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RESEARCH ARTICLE

# Which States Enroll Their Medicaid-Eligible, Citizen Children with Immigrant Parents?

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**Objective.** To identify which states achieve comparable enrollment rates for Medicaid-eligible, citizen children with immigrant and nonimmigrant parents.

**Data Source.** A total of 810,345 Medicaid-eligible, citizen children drawn from the 2008–2010 American Community Survey.

**Study Design.** This study estimates a state fixed-effects probit model of uninsured status for Medicaid-eligible, citizen children. State and immigrant family interaction variables test whether citizen children in immigrant families have a higher probability of remaining uninsured compared to children in nonimmigrant families. Simulations predict the uninsured rates for Medicaid eligible children in immigrant and nonimmigrant families and rank states by the differences between the two groups.

**Principal Findings.** While some states have insignificant and near zero differences in predicted uninsured rates, many states have enrollment disparities reaching 20 percent points between citizen children with immigrant and nonimmigrant parents.

**Conclusions.** Many states have large differences in enrollment rates between their Medicaid-eligible, citizen children with immigrant and nonimmigrant parents. Addressing these enrollment disparities could improve the health status of citizen children in immigrant families and earn Children's Health Insurance Program Reauthorization Act bonus payments for many states.

**Key Words.** Immigrant children, Medicaid enrollment, uninsured

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Although immigration remains a sensitive policy topic, over 24 percent of citizen children in the United States have at least one immigrant parent. These citizen children with immigrant parents are disproportionately uninsured even when they are eligible for Medicaid. In 2005, 15 percent of low-income citizen children in nonimmigrant families were uninsured. In contrast, 24 percent of low-income citizen children in immigrant families and 48 percent of noncitizen children remained uninsured (Ku 2007). While children in immigrant families are more likely to be uninsured than children in native families

(Huang, Yu, and Ledsky 2006), national estimates can mask important enrollment disparities in states that are not traditional immigration gateways. Contributing to these state differences is the fact that states enjoy broad discretion in the administration of their individual Medicaid programs. This article examines which states successfully enroll their Medicaid-eligible, citizen children with immigrant parents.

A state's experience with immigration can greatly facilitate the Medicaid enrollment experience for citizen children with immigrant parents, but relatively few states have a long history of immigration. In 1990, almost 75 percent of immigrants lived in six states (California, New York, Florida, Texas, New Jersey, and Illinois). These *traditional gateway states* have comparatively well-developed approaches for enrolling immigrant children in Medicaid, drawing on large, bilingual populations and well-established community organizations. However, more recent immigrants and their families have increasingly settled in states outside these traditional destinations. Between 1990 and 2005, the immigrant population doubled in the *new destination states*, defined as all states except the six traditional immigration gateways (CA, FL, IL, NJ, NY, and TX) (Frey 2006). Some of these new destination states have actively supported immigrants with English language classes and bilingual job markets, whereas other states have erected barriers by passing English-only laws and criminalizing immigration violations with local trespassing ordinances. Local regulations relating to immigration have no direct impact on a citizen child's Medicaid eligibility, but all these circumstances have a direct impact on the probability that immigrant parents will go to a local government office to enroll their child.

Federal legislation encourages states to enroll Medicaid-eligible children. Specifically, the Children's Health Insurance Program Reauthorization Act (CHIPRA) includes performance bonuses for states that successfully increase enrollment of Medicaid-eligible children. The CHIPRA legislation allows for bonus payments to states that enroll more uninsured Medicaid-eligible children. To qualify for a bonus, states must first implement program features to facilitate enrollment. With the new program features in place, states can then receive an enhanced federal match if their Medicaid enrollment exceeds a baseline level set for their state (Centers for Medicare and Medicaid Services 2009). Furthermore, the 2014 Medicaid expansions scheduled under

the Affordably Care Act (ACA) can be expected to disproportionately increase enrollment for children in native families as native parents will now have the incentive to enroll both themselves and their children in Medicaid.

Children in immigrant families are not alone in remaining uninsured, with two-thirds of all uninsured children being eligible for Medicaid and CHIP (Cutler and Kenney 2007; Hudson 2009). Following the enactment of CHIP, all states increased the eligibility thresholds for children and efforts were made to simplify and improve enrollment and retention processes to reduce the number of eligible children who remain uninsured. Despite increased funding for outreach and enrollment efforts, Medicaid participation rates vary widely across states, ranging from 66 percent of eligible children enrolled in the Southern states to 80 percent of eligible children enrolled in the Northeast (Holahan, Dubai, and Kenney 2003). Similarly, maintaining coverage can be challenging, with up to 40 percent of Medicaid children in some states having a break in coverage (Fairbrother, Emerson, and Partridge 2007) or 50 percent in other states dropping out of Medicaid each year (Sommers 2007).

