

# The Association of Generation Status and Health Insurance Among US Children

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## KEY WORDS

immigrant, Affordable Care Act, insurance

## ABBREVIATIONS

ACA—Patient Protection and Affordable Care Act  
AOR—adjusted odds ratio  
CHIP—Children's Health Insurance Program  
FPL—federal poverty level  
LPR—lawful permanent resident  
NSCH—National Survey of Children's Health  
SCHIP—State Children's Insurance Program

Dr BeLue conceptualized and designed the study, drafted the initial manuscript, and conducted the initial analyses; Drs Miranda and Hillemeier contributed to writing the manuscript; Ms Elewonibi carried out analyses; and all authors approved the final manuscript as submitted.

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**WHAT'S KNOWN ON THIS SUBJECT:** Immigrant children are more likely to be uninsured versus nonimmigrant children. The extent to which immigrant families are aware of and interested in obtaining insurance is unclear. Obstacles to participation in insurance exchanges and public insurance programs are also unknown.



**WHAT THIS STUDY ADDS:** Barriers for children in immigrant families include awareness of and experience with various health insurance options, perceived costs and benefits of insurance, structural/policy restrictions on eligibility, and the likelihood of working organizations likely to offer employee insurance coverage.

## abstract

**BACKGROUND:** The Patient Protection and Affordable Care Act (ACA) has the potential to reduce the number of uninsured children in the United States by as much as 40%. The extent to which immigrant families are aware of and interested in obtaining insurance for their children is unclear.

**METHODS:** Data from the 2011–2012 National Survey of Children's Health were analyzed to examine differences by immigrant generational status in awareness of children's health insurance options. Adjusted odds ratios (AORs) were calculated for each outcome variable that showed statistical significance by generation status.

**RESULTS:** Barriers to obtaining insurance for children in immigrant (first- and second-generation) families include awareness of and experience with various health insurance options, perceived costs and benefits of insurance, structural/policy restrictions on eligibility, and lower likelihood of working in large organizations that offer employee insurance coverage. Although noncitizen immigrants are not covered by ACA insurance expansions, only 38% of first-generation families report being uninsured because of the inability to meet citizenship requirements. Most families in this sample also worked for employers with <50 employees, making them less likely to benefit from expansions in employer-based insurance. In multivariate analyses, third-generation families have increased odds of knowing how to enroll in health insurance (AOR 7.1 [3.6–13.0]) and knowing where to find insurance information (AOR 7.7 [3.8–15.4]) compared with first-generation families.

**CONCLUSIONS:** ACA navigators and health services professionals should be aware of potential unique challenges to helping immigrant families negotiate Medicaid expansions and state and federal exchanges. *Pediatrics* 2014;134:307–314

The roll-out of the Patient Protection and Affordable Care Act (ACA) has the potential to reduce the number of uninsured children in the United States by as much as 40%, from 7.4 million to 4.2 million.<sup>1</sup> The ACA will benefit low-income families specifically by creating a minimum Medicaid eligibility across the country, extending funding for the State Children's Insurance Program (SCHIP), and providing low-cost insurance policies through state and federal insurance exchanges (Centers for Medicare & Medicaid Services, [CMS]). The benefits of this legislation, however, are likely to be constrained among children in immigrant families, whose risk of being uninsured is currently about twice that of children in nonimmigrant families.<sup>2</sup> Children who are undocumented will remain categorically ineligible for public insurance under the ACA, and many lawfully present immigrant children will continue to experience eligibility restrictions. Undocumented immigrants, who face continued challenges obtaining lawful permanent resident (LPR) status because of the financial burden of the application process, English language requirements, and waiting periods, will also remain ineligible for ACA premium tax credits and will be prohibited from purchasing private coverage through exchanges. Undocumented immigrants will continue to receive most of their care through safety-net hospitals and clinics and emergency departments, as the ACA will have little impact on non-LPR immigrant families.<sup>3</sup>

