinearity and robustness.

Due to the fact that the outcome variable is binary, we will be estimating this logistic equation with a maximum likelihood estimator (MLE). Findings will be presented using logit coefficients and factor change in odds ratios. Because this survey is used to represent the U.S. nationally, weights are applied in all estimations to correct for biased standard errors and all statistical analysis were conducted using Stata 10.

DATA

Studying undocumented families and program use is a challenge especially when further collapsing families into mixed-status subcategories by nationality, race and ethnicity. To model a mixed-status family one family member has to be a U.S. citizen and at least one parent should be undocumented. In order to fulfill data requirements, we make use of the survey sampling strategy of the Fragile Families and Child Wellbeing Survey (FFCWB). The Fragile Families and Child Wellbeing Study is a national longitudinal sample of all U.S. cities with 200,000 or more inhabitants between 1998 and 2000. Data have been collected on 4,898 births in 75 hospitals in 20 cities across the United States. The study then follows a cohort of parents and their children from child's birth, 12th month, 30th month, 48th month and when the child is nine years old. This analysis uses the nationally representative weights to be able to generalize about the well-being of families living in fragile families.

The Fragile Families and Child Wellbeing Study are of particular importance for this study because of their scope and national representativeness. In addition, the Fragile Families by design includes only families who have a child born in the U.S., granting the child citizenship by birthright. The study has a representative number of mixed-status families who are sampled across time on various indicators of social service participation, earnings, and physical/mental health. Moreover, the contract data has geographic indicators which permit merging external data sources to the geographic location of the mother. The first two waves of the Fragile Families survey are utilized which were administered in 1998-2001.

External sources of data (deportation data from Special Agent in Charge Districts of the U.S. Department of Homeland Security[3], undocumented population estimates from the Pew Hispanic Center, and Medicaid specific measures from the Kaiser Family Foundation are merged using the geo-coded indicators within Fragile Families and Child Survey. For example, if living in Indianapolis, you are under the enforcement jurisdiction of the Chicago, IL SAC district. Matching Fragile Family sites and Special Agent in Charge districts are as followed: Oakland-San Francisco, Austin-San Antonio, Baltimore-Baltimore, Detroit-Detroit, Newark-Newark, Philadelphia-Philadelphia, Richmond-Washington DC, Corpus Christi-Houston, Indianapolis- Chicago, Milwaukee-Chicago, New York-New York, San Jose-San Francisco, Boston-Boston, Nashville-New Orleans, Chicago-Chicago, Jacksonville-Tampa, Toledo-Detroit, San Antonio-San Antonio, Pittsburgh-Philadelphia, Norfolk-Washington DC.

[3]Obtained through the Freedom of Information Act (FOIA) are now publicly available.

MEASURES

Family Categories

Mixed-status mothers in this study are defined as mothers who are undocumented and who have a child who is an American citizen by birthright. Families were separated by race and ethnicity and citizenship status. For example, families were collapsed into U.S. born non-Hispanic Whites (reference group), U.S. born non-Hispanic Black, non-Hispanic Black naturalized, non-Hispanic Black mixed status, U.S. born Hispanic, Hispanic naturalized, Mexican-Hispanic mixed-status, and non-Mexican Hispanic mixed-status family.

Up to this point there is no prior research on how to code mixed-status. Using qualitative interviews and focus groups, a typology was constructed and one of these mixed-status families is depicted in figure 1. Qualitative interviews suggest that mixed-status families are a function of residency in the U.S., and the demographic profile on an immigrant. In general, the family in the figure 1, is representative of a family who came to the U.S. relatively young and has been in the U.S. long enough to form a family.

Exhibit 1: Typology of Mixed-Status Families—To be coded as mixed-status in the FFCWB dataset you have to self-identify as being foreign born and non-citizen. If satisfying the above criteria you were coded as mixed-status. If, mothers were not asked the citizen question (certain cities were skipped) and said they were foreign born they were coded as being citizens if they arrived pre-1986 and presumed to be non-citizens after 1986. Moreover, because the FFCWB design surveys mothers who have given birth in a U.S. hospital this automatically makes them eligible to be classified as mixed-status.