Many state-specific factors likely contribute to these differences in participation. These hurdles can include in-person applications at multiple locations, lengthy forms, and extensive documentation requirements (Ross and Hill 2003). States have implemented multiple strategies to facilitate enrollment in Medicaid, including expanding coverage to parents, extending time between renewals, eliminating asset tests, and streamlining verification requirements (Kronebusch and Elbel 2004; Wolfe and Scrivner 2005; Sommers 2006; Summer and Mann 2006). Estimates of Medicaid participation for children with immigrant parents are limited to the largest states. In large states, children with immigrant parents are disproportionately uninsured, even when eligible for Medicaid (Acevedo-Garcia and Stone 2008; Yu, Huang, and Kogan 2008). However, data limitations have prevented these studies from examining Medicaid enrollment for children in most of the new destination states.

Medicaid and CHIP eligibility for immigrant children varies widely across states. Both programs have always excluded undocumented immigrants, but the welfare reform (PRWORA) made immigrants who arrived after August 1996 ineligible for federally funded Medicaid until they reach 5 years of residency (Kaushal and Kaestner 2005). Multiple studies examine the “chilling effect” of PRWORA on insurance coverage for immigrant children and children with immigrant parents (Ku and Matani 2001; Kaushal and Kaestner 2005; Pati and Danagoulian 2008). After PRWORA, twenty-one states, including the six traditional gateway states, maintained eligibility for

immigrant children in their Medicaid and CHIP programs, choosing to fund their benefits from local budgets until they met the residency requirement to receive the federal contribution (Ku 2009). Only in 2009, with the passage of the *Children's Health Insurance Program Reauthorization Act* was this exclusion of immigrant children removed, but the decision to cover noncitizen immigrant children remains optional based on the priorities of each individual state (Garner 2009). However, household surveys from the Census Bureau do not collect immigration status for noncitizens. Without information on whether a child is an undocumented alien, temporary resident, or permanent resident, it is not possible to identify Medicaid eligibility for noncitizens. Due to this limitation and the fact that 89 percent of children in immigrant families are U.S. citizens, this article only examines citizen children who meet state income eligibility criteria.

This study will use the 2008, 2009, and 2010 American Community Survey (ACS) to examine public insurance take-up (Medicaid and the Children's Health Insurance Program or CHIP) for eligible citizen children in immigrant families. A state fixed-effects probit model estimates the probability of any insurance coverage based on the new ACS insurance questions introduced in 2008. The regression model tests which states have achieved comparable enrollment rates for citizen children in immigrant and nonimmigrant families. Policy simulations rank states to reveal which states are most successful at enrolling their citizen children with immigrant parents. Rather than finding traditional gateway states leveraging their immigration experience, this article finds gateway states among the most and least successful at enrolling their Medicaid-eligible children with immigrant parents.

## DATA AND METHODS

The large sample sizes in the U.S. Census Bureau's 2008, 2009, and 2010 American Community Surveys (ACS) allow state-level estimates of Medicaid and CHIP (jointly called "Medicaid" hereafter) enrollment for citizen children with immigrant parents. The ACS interviews over 2.8 million households annually and can be used to produce representative national- and state-level population estimates. Previous studies have been limited to national and large states due to limited sample sizes for immigrants outside of the traditional immigration states. With a multimillion household sample, the ACS collects data for over 40,000 children in immigrant families each year, allowing state-level estimates for children in immigrant families in all but the smallest states.

The ACS added its first health insurance question in 2008, allowing state-level estimates of Medicaid participation. In the ACS, the respondent indicates the health insurance coverage for each individual in the household by choosing “yes” or “no” for eight insurance options: (1) employer sponsored, (2) privately purchased, (3) Medicare, (4) Medicaid, (5) Tricare, (6) Veterans Administration, (7) Indian Health Service, and (8) Any Other Coverage. A detailed discussion of strengths and limitations related to the ACS insurance coverage estimates can be found in Plewes (2010). For this article, individuals reporting coverage through the Indian Health Service were coded as uninsured (Kenney et al. 2010).

Respondents also indicate whether they and the children in the household are native-born citizens, naturalized citizens, or noncitizens. Consistent with other Census Bureau surveys, the ACS does not ask about documentation for noncitizens. With this information, children living in immigrant families can be separated into three groups:

1. Noncitizen, first-generation immigrant child.
2. Naturalized, first-generation immigrant child.
3. Native-born, child with at least one immigrant parent.

All children in the second and third groups are eligible for Medicaid if their family meets the income thresholds. I exclude the noncitizen children in the first group since the ACS does not indicate whether the children are undocumented immigrants and, therefore, not eligible for Medicaid. The naturalized and native-born children with immigrant parents in the second and third groups compose 24 percent of all citizen children in 2010.