Welfare reform legislation in 1996 mandated a 5-year waiting period before eligibility for Medicaid and the Children's Insurance Program (CHIP) among children of immigrants who were lawful permanent residents (ie, those with "green cards"). The Immigrant Children's Health Improvement Act of 2009 allowed states the option of providing public insurance coverage to

these children without a waiting period; however, by 2012, only about half had opted to extend this coverage.<sup>4</sup> The ACA will allow LPR families to purchase private insurance coverage for their children in the newly established health insurance exchanges and receive tax credits without a waiting period.<sup>5</sup> Medicaid eligibility for LPR under the ACA expansion may vary by state, leading to state-level variations among immigrant families.<sup>6</sup>

The extent, however, to which LPR immigrant families are aware of and interested in this option for obtaining insurance for their children is unclear. Additional obstacles to participation in insurance exchanges and in public insurance programs by immigrant families also are not well understood, although there is evidence to suggest important factors, such as lower citizenship rates,<sup>7</sup> a lack of knowledge about insurance plans, including eligibility requirements,<sup>8</sup> perceived difficulty of enrolling in insurance coverage,<sup>9</sup> stigma related to public health insurance,<sup>10</sup> and differences in perceived need for health insurance.<sup>11</sup>

The objective of this article is to identify factors related to lack of insurance among immigrant families, and investigate barriers that may affect the effectiveness of the ACA in extending insurance coverage to children in immigrant families in the United States. By analyzing current data from a nationally representative sample of children, and comparing child and parental migration status, we examine whether differences by generational status are present in reasons for being uninsured, awareness and experience with insurance options, and barriers to obtaining insurance. We hypothesize that awareness and experience with insurance options and barriers to obtaining insurance, such as insurance-related knowledge and familiarity with the enrollment processes, will more likely be contributors to

uninsurance for first- and second-generation families compared with families in which both children and parents are US born (third generation), even after controlling for sociodemographic factors.

## METHODS

### Data and Participants

The study uses data from the 2011–2012 National Survey of Children's Health (NSCH), a national telephone survey sponsored by the US Department of Health and Human Services' Maternal and Child Health Bureau. NSCH collects data on >500 childhood health indicators, covering physical, emotional, and behavioral issues. The NSCH data are nationally representative and contain data for 95 677 children ages 0 to 17. The 2011–2012 survey reports a response rate <40%.<sup>12</sup> The study received institutional review board approval. The current study sample was limited to those children reported by their parents to be uninsured ( $n = 4040, 5.4\%$ ).

### Measures

Generational status was categorized as first (foreign-born child with foreign-born parents), second (US-born child with at least 1 foreign-born parent), or third generation (US-born child with 2 US-born parents).

Child demographics included age in years, gender (male/female), race/ethnicity (non-Hispanic white, non-Hispanic black, Hispanic, and other, including Asian), highest educational attainment of parents (less than high school graduate, high school graduate, or greater than high school), and household composition (2-parent family, single mother, other). Parents were asked if they received Temporary Assistance for Needy Families/welfare or food stamps or Supplemental Nutritional Assistance Program benefits in the past 12 months. Poverty status was

grouped by category (<100% of the federal poverty level [FPL], 100%–133%, 133%–150%, 150%–185%, 185%–200%, 200%–300%, 300%–400%, >400%). Language spoken at home was indicated as English or other.

Geographic region was indicated by dividing states into the 4 major census regions: West, Midwest, South, and Northeast.

Reason why uninsured: Parents were asked in a single question the reasons for currently being uninsured, such as costs too much, no one in family employed, insurance not worth the costs.

Barriers to obtaining insurance: Parents were asked the following questions: Length of time child uninsured (<6 months, 6 months–1 year, 1–3 years, >3 years, never insured); employer size (>50, exactly 50, or <50); and eligibility for insurance (yes, through employer, through Union, no). Also, questions included whether parents reported they ever (1) had employer-based insurance, (2) purchased their own insurance, (3) heard of Medicaid, (4) had Medicaid coverage for child, (5) heard of CHIP, or (6) applied for CHIP.