Risk of Deportation

Risk of deportation is measured as the proportion of deported aliens divided by the number of estimated unauthorized immigrants[4]. For example, we would expect that the risk of being deported in Texas is different than the risk of being deported in North Carolina. Deportation data are gathered from the Department of Homelands Security- Immigration Statistics office. The data are then classified by the 26 Special Agents in Charge Jurisdictions, who are responsible for enforcing specific jurisdictions within the nation's interior. The 26 SAC offices maintain various subordinate field offices throughout their areas of responsibility, and produce statistics on deportations across time.

Risk is constructed by taking the proportion of deportations which is at the SAC district by the estimated undocumented population which is measured at the state level. In some states, there are multiple SAC districts that can be in the same state such as in Florida and New York. Furthermore, SAC jurisdictions can have multiple offices in a state have their jurisdictions reach across state boundaries.

Risk of deportation is constructed by taking the total number of deportations in the SAC district and multiplying it by the proportion of the total population of a given state by the total population of the states within the SAC region. The formula is as such:

[4]Estimates for unauthorized immigrants are provided by the Pew Hispanic Center.

$$\Gamma = \left((\#\ \text{of Deported in SAC})^{*} \left(\frac{\text{Total Population of state}_{i}}{\text{Total Population SAC region}} \right) \right) / (\#\ \text{of Undocumented in state})$$

For example, to calculate the total number of deportation in Indiana, you would take the total deported in the Chicago SAC (Indianapolis is the Chicago SAC district jurisdiction) district (n=6,493). Multiply this figure by the proportion of the total population in Indiana in 2000 (n=6,091,392) divided by the sum of the populations of each state in the Chicago SAC district (Σ(IN, KY, IL, WI, MO, KS)=36,250,793) which is (((6,091,392/36,250,793)= (0.1680)*(6,493))=1,091 deported aliens in the Hoosier State in 2000. After deriving this number you then divide by the number of estimated undocumented immigrants in that state (IN=65,000), which provides, an estimate of the risk of being deported in the state of Indiana in 2000. In this case the risk of being deported in Indiana is (1,091/65,000) =1.67 percent. This formula then allows us to estimate deportations at the state level and also take into account the areas of responsibility for each SAC district.

Deportations however are not uniform across nationalities, for example in 2000, 0.961 percent of all deportees were from Mexico, Central and South Americans made up 0.004 percent of deportees and the remaining 0.035 percent were from non-Latino America countries. To take this enforcement differences into account, we then applied weights of 0.961 for Mexican mixed-status mothers, 0.004 for Non-Mexican Hispanics mixed-status mothers and 0.035 for all other No-Hispanic mixed-status families. We can also assume U.S. born mothers and naturalized citizens do not have a risk deportation and are assigned a value of zero. In other words, only mixed-status mothers are at risk deportation but it must be noted that when a mother is deported, we are inherently deporting U.S. citizen children.

Disabling Factors

To account for disabling factors that make participating in Medicaid/SCHIP more difficult, we include two binary variables that measure if the state requires face-to-interviews (1= no, 0=yes) to use services (Cohen 2006). These data are collected by the Kaiser Family Foundation.

Economic Hardship FFCWB

After testing several specifications of income and maternal well-being, this analysis uses a non-traditional approach to measure poverty. Since this study is on a population that by law is not authorized to be in the formal labor market, specifying a relative measure of economic hardship gives a better indicator of the level of economic hardship a family might be facing. Several studies indicate that maternal wellbeing is a better indicator than income, (Mayer and Jencks, 1989; Beverly, 2001; Teitler et. al, 2004; Sullivan et al., 2008; Heflin, 2009). Moreover, qualitative data regarding parent's household income show that in general mixed-status families tend to work off the books, or use falsified documents to obtain employment. To overcome this, we constructed a measure of economic hardship. This construct is a sum of twelve indicators ranging from help with food, hunger, if the mother has had to use a homeless shelter, trouble paying bills, etc. Due to the fact that FFCWB dataset is

representative of low-income families were over 80 percent of respondents make less than $25,000, we must consider non-traditional means to capture earnings.