The analysis sample only includes Medicaid-eligible children, excluding (1) noncitizens and (2) children who are not income eligible for Medicaid. Modeling Medicaid eligibility can be problematic. States consider many criteria when determining Medicaid and CHIP eligibility, including household income, age of the applicant, household wealth, citizenship documentation, income disregards for some medical expenditure, and other criteria. Since the ACS does not measure all dimensions of Medicaid eligibility, studies typically use income-based criteria to estimate eligibility. This article combines the respondent’s age with the family income threshold in the state of residence for the relevant year to estimate eligibility (Seiber and Florence 2010). When a state has separate Medicaid and CHIP income eligibility thresholds, the model uses the higher CHIP threshold to determine joint Medicaid/CHIP eligibility. As described previously, noncitizen children are excluded since

documentation status is unknown. Limiting the sample to Medicaid-eligible, citizen children in the 2008 through 2010 ACS produces a final sample of 861,116 children, including 206,864 in immigrant families.

After dropping noncitizens and children exceeding the income eligibility thresholds for Medicaid, a state fixed-effects probit model estimates the probability that a child remains uninsured:

$$\text{Uninsured} = \text{State}_j + \text{Immigrant\_Family} + \text{State}_j \times \text{Immigrant Family} + \beta X + \varepsilon$$

where

$\text{State}_j = 1$  if the child lives in state  $j$ .

$\text{Immigrant\_Family} = 1$  if the child has at least one immigrant parent.

$\text{State}_j \times \text{Immigrant Family} = 1$  if the child lives in state  $j$  and has at least one immigrant parent.

In this model,  $\text{Uninsured} = 1$  if the child is uninsured and  $\text{Uninsured} = 0$  if the child is covered by any form of health insurance, including public (Medicaid or CHIP), employer-sponsored insurance, or privately purchased coverage. The state fixed-effects,  $\text{State}_j$ , control for all time invariant aspects of Medicaid enrollment in each state. Most important, these state fixed-effects capture the difficulty that *all* children in that state face when enrolling in Medicaid. The  $\text{Immigrant\_Family}$  dummy variable controls for unobserved determinants unique to immigrant families. Lastly, family- and child-specific control variables,  $\beta X$ , include the child's age, race, ethnicity, gender, family income, household structure, and survey year. The key variables in the model are the interaction variables,  $\text{State}_j \times \text{Immigrant Family}$ , which test for differences in Medicaid enrollment between children in immigrant and nonimmigrant families for each state.

## RESULTS

Table 1 presents descriptive statistics for the Medicaid-eligible, citizen children in the sample. The children in immigrant families are almost exclusively native-born (98 percent) citizens, with only 2.4 percent obtaining citizenship through naturalization. Most (70 percent) children in immigrant families report Hispanic ethnicity. Income levels for the immigrant families are very similar to native-born families (40 percent of each living under the poverty line), but more immigrant households report two or more workers in the household (44 percent for immigrant families vs. 33 percent for native

Table 1: Descriptive Statistics for Medicaid-Eligible, Citizen Children

	<i>Immigrant Families</i>		<i>Nonimmigrant Families</i>		<i>All Children</i>	
	<i>Mean, %</i>	<i>SE, %</i>	<i>Mean, %</i>	<i>SE, %</i>	<i>Mean, %</i>	<i>SE, %</i>
Immigrant family	100.0	0.00	0.0	0.00	26.5	0.09
Naturalized citizen	2.4	0.05	0.1	0.01	0.7	0.01
Native-born citizen	97.6	0.05	99.9	0.01	99.3	0.01
Hispanic	70.4	0.18	15.5	0.09	30.0	0.10
American Indian	1.0	0.04	3.0	0.04	2.5	0.03
Black	8.8	0.12	28.0	0.11	22.9	0.09
Asian	11.7	0.12	1.5	0.03	4.2	0.04
Other race	26.0	0.18	4.8	0.05	10.4	0.07
White	56.2	0.20	68.9	0.12	65.6	0.10
Age 0–2 years	20.6	0.11	18.5	0.06	19.0	0.06
Age 3–5 years	19.8	0.10	17.8	0.06	18.4	0.05
Age 6–8 years	17.4	0.09	16.7	0.05	16.9	0.05
Age 9–11 years	15.4	0.09	16.3	0.05	16.1	0.05
Age 12–15 years	18.5	0.10	20.8	0.06	20.1	0.05
Age 16–17 years	8.4	0.07	9.8	0.05	9.4	0.04
Male	51.2	0.13	51.1	0.08	51.1	0.07
Poverty level						
0–100% of poverty	39.7	0.21	40.3	0.12	40.1	0.11
101–200% of poverty	46.5	0.21	43.8	0.12	44.5	0.10
Over 200% of poverty	13.8	0.13	16.0	0.08	15.4	0.07
Household (HH) with:						
No high school graduates	29.0	0.19	9.6	0.08	14.7	0.08
One or more HS graduates	71.0	0.19	90.4	0.08	85.3	0.08
Zero workers in HH	6.4	0.11	13.2	0.09	11.4	0.07
One worker in HH	49.7	0.21	53.9	0.12	52.8	0.11
Two or more workers	43.8	0.20	33.0	0.11	35.8	0.10
Child with						
Neither parent in HH	1.2	0.04	1.3	0.02	1.3	0.02
Only father in HH	8.0	0.11	9.1	0.07	8.8	0.06
Only mother in HH	24.6	0.17	48.6	0.12	42.2	0.10
Two parents in HH	66.1	0.19	41.1	0.12	47.7	0.10
Year = 2008	30.4	0.19	30.5	0.11	30.5	0.10
Year = 2009	34.3	0.20	34.0	0.11	34.1	0.10
Year = 2010	35.3	0.20	35.5	0.12	35.4	0.10
Number of observations	206,864		654,252		861,116	