Awareness and experience with insurance options: Parents were asked the following questions: Do you know where to get insurance information (yes or no)? Do you know how to enroll (yes or no)? Rank the difficulty of enrolling in insurance (very easy, somewhat easy, somewhat difficult, very difficult). Do you think your child is eligible (yes or no)? Would you want your child to enroll (yes or no)?

### Analytic Approach

Frequencies were used to assess the distribution of each variable;  $\chi^2$  tests were used to examine the relationships among generation status, demographics, and health care variables. Adjusted odds ratios (AORs) were calculated by using logistic regression for insurance-related outcomes for each

variable that showed statistical significance by generation status. AORs were adjusted by poverty level, race/ethnicity, child health status, parent level of education, and major census region. All analyses used Stata (Version 13; Stata Corp, College Station, TX) survey procedures to account for survey weights and design.

## RESULTS

Of 95 766 children in the NSCH sample, 3.2% were first generation, 23.2% were second generation, and 73.6% were third generation; in all, 5.4% ( $n = 4040$ ) were uninsured. In total, 26.0% of first-generation children, 7.0% of second-generation children, and 3.9% of third-generation children were uninsured. Among uninsured children, 14.9% were first-generation families, 29.3% were second-generation families, and 55.8% were third-generation families.

### Descriptive Results

First-generation children were on average older (mean = 11.5 years) than second- (mean = 8.8 years) or third-generation children (mean = 8.9 years) ( $P < .01$ ) (see Table 1). Third-generation children also were less likely to report good health status (88.7%) compared with second-generation (93.5%) and third-generation children (95.8%) ( $P = .028$ ). Most (67.1%) of uninsured first-generation families had incomes that were <100% of the poverty level, a considerably higher percentage than second- (37.4%) and third-generation (20.2%) families ( $P < .0001$ ). Uninsured first- (80.2%) and second-generation (75.6%) families were mostly Latino/Hispanic, whereas most uninsured third-generation children were non-Hispanic white (65.9%). Parents in first-generation families also were more likely to have not finished high school (70.4% vs 58.2% of

parents in second-generation families and 18.8% of parents in third-generation families) ( $P < .0001$ ).

A larger majority of children in first- (80.9%) and second-generation (82.6%) families reside in 2-parent homes compared with third-generation families (70.2%) ( $P < .01$ ). Approximately 13% of first-generation and 36% of second-generation families spoke English at home ( $P < .001$ ). The distribution of uninsured children varied across generation status and major census region with second- and third-generation families most likely residing in the South ( $P < .01$ ). Receipt of welfare or food stamps was not related to generation status among uninsured children.

Table 2 describes reasons for being uninsured by generation status. The primary reason reported for being uninsured was that insurance “costs too much” among second- (24.5%) and third-generation (35.4%) families; among first-generation families, the percentage was somewhat lower at 19.6%. First-generation families were, however, more likely than other parents to state “health insurance is not worth the money it costs” ( $P < .001$ ) as the reason for lack of insurance. First- and second-generation families were significantly more likely than those of third-generation families to state that a reason their children were uninsured was that they “don’t know how to get insurance” ( $P < .001$ ). Overall, 37% of first-generation families reported that they “cannot meet residency/citizenship requirements or lack a social security number,” compared with only 1.2% of second-generation families ( $P < .001$ ).