Additional Control Variables

In addition to family categories, risk of deportation, and Medicaid specific predictors, additional control variables are included to estimate Medicaid participation, which are consistent with the literature. For example, education is specified with two binary variables (0=High School and above, 1=Less than High School). A binary indicator of marital status (1=married, 0=unmarried) is included to understand differences in Medicaid uptake by marital status as well as a binary variable on employment status (0=unemployed, 1=employed). We also include a measure of the number of children in the household and age of mother.

Outcome Variable

The Medicaid indicator is a dichotomous measure if the mother is using the program (1=yes, 0=no). In the Fragile Families the question is asked at the hospital when the child is born.

Table 1, provides an overview of the key demographic family groups used in this analysis. Immigration status is broken into three categories: U.S. born citizen, naturalized citizens[5] and non-citizens (mixed-status families). Race/ethnicity/nationality is broken down into the following categories: non-Hispanic White, Non-Hispanic non-White, Pan ethnic Hispanic, Hispanic of Mexican origin and Hispanics non Mexican ancestry. Mixed-status families represent about 11.6 percent (567/4,884) of families in the Fragile Families and Child Wellbeing Survey (Mexican origin representing over half). This is 2.5 percentage points above the national estimate (9 percent) taken from the 1998 Current Population Survey (Fix & Zimmerman, 1999; Passel and Clark, 1998).

Table 2 provides a detailed tabulation of the summary statistics used in the analysis. In general, the FFCWB sample tends to be black (46 percent), relatively young (25 years old), and participating in Medicaid at high rates (62 percent). In general, over 30 percent of mothers had less than a high school education yet mothers also tended to be either be part-time or half-time employed. Fragile Family mothers in this sample also had low marriage and cohabiting rates and have at minimum two other biological children. The fact that FFCWB is a national representative sample of poor, single, families, explains the low marriage rates, Medicaid use, and low educational attainment.

RESULTS

The analysis uses a nationally representative sample to test the relationship between risks of deportation on the probability of Medicaid use. The first step in this analysis is to run a baseline logistical regression to estimate Medicaid participation by comparing Mexican mixed-status families with all other family types (model 1). Model 1 provides a benchmark to examine Medicaid take-up differences between Mexican mixed-status families and all

[5]When citizenship status is missing (N=223), mothers who migrated to the U.S. prior to 1986 are categorized as naturalized citizens. Those migrating during or after 1986 are classified as non-citizens.

other families. Due to sample sizes and estimation issues related to overfitting the data, model 1 is the most parsimonious model and provides us the opportunity to compare Medicaid participating for Mixed-Status Mexican families. I include logit coefficients and a column for odds ratios for a unit change (factor change in odds) of the independent variables. From model 1 (table 3), we find that Mexican mixed-status families are 3.5 times more likely to use Medicaid than all other family types, a result which exemplifies the need for this vulnerable family. From model 2 (table 3), I estimate a model that includes the risk of deportation along with demographic and Medicaid disabling factors controls. As hypothesized, risk of deportation is negatively associated with Medicaid participation, holding all else constant. For a one percentage change in risk of deportation, the odds of Medicaid participation are expected to decrease by 83 percent, holding all else constant, which is statistically significant at the 0.05 level. In other words, for a one percentage increase in risk of deportation, the odds of participating in Medicaid decrease by 87 percent, holding all else constant ($p<0.01$).

Our last model 3 includes family types, risk of deportation, and control variables of age, education, marital status, number of children, economic hardship, employment, and Medicaid disabling factors. In this model, we find that Mexican mixed-status families as well as all other family types are more likely to use Medicaid compared to U.S. white mothers, holding all else constant. We also find that as the risk of deportation increases, the likelihood of Medicaid uptake decreases, holding all else constant. Taken together, this model shows that if we compare Mexican mixed-status families Medicaid utilization in model 1 compared to model 3, controlling for risk of deportation, Mexican mixed-status families are more likely to use Medicaid, providing evidence that risk of deportation is having a chilling effect on Medicaid utilization. However, it should be noted that we need to be cautious of these findings as the odds ratios are extremely high. These inflated odds ratios are evidence that we are over estimating our models given the low cell sizes and lack of variation on the number of individuals who are not using Medicaid, which is expected given that we are investigating a set of families are fragile and on the margins of our society.