*Note.* Estimates weighted with the ACS survey weights.

*Source:* Authors’ estimates from the American Community Surveys (2008, 2009, 2010).

families). Lastly, children in immigrant families are much more likely to live in two-parent households (66 percent vs. 41 percent).

Table 2 shows the percent of Medicaid-eligible children who remain uninsured in the new destination states, the traditional gateway states as a

Table 2: Percent of Medicaid-Eligible Citizen Children Remaining Uninsured

	<i>Immigrant Families, %</i>	<i>Nonimmigrant Families, %</i>
New destination states	15.2	8.8
Traditional gateway states	15.3	10.7
California	14.0	9.8
Florida	25.1	16.6
Illinois	8.3	6.2
New Jersey	10.8	6.6
New York	6.5	5.5
Texas	23.3	15.7

*Note.* Estimates weighted with the ACS survey weights.

*Source:* Authors' estimates from the American Community Surveys (2008, 2009, 2010).

group, and each of the six traditional states. Columns 2 and 3 give the percent uninsured for children in immigrant families and children in nonimmigrant families, respectively. Despite their having less experience enrolling immigrant children, the new destination states as a group show very little difference from the traditional states. For Medicaid-eligible children in immigrant families, 15.2 percent remain uninsured in new destination states and 15.3 percent in traditional states. In contrast, the 10.7 percent of eligible immigrant children in traditional states remain uninsured compared to 8.8 percent for the new destination states.

Although traditional and new destination states show few differences as a group, the subsequent rows indicate that not all traditional gateway states successfully use their immigrant experience to enroll their children with immigrant parents. The 15.3 percent uninsured in eligible immigrant families masks differences ranging from a low of 6.5 percent uninsured in eligible immigrant families in New York, increasing to the two highest states of 23.3 percent in Texas and Florida's 25.1 percent of Medicaid-eligible children with immigrant parents remaining uninsured. Across all of these traditional gateway states, children with immigrant parents always have higher uninsured rates, but the states with the most uninsured immigrant children also have the most uninsured Medicaid-eligible children with nonimmigrant parents. This pattern suggests that in some states, Medicaid enrollment is difficult for all children, but these barriers are especially problematic for children with immigrant parents.

Table 3 presents the estimates from the state fixed-effects probit model with the nonlinear coefficients converted to marginal effects, including the standard error and significance of the marginal effect. The underlying probit



coefficients are available from the author by request. These marginal effects in Table 3 represent the change in the probability of the Medicaid-eligible child remaining uninsured for a one unit change of the independent variable, based on the mean values of the independent variables. Across all states, Medicaid-eligible, citizen children with at least one immigrant parent have a 2.2 percentage point higher probability of remaining uninsured ( $p = .01$ ) than children in nonimmigrant families. Similarly, naturalized citizen children have a 1.5 point ( $p = .05$ ) higher uninsured rate than native-born citizens, whereas Hispanic children show no statistically significant difference after controlling for state of residence and the demographic controls.

Interpreting the state fixed-effects and the State  $\times$  Immigrant Family interaction variables in Table 3 is cumbersome. The state fixed-effects indicate how well each state enrolls all its Medicaid-eligible children compared to the excluded state of California. For example, the probability of *any* Medicaid-eligible child (immigrant or nonimmigrant) remaining uninsured is 1.8 percentage point lower in Alabama compared to California ( $p = .01$ ), while Arizona would be 3.1 percent points higher than California ( $p = .01$ ). Similarly, the State  $\times$  Immigrant Family interaction variables show the difference between immigrant and nonimmigrant children for each state, compared to the excluded state, California. For the case of Colorado, children with immigrant parents have a 3.6 percent points higher difference in their probability of being uninsured than nonimmigrant children, compared to the difference between the two groups in California ( $p = .01$ ). The statistical significance and magnitude of the State  $\times$  Immigrant Family marginal effects vary across the sample so the values in Table 3 only provide preliminary evidence for disparities in Medicaid enrollment between children with immigrant and nonimmigrant parents (Ai and Norton 2003). The predicted probabilities in Table 4 provide a more intuitive interpretation of the regression results.