Our control variable findings are in line with the Medicaid uptake literature in that age, marital status, and additional children in the household are negatively associated with Medicaid participation. In our sample, as a mother gets one year older, the odds of participating in Medicaid decreases, holding all other variables constant. If a mother is married, she is less likely to participate in Medicaid, holding all else constant. The effects of economic hardship on Medicaid participation was as expected, so as mother's faced more hardship, they are more likely to participate in Medicaid. We also find the expected relationship between Medicaid disabling factors and Medicaid uptake, so if a state does not require a face to face meeting to use Medicaid and SCHIP they are more likely to participate in Medicaid, all else constant.

DISCUSSION

This paper finds evidence that Mexican mixed-status families have higher odds of Medicaid uptake compared to their U.S. born white counterparts. Moreover, our empirical results suggest that risk of deportation does negatively affect Medicaid uptake and if including it as

a control variable, the odds of Medicaid uptake increase substantially for mixed-status families of Mexican origin. Mixed-status families and Mexican origin mixed-status families in particular should be of critical concern for policy makers given their marginalization. Mixed-status families are extremely vulnerable in terms of access to health care and increased chances of being impacted by family disruption through deportation removal. In our study we are concerned with the latter and find that in fact, risk of deportation is mostly likely to burden mixed-status families of Mexican origin, a novel finding that has yet to be documented in the Medicaid participation literature.

This study is important as it adds to the program evaluation literature that has yet to address the link between risk of deportation and social service uptake. In addition to the development of a new barrier to social service utilization, this analysis provides a typology and framework to study mixed-status families and evaluate their usage of Medicaid. Ultimately, our analysis has the potential to help service providers address the needs of children living in complex family structures and policy makers interested in alleviating health equity in immigrant populations. Lastly, as President Obama's executive order Deferred Action for Parents of Americans and Lawful Permanent Residents (DAPA) program is being tested, there remains a great deal of confusion about how this policy will impact undocumented communities and their usage of social services. It is our hope that this work can help unpack the link between anti-immigration sentiment and Latino health, irrespective of citizenship status.

BIBLIOGRAPHY

Amuedo-Dorantes C, Puttitanun T, Martinez-Donate AP. How Do Tougher Immigration Measures Affect Unauthorized Immigrants? Demography. 2013; 50(3) 10.1007/s13524–013–0200–x. doi: 10.1007/s13524-013-0200-x.

Asch S, Leake B, Gelberg L. Does Fear of Immigration Authorities Deter Tuberculosis Patients From Seeking Care? Western Journal Medicine. 1994; 161:373–376.

Bean, Frank D.; Jennifer, VW.; Hook, Van; Glick, Jennifer E. Country of Origin, Type of Public Assistance and Patterns of Welfare Recipiency Among U.S. Immigrants and Natives. Social Science Quarterly. 1997; 78(2):432–451.

Berk ML, Schur CL. The Effect of Fear on Access to Care Among Undocumented Latino Immigrants. Journal of Immigrant Health. 2001; 3(3):151–151. [PubMed: 16228780]

Beverly S. Material Hardship in the United States: Evidence from the Survey of Income and Program Participation. Social Work Research. 2001; 25(3):143.

Blau, Francine. The Use of Transfer Payments by Immigrants. Industrial and Labor Relations Review. 1984; 37(2):222–239.

Borjas, George; Hilton, Lynette. Immigration and the Welfare State: Immigrant Participation in Means-Tested Entitlement Programs. Quarterly Journal of Economics. 1996; 111(2):575–604.

Borjas, George; Trejo, Stephen. Immigrant Participation in the Welfare System Industrial and Labor Relations Review. 1999; 44(2):195–211.

Borjas, George; Trejo, Stephen. National Origin and Immigrant Welfare Recipiency. Journal of Public Economics. 1993; 50(3):325–344.