Table 4 presents regression-adjusted predictions of uninsured rates based on predicted probabilities and identifies where Medicaid-eligible children in immigrant families are more likely to remain uninsured than nonimmigrant families. These simulation results are produced by setting the immigrant family indicator variables to the values that coincide with each category. For example, to predict the rate of coverage for children with at least one immigrant parent who live in Alabama, I (1) set Immigrant Family = 1, Alabama = 1, Alabama  $\times$  Immigrant Family = 1, (2) all other variables retain their original values, and (3) predict the probability of the child remaining uninsured. To simulate the coverage rate for children with nonimmigrant parents, I set Immigrant Family = 0 and Alabama  $\times$  Immigrant Family = 0

Table 3: Probit Estimates of the Marginal Effect on Probability of Remaining Uninsured for Medicaid-Eligible, Citizen Children, 2008–2010

	<i>Marginal Effect</i>	<i>SE</i>		<i>Marginal Effect</i>	<i>SE</i>
Immigrant family	0.022	0.0035***	DC × Immigrant family	0.004	0.0399
Naturalized citizen	0.015	0.0054***	FL × Immigrant family	0.025	0.0065***
Hispanic	−0.002	0.0018	GA × Immigrant family	0.058	0.0105***
American Indian	0.053	0.0045***	HI × Immigrant family	−0.021	0.0205
Black	−0.017	0.0016***	ID × Immigrant family	0.038	0.0246
Asian	−0.017	0.0028***	IL × Immigrant family	−0.010	0.0081
Other race	0.002	0.0021	IN × Immigrant family	0.010	0.0129
Age 3–5 years	0.014	0.0014***	IA × Immigrant family	−0.010	0.0204
Age 6–8 years	0.021	0.0016***	KS × Immigrant family	−0.006	
Age 9–11 years	0.029	0.0017***	KY × Immigrant family	0.005	0.0206
Age 12–15 years	0.045	0.0017***	LA × Immigrant family	0.003	0.0218
Age 16–17 years	0.077	0.0023***	ME × Immigrant family	−0.045	0.0255*
Male	−0.001	0.0008	MD × Immigrant family	0.004	0.0114
Poverty level			MA × Immigrant family	−0.018	0.0118
0–100 Pct of poverty	0.029	0.0023***	MI × Immigrant family	0.008	0.0152
101–200 Pct of poverty	0.032	0.0020***	MN × Immigrant family	0.017	0.0165
Household (HH) with:			MS × Immigrant family	0.112	0.0443**
No high school grads	0.025	0.0021***	MO × Immigrant family	0.021	0.0160
Zero workers in HH	−0.034	0.0020***	MT × Immigrant family	0.006	0.0433
One worker in HH	−0.009	0.0014***	NE × Immigrant family	0.057	0.0320*
Child with			NV × Immigrant family	0.025	0.0130*
Neither parent in HH	0.028	0.0044***	NH × Immigrant family	0.059	0.0495
Only father in HH	0.025	0.0023***	NJ × Immigrant family	0.021	0.0089**
Only mother in HH	−0.014	0.0015***	NM × Immigrant family	0.009	0.0159
Year = 2009	−0.024	0.0014***	NY × Immigrant family	−0.013	0.0053**
Year = 2010	−0.033	0.0014***	NC × Immigrant family	0.017	0.0102*
Immigrant family ×			ND × Immigrant family	−0.032	0.0542
State interactions					
AL × Immigrant family	0.028	0.0209	OH × Immigrant family	0.048	0.0183***
AK × Immigrant family	−0.044	0.0315	OK × Immigrant family	−0.002	0.0146
AZ × Immigrant family	0.010	0.0084	OR × Immigrant family	−0.011	0.0111
AR × Immigrant family	0.006	0.0205	PA × Immigrant family	0.005	0.0115
CO × Immigrant family	0.036	0.0128***	RI × Immigrant family	−0.013	0.0202
CT × Immigrant family	0.049	0.0199**	SC × Immigrant family	0.033	0.0187*
DE × Immigrant family	0.021	0.0420	SD × Immigrant family	−0.023	0.0426
TN × Immigrant family	0.040	0.0164**	MN	−0.005	0.0058
TX × Immigrant family	0.013	0.0050**	MS	0.028	0.0075***
UT × Immigrant family	0.134	0.0236***	MO	−0.015	0.0043***
VT × Immigrant family	0.065	0.1311	MT	0.055	0.0131***
VA × Immigrant family	0.060	0.0170***	NE	−0.041	0.0064***
WA × Immigrant family	0.017	0.0106	NV	0.106	0.0124***
WV × Immigrant family	0.191	0.1198	NH	−0.031	0.0083***
WI × Immigrant family	0.016	0.0185	NJ	−0.027	0.0042***