Broder, Tanya; Blazer, Jonathan. Overview of Immigrant Eligibility for Federal Programs. National Immigration Law Center; 2011. at http://www.nilc.org/overview-immeligfedprograms.html [11/15/2012]

Brown, Richard; Wyn, Roberta; Ojeda, Victoria D. Access to Health Insurance and Health Care for Children in Immigrant Families. UCLA Center for Health Policy Research; Los Angeles: Jun. 1999

Cohen Ross, D.; Cox, L. Resuming the Path to Health Coverage for Children and Parents: A 50 State Update on Eligibility Rules, Enrollment and Renewal Procedures, and Cost-Sharing Practices in Medicaid and SCHIP.. Prepared for the Center on Budget and Policy Priorities and Caryn Marks Kaiser Commission on Medicaid and the Uninsured. 2006. http://www.kff.org/medicaid/upload/7608.pdf

Citrin, Jack; Green, Donald; Muste, Christopher; Wong, Cara. Public Opinion Toward Immigration Reform: The Role of Economic Motivations. The Journal of Politics. 1997; 59(3)

Hernandez, Donald J.; Charney, Evan, editors. From Generation to Generation: The Health and Well-Being of Children in Immigrant Families. National Academy Press; Washington, D.C.: 1998. p. 10

Fix, Michael; Zimmermann, Wendy. All Under One Roof: Mixed-Status Families in an Era of Reform. The Urban Institute; Washington, DC: 1999.

Heflin, Colleeen; Iceland, John. Poverty, Material Hardship, and Depression. Social Science Quarterly. 2009; 90(5):1051–1071. [PubMed: 25530634]

Hernandez, D.; Denton, NA.; McCartney, SE. Early education Programs: Differential Access Among Young Children in Newcomer and Native Families.. In: Waters, M.; Alba, R., editors. The Next Generation: Immigrant youth and Families in Comparative Perspective. Cornell University Press; Ithaca, NY: 2011.

Kahler, Lucinda R.; O'Shea, Robert M.; Duffy, Linda C.; Buck, Germaine M. Factors Associated with Rates of Participation in WIC by Eligible Pregnant Women. Public Health Reports. 1992; 107(1)

Kronick R, Gilmer T. Insuring Low-Income Adults: Does Public Coverage Crowd Out Private? Health Affairs. 2002; 21(1):225–239. [PubMed: 11900081]

Kullgren JT. Restrictions on Undocumented Immigrants' Access to Health Services: The Public Health Implications of Welfare Reform. American Journal of Public Health. 2003; 93(10):1630–1633. [PubMed: 14534212]

LoSasso A, Buchmueller T. The Effect of the State Children's Health Insurance Program on health insurance coverage. Journal of Health Economics. 2004; 23:1059–1082. [PubMed: 15353193]

Mayer S, Jencks C. Poverty and the Distribution of Material Hardship. The Journal of Human Resources. 1989; 24(1):88–114.

Passel, Jeffrey S.; Capps, Randy; Fix, Michael. Undocumented Immigrants: Facts and Figures. Urban Institute Immigration Studies Program; 2004.

Passel, Jeffrey S. Unauthorized Migrants: Numbers and Characteristics. Pew Hispanic Center; Washington, DC: 2005. Retrieved from: http://pewhispanic.org/files/reports/46.pdf

Passel, Jeffrey; Cohn, D'Vera. Trends in Unauthorized Immigration: Undocumented Inflow Now Trails Legal Inflow Source: Urban Institute Analysis of March 2005 U.S. Current Population Survey Data. Pew Hispanic Center; 2008.

Passel, JS. Unauthorized immigrants and their U.S.-born children. Pew Hispanic Center; 2010. http://pewhispanic.org/files/reports/125.pdf

Doe, Plyler v. 1982. 457 U.S. 202

Preuhs, Robert. Descriptive Representation, Legislative Leadership, and Direct Democracy: Latino Influence on English Only Laws in the States, 1984-2002. State Politics and Policy Quarterly. 2005; 5(Fall):203–224.

Rutledge MS, McLaughlin CG. Hispanics and health insurance coverage: the rising disparity. Medical care. 2008; 46(10):1086–1092. [PubMed: 18815531]

Schildkraut, Deborah. Official-English and the States: Influences on Declaring English the Official Language in the United States. Political Research Quarterly. Jun.2001 2001 54:445–457.

Sullivan J, Turner L, Danziger S. The Relationship between Income and Material Hardship. Journal of Policy Analysis and Management. 2008; 27(1):63–81.