*continued*

Table 3. *Continued*

	<i>Marginal Effect</i>	<i>SE</i>		<i>Marginal Effect</i>	<i>SE</i>
WY × Immigrant family	0.021	0.0818	NM	-0.008	0.0071
State fixed-effects			NY	-0.041	0.0028***
AL	-0.018	0.0046***	NC	-0.009	0.0043**
AK	0.010	0.0148	ND	0.019	0.0206
AZ	0.031	0.0064***	OH	-0.013	0.0042***
AR	-0.037	0.0050***	OK	0.000	0.0063
CO	0.039	0.0073***	OR	0.026	0.0073***
CT	-0.054	0.0048***	PA	-0.028	0.0034***
DE	-0.026	0.0127**	RI	-0.033	0.0107***
DC	-0.071	0.0062***	SC	0.030	0.0067***
FL	0.065	0.0052***	SD	-0.005	0.0140
GA	0.012	0.0046**	TN	-0.033	0.0036***
HI	-0.048	0.0082***	TX	0.053	0.0044***
ID	0.017	0.0095*	UT	0.014	0.0080*
IL	-0.037	0.0039***	VT	-0.061	0.0073***
IN	0.018	0.0053***	VA	-0.012	0.0053**
IA	-0.037	0.0062***	WA	-0.019	0.0046***
KS	0.010	0.0082	WV	-0.042	0.0056***
KY	-0.029	0.0047***	WI	-0.039	0.0045***
LA	-0.021	0.0048***	WY	-0.013	0.0152
ME	-0.042	0.0080***			
MD	-0.037	0.0044***			
MA	-0.074	0.0026***			
MI	-0.043	0.0032***			
Number of Observations	861,116				

\* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

Source. Authors' estimates from the American Community Surveys (2008, 2009, 2010).

then recalculate. Other states are simulated by changing their state and immigration variable. This approach produces the average predicted probability of being uninsured for each state, incorporating the nonlinearity of the estimates. A detailed description can be found in Karaca-Mandic, Norton, and Dowd (2012).

Table 4 presents the predicted uninsured rates for Medicaid-eligible children in immigrant and nonimmigrant families by state and includes a ranking of how the difference between the two groups compares to the other 50 states and District of Columbia. The second row presents the results for Alabama. In Alabama, 12.5 percent of Medicaid-eligible children in

Table 4: Predicted Percentage of Uninsured Medicaid-Eligible, Citizen Children Living in Immigrant and Nonimmigrant Families, 2008–2010

	<i>Immigrant Families, %</i>	<i>Nonimmigrant Families, %</i>	<i>Immigrant Family Differential, %</i>	<i>Rank<sup>†</sup>: Largest to Smallest Difference</i>	<i>Sample Size: Immigrant Families</i>
AL	12.5	7.8	4.7*	17	877
AK	9.9	13.5	-3.6	51	134
AR	8.9	6.6	2.3	34	893
AZ	19.2	14.8	4.4*	20	6,241
CA	13.2	10.8	2.4*	31	63,875
CO	23.0	14.8	8.2*	7	2,847
CT	8.9	4.4	4.5*	19	1,855
DC	3.2	2.3	0.9	41	206
DE	11.4	7.6	3.9	26	265
FL	24.2	16.9	7.2*	10	11,955
GA	20.2	10.8	9.4*	4	5,252
HI	4.3	4.4	-0.1	47	980
IA	7.0	6.2	0.8	43	742
ID	20.8	12.9	7.9*	8	761
IL	7.4	6.6	0.8	42	6,788
IN	15.9	12.0	3.9*	25	1,791
KS	13.3	11.5	1.9	39	1,023
KY	9.8	7.4	2.4	32	569
LA	9.6	7.4	2.2	37	703
MA	2.5	2.4	0.1	46	3,753
MD	7.6	5.7	1.9	38	2,965
ME	4.2	6.3	-2.1	50	122
MI	8.2	5.9	2.3	36	2,191
MN	13.9	9.7	4.2	22	1,780
MO	12.7	8.5	4.2*	21	1,295
MS	29.0	12.4	16.6*	3	276
MT	21.1	16.9	4.2	23	97
NC	13.4	9.3	4.1*	24	4,129
ND	12.1	14.0	-1.9	49	30
NE	13.1	6.5	6.7*	13	568
NH	14.1	6.9	7.1	11	221
NJ	10.4	6.8	3.6*	28	7,804
NM	14.0	10.6	3.4	29	1,435
NV	30.4	22.2	8.3*	6	2,652
NY	6.2	5.7	0.6	45	19,266
OH	16.3	9.0	7.3*	9	1,440
OK	13.8	11.5	2.3	35	1,207
OR	14.2	12.9	1.2	40	2,426
PA	9.4	7.1	2.3	33	2,872
RI	7.3	6.7	0.6	44	702

*continued*

Table 4. *Continued*

	<i>Immigrant Families, %</i>	<i>Nonimmigrant Families, %</i>	<i>Immigrant Family Differential, %</i>	<i>Rank<sup>†</sup>: Largest to Smallest Difference</i>	<i>Sample Size: Immigrant Families</i>
SC	19.9	12.8	7.1*	12	1,047
SD	11.6	12.0	-0.4	48	87
TN	11.9	6.6	5.3*	14	1,752
TX	21.8	16.6	5.2*	16	28,751
UT	31.8	12.5	19.3*	1	1,417
VA	17.3	8.8	8.5*	5	2,070
VT	9.3	4.0	5.3	15	66
WA	12.1	8.3	3.8*	27	5,112
WI	9.0	6.1	2.9	30	1,427
WV	24.1	6.0	18.1	2	75
WY	14.6	10.0	4.7	18	72

<sup>†</sup>State ranking for the Immigrant Family Differential, from the largest difference to smallest.

\* $p < .05$ .

Source. Authors' estimates from the American Community Surveys (2008, 2009, 2010).

immigrant families are uninsured compared to 7.8 percent for children in non-immigrant families. The third column is the immigrant family differential, or the difference between the immigrant and nonimmigrant family results in columns 1 and 2, and the last column indicates whether the difference between the two groups is significant at the  $p = .05$  level. Some states show large differences between groups but do not achieve statistical significance due to the limited number of immigrants in those states. The last column lists the number of immigrant children in the sample, allowing the reader to interpret the statistical power underlying each state's estimate.

Table 4 identifies which states have the largest differential in uninsured rates between Medicaid-eligible children in immigrant and nonimmigrant families. The state with the largest disparity between the two groups of children was Utah, with a 19.3 percent point higher uninsured rate for their Medicaid-eligible, citizen children living in immigrant families (31.8 percent uninsured in immigrant families compared to 12.5 percent for nonimmigrant families). Following Utah in the rankings are Mississippi with a 16.6 percent point difference, Georgia (9.4 percent points), Virginia (8.5 percent points), and Nevada (8.3 percent points). Completing the top ten are Colorado, Idaho, Ohio, and Florida. Both West Virginia and New Hampshire have large differences between immigrant and nonimmigrant families in the data, but both states have very few immigrants leading to very imprecise estimates (West Virginia's difference disappears if the 2010 data are excluded).

Table 4 also provides guidance for identifying states that minimize the difference between Medicaid enrollments for eligible children in immigrant and nonimmigrant families, but interpretations of the results for states with the small differences should consider the precision of the estimates. While the model estimates that Alaska has the smallest difference between the two groups, the confidence interval for immigrant children ranges from a lower bound of 0.6 percent uninsured to the upper bound of 19.2 percent uninsured in immigrant families (10.1 percent to 16.9 percent for native families). This large confidence interval stems from the few immigrant children in the Alaskan sample (134 children across the 3 years of data). North Dakota and South Dakota show even larger confidence intervals for their estimates (30 percentage points and 20 percentage points, respectively) due to the few immigrant children in their samples.

## DISCUSSION

The results in this article discredit the original hypothesis that traditional gateway states would prove more successful at enrolling their citizen children with immigrant parents than the new destination states. Some traditional states do appear among the most successful at reaching immigrant families, with both New York and Illinois among the states with the smallest difference between children with immigrant and nonimmigrant parents. However, two other traditional states are among the states with the largest differences in uninsured immigrant and nonimmigrant families. Florida with its long history of immigration and a large immigrant population has one of the 10 largest disparities between immigrant and nonimmigrant uninsured Medicaid-eligible children. Although not among the 10 largest, Texas had the 16th largest differences between the two groups of children.

The results suggest that Maine, Hawaii, Massachusetts, New York, and Illinois all hold potential as models for enrolling eligible children with immigrant parents. Maine and Hawaii both have a limited number of immigrant families, but they have managed to limit the uninsured difference between immigrant and nonimmigrant children to between zero and no more than 2.8 percent points, the upper bound of the 95 percent confidence interval. Massachusetts has a larger population of immigrant children, and it has an upper limit confidence interval of a 1.1 percent point difference. Two traditional immigration states also show small upper bounds for the difference between citizen children with immigrant and nonimmigrant parents. New York has the

smallest difference among the traditional gateway states, with no more than a 1.3 percent point difference between citizen children in immigrant families and nonimmigrant families. Illinois follows with the second smallest with an upper bound difference estimate of 2.1 percent points.