Teitler, Julien O.; Reichman, Nancy E.; Nepomnyaschy, Lenna. Sources of Support, Child Care, and Hardship Among Unwed Mothers, 1999-2001. Social Services Review. 2004; 78(1):125–148.

Van Hook, Jennifer; Glick, Jennifer E.; Bean, Frank D. Public Assistance Receipt among Immigrants and Natives: How the Unit of Analysis Affects Research Findings. Demography. 1999; 36(1):111–120. [PubMed: 10036596]

Vicens, AJ. The Obama Administration's 2 Million Deportations, Explained. 2014. http://www.motherjones.com/politics/2014/04/obama-administration-record-deportations

Watson, Tara. Inside the Refrigerator: Immigration Enforcement and Chilling Effects in Medicaid Participation. American Economic Journal: Economic Policy. 2014; 6(3):313–38.

Yoshikawa, H.; Godfrey, EB.; Rivera, AC. Access to Institutional Resources as a Measure of Social Exclusion: Relations with Family Process and Cognitive Development in the Context of Immigration.. In: Yoshikawa, H.; Way, N., editors. Beyond the Family: Contexts of Immigrant Children's Development. Vol. 121. New Directions for Child and Adolescent Development; 2008. p. 63-86.

Kaiser Foundation. Health Coverage for the Hispanic Population Today and Under the Affordable Care Act. 2013. https://kaiserfamilyfoundation.files.wordpress.com/2013/04/84321.pdf

Pew Hispanic Center. National Survey of Latinos: As Illegal Immigration Issue Heats Up, Hispanics Feel a Chill. 2007. Retrieved from: http://pewhispanic.org/files/reports/84.pdf

Section 287 ICE found in the Office of Public Affairs of U.S. Department of Homeland Security Worksite. http://www.ice.gov/doclib/pi/news/factsheets/060816dc287gfactsheet.pdf

[April 30, 2009] Worksite Enforcement found in the Office of Public Affairs of U.S. Department of Homeland Security Worksite. Enforcement Overview http://www.ice.gov/doclib/pi/news/factsheets/worksite.pdf

Department of Homeland Security. Yearbook of Immigration Statistics. 2005. http://www.dhs.gov/yearbook-immigration-statistics-2005

National Hispanic Media Coalition. The Impact of Media Stereotypes On Opinions And Attitudes Towards Latinos. 2012. Retrieved from: http://www.nhmc.org/sites/default/files/LD%20NHMC%20Poll%20Results%20Sept.2012.pdf

The Urban Institute. Children of Immigrants: Facts and Figures. 2006. Retrieved from: http://www.urban.org/UploadedPDF/900955_children_of_immigrants.pdf

U.S. Department of Homeland Security. ENFORCE Alien Removal Module (EARM), January 2014. Enforcement Integrated Database (EID). Nov.2013

U.S. Department of Homeland Security. Customs and Border Protection (CBP) Office of Border Patrol (OBP), Immigration and Customs Enforcement (ICE) Office of Investigations (OI) and the Office of Detention and Removal Operations (DRO).