Maine, Hawaii, Massachusetts, New York, and Illinois's successful enrollment policies may also interest states looking to increase their CHIPRA bonus payments. The CHIPRA includes performance bonuses for states that successfully increase enrollment of Medicaid-eligible children. To qualify for a bonus, states must first implement five of eight program features to facilitate enrollment. These new features designed to simplify enrollment range from 12 months of continuous coverage, elimination of face-to-face interviews, to presumptive eligibility. With the new program features in place, states become eligible for an enhanced federal match. If the state's Medicaid enrollment achieves a 100–110 percent of a baseline, they receive a higher match for the new enrollees. Exceeding 110 percent of the target earns an even higher match. These enhanced match rates are delivered to the state as a lump sum. (CMS 2009; Kaiser Family Foundation 2009).

The enrollment gaps between children in immigrant and native families present challenges for states implementing their Medicaid expansions under the ACA. ACA will expand adult Medicaid eligibility to 138 percent of the federal poverty line in 2014. Previous authors have shown that allowing low-income parents to enroll in Medicaid is a particularly effective way to boost enrollment among eligible children (Ku and Broaddus 2006), and a key advantage of the ACA Medicaid expansion will be its spillover effects on children's enrollment. This spillover enrollment can be expected to boost coverage for children in native families, but many parents in immigrant families will not be eligible due to their immigration status. State policy makers in states with large enrollment gaps between children in immigrant and native families can expect these gaps to grow larger with the implementation of the 2014 Medicaid expansions under ACA.

California's success and remaining challenge with enrolling its Medicaid-eligible children holds lessons for other states. California is particularly interesting due to its very large immigrant population and due to the fact that previous authors have produced state-level estimates relevant to immigrant families. California has made large investments in linguistic access to its Medicaid program with multilingual application procedures and many bilingual staff in many enrollment offices. The limited research on linguistic access and the barrier of English proficiency to Medicaid enrollment suggests that Medicaid agencies in few states meet the required standard of "meaningful access"

(Feinberg et al. 2002; Ku and Waidmann 2003). In contrast, California has managed to mobilize its large, bilingual population and well-established community organizations, with recent research finding parents' English proficiency to be a statistically insignificant barrier to Medicaid enrollment (Kincheloe, Frates, and Brown 2007). Despite its success with linguistic access, eligible children with immigrant parents have a two percentage point higher uninsured rate than nonimmigrant children. It is not known whether this remaining enrollment disparity is due to uneven linguistic access within the state or whether another barrier drives the disparity between children with immigrant and nonimmigrant parents.

Future research is necessary to identify why Medicaid-eligible children with immigrant parents remain uninsured. Although this article identifies *where* citizen children with immigrant families manage to enroll in Medicaid, it does not answer *why*. Multiple explanations could underlie these enrollment disparities. First, linguistic barriers may prevent immigrant parents from enrolling their eligible children. If states lack interpreters on staff or face long delays in obtaining an outside interpreter, the time costs to enroll in Medicaid may prove too high for an immigrant parent with limited English proficiency to enroll a healthy child in an insurance program. Alternatively, immigrants are not a homogeneous population. Although some states have predominantly Hispanic, economic migrants, others have sizeable refugee populations who may have moved to the United States after living their entire lives in tribal societies where health insurance and the Medicaid bureaucracy could be very alien concepts. Finally, these enrollment disparities may arise from a "chilling effect" from local immigration attitudes and police agencies' immigration enforcement activities. An immigrant family with any undocumented family members is unlikely to go to a Medicaid office located in a county government building that also houses a police station when a neighbor was deported after an encounter with local law enforcement.

The ACS data introduce a key limitation to the study. The primary strength of the ACS data is its very large sample size, which allows estimates for children with immigrant parents even in states with low levels of immigration. However, the ACS includes just a single health insurance question. In that question, the ACS identifies Medicaid and CHIP coverage as "Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability," but it does not include an additional confirmatory question. Most important, it does not include state-specific names for Medicaid or CHIP. State-specific information became available in 2009 for telephone interviews, but over half of responses are conducted solely through the



mail (Plewes 2010). The econometric specification used in the model should limit the impact of this limitation. As long as the question is not interpreted differently by immigrant and native families, the individual state fixed-effects should capture state-specific differences in how the respondents interpret the insurance question.

## CONCLUSION

In 2010, 24 percent of citizen children in the United States have at least one immigrant parent. This study found that a few states such as New York and Massachusetts do achieve near zero differences in predicted uninsured rates for Medicaid-eligible children with immigrant and nonimmigrant parents, and many states have large enrollment disparities reaching up to 20 percent points between the two populations. Addressing this enrollment disparity could earn CHIPRA bonus payments for many states. Similarly, states can expect this enrollment gap to grow as more low-income native parents gain Medicaid eligibility under ACA.

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Appendix SA1: Author Matrix.

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