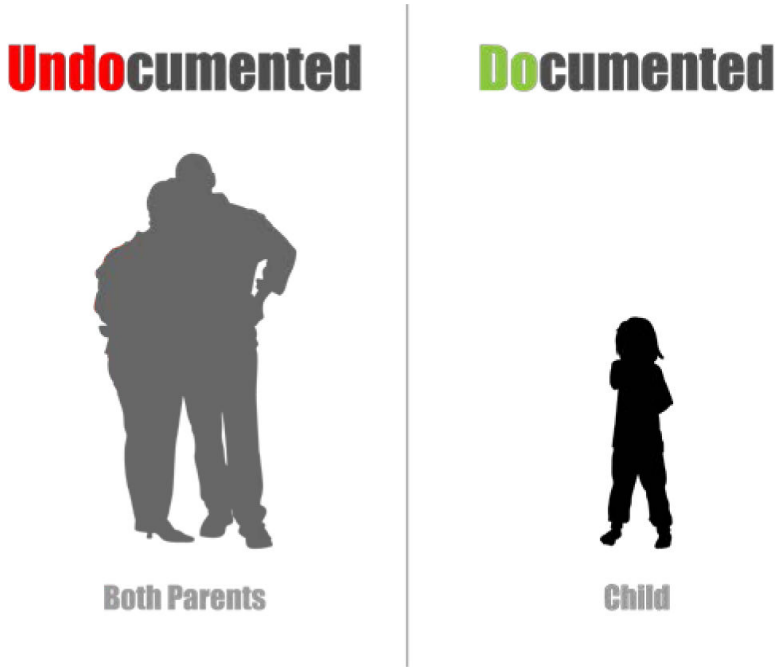

Figure 1.
Mixed-Status Family

Table 1

Key Demographic Groups in Fragile Families

	Non-Hispanic White	Non-Hispanic Non-White	Hispanic	Hispanic: Mexican National	Hispanic: Non Mexican National
U.S. Born Citizen	1,024	2,283	790	--	--
Naturalized Citizen[a]	--	116	104	--	--
Non-Citizen	--	120	--	315	132

Note(s):

[a]When citizenship status is missing (N=223), mothers who migrated to the U.S. prior to 1986 are categorized as naturalized citizens. Those migrating during or after 1986 are classified as non-citizens.

Table 2

Summary Statistics for Analysis

Variables	Mean	Std. Dev.	Min	Max
Medicaid	0.624	--	0	1
Non-Hispanic White	0.21	--	0	1
Other: U.S. Born Citizen	0.467	--	0	1
Other: Naturalized Citizen	0.024	--	0	1
Other: Mixed-Status	0.025	--	0	1
Hispanic: U.S. Born Citizen	0.162	--	0	1
Hispanic: Naturalized Citizen	0.021	--	0	1
Hispanic: Non Mexican Mixed-Status	0.027	--	0	1
Hispanic: Mexican Mixed-Status	0.064	--	0	1
Age	25.28	6.047	15	43
Less than High School	0.348	--	0	1
Married or Cohabitating	0.242	--	0	1
Number of Children	2.159	1.325	1	16
Economic Hardship	2.342	3.729	0	12
Employed	0.774	--	0	1
Risk of Deportation (percent)	0.094	0.37	0	3.13
No Face-to-Face Interview Medicaid	0.325	--	0	1
No Face-to-Face Interview SCHIP	0.704	--	0	1
Pct. of HH on Public Assistance	0.081	0.072	0	1
Pct. of Families Below Poverty Level	0.191	0.139	0	1

Table 3

Logistic Coefficients for Regression of Medicaid Take-up using Fragile Families Child Wellbeing Survey.

	Model 1		Model 2		Model 3	
VARIABLES	**β**	**Odds Ratios**	**β**	**Odds Ratios**	**β**	**Odds Ratios**
Hispanic: Mexican Mixed-Status	1.245**	3.474**	--	--	4.969***	143.929***
Hispanic: U.S. Born	--	--	--	--	0.857**	2.357**
Hispanic: Non-Mexican Mixed-Status	--	--	--	--	2.383**	10.840**
Hispanic: Naturalized	--	--	--	--	1.380*	3.976*
Other: U.S. Born	--	--	--	--	1.248***	3.482***
Other: Mixed Status	--	--	--	--	1.722***	5.597***
Other: Naturalized	--	--	--	--	0.489	1.631
Age	--	--	−0.126***	0.881***	−0.146***	0.864***
Education: Less HS	--	--	0.943**	2.568**	0.442	1.556
Married	--	--	−2.267***	0.104***	−2.126***	0.119***
Number of Children	--	--	0.665***	1.945***	0.608***	1.837***
Hardship	--	--	0.123**	1.131**	0.091*	1.096*
Employed	--	--	−0.562	0.570	−0.524	0.592
No Face-to-Face SCHIP	--	--	0.511*	1.666*	0.468**	1.597**
No Face-to-Face Medicaid	--	--	1.407***	4.086***	1.311***	3.708***
Risk of Deportation	--	--	0.607***	1.835***	−1.646**	0.193**
Observations	3,418		2,388		2,388	

*** p<0.01

** p<0.05

* p<0.1