### Regression Results

Table 3 describes awareness and experience with insurance options and barriers to obtaining insurance. Significantly fewer first-generation families reported

**TABLE 1** Demographic Characteristics and Welfare/Social Program Receipt by Generational Status, Uninsured Children in the 2011–2012 National Survey of Children's Health

	All Uninsured Children	1st Generation	2nd Generation	3rd Generation	P Value
	<i>n</i> = 4040	<i>n</i> = 445; 14.9%	<i>n</i> = 779; 29.3%	<i>n</i> = 2508; 55.8%	Difference by Generation
	% (SE)	% (SE)	% (SE)	% (SE)	
<b>Demographics</b>					
Age	9.3 (0.18)	11.5 (0.36)	8.8 (0.37)	8.9 (0.24)	<i>P</i> < .001
Gender, % male	54.3 (1.8)	58.0 (4.3)	53.2 (4.0)	53.9 (2.3)	<i>P</i> < .05
<b>Race/ethnicity</b>					
White	38.9 (1.7)	2.3 (0.8)	7.5 (1.2)	65.9 (2.3)	<i>P</i> < .001
Black	11.8 (1.2)	8.2 (2.3)	8.5 (2.0)	14.5 (1.8)	
Hispanic	41.0 (1.9)	80.2 (3.2)	75.6 (3.0)	12.0 (1.8)	
Other (includes Asian)	8.6 (0.9)	9.2 (2.1)	9.3 (2.0)	7.6 (0.9)	
<b>Poverty level</b>					
<100%	31.4 (1.9)	61.7 (4.6)	37.4 (4.1)	20.2 (1.9)	<i>P</i> < .001
100%–133%	17.2 (1.5)	13.5 (2.3)	22.4 (3.6)	15.5 (1.8)	
133%–150%	4.0 (0.9)	6.3 (3.0)	2.2 (1.0)	4.4 (1.4)	
150%–185%	13.1 (1.3)	9.4 (2.8)	12.6 (2.7)	14.3 (1.8)	
185%–200%	4.3 (0.8)	0.6 (0.4)	3.9 (1.6)	5.5 (1.1)	
200%–300%	16.8 (1.3)	5.9 (2.0)	13.7 (2.7)	21.4 (1.8)	
300%–400%	6.6 (0.9)	1 (0.4)	4.4 (1.2)	9.3 (1.5)	
>400%	6.5 (0.8)	1.6 (0.7)	3.3 (0.8)	9.4 (1.3)	
<b>Highest level of parental education</b>					
<HS graduate	38.1 (1.9)	70.4 (4.1)	58.2 (4.1)	18.8 (1.7)	<i>P</i> < .001
HS graduate	28.7 (1.7)	17.6 (3.6)	19.6 (3.2)	31.4 (2.3)	
>HS graduate	32.2 (1.8)	11.9 (2.4)	22.3 (3.2)	42.8 (2.4)	
<b>Hours parent worked per week</b>					
None	9.4 (2.3)	3.8 (2.2)	4.2 (2.0)	11.3 (2.9)	<i>P</i> < .05
<1–20	80.8 (3.6)	95.3 (2.5)	91.4 (4.2)	76.7 (4.6)	
21–30	6.4 (2.2)	0.0 (0.0)	4.1 (3.5)	7.7 (2.9)	
31–40	2.3 (2.0)	0.0 (0.0)	0.3 (0.3)	3.1 (2.6)	
41+	1.0 (0.8)	0.9 (0.9)	0.0 (0.0)	1.3 (1.0)	
<b>Marital status</b>					
Two-parent	75.6 (1.5)	80.9 (4.0)	82.6 (3.3)	70.2 (2.1)	<i>P</i> < .01
Single mother	20.3 (1.5)	14.7 (3.4)	15.6 (3.0)	24.5 (2.0)	
Other	4.1 (0.7)	4.4 (2.6)	1.8 (0.7)	5.3 (0.9)	
Primary language spoken at home is English	65.7 (1.85)	12.7 (3.2)	35.5 (3.8)	97.5 (0.8)	<i>P</i> < .001
<b>Major census region</b>					
Midwest	22.2 (0.2)	11.6 (1.4)	12.5 (0.4)	25.5 (0.2)	<i>P</i> < .001
Northeast	17.0 (0.2)	22.1 (2.1)	16.0 (0.2)	16.3 (0.2)	
South	36.7 (0.3)	27.4 (2.6)	38.2 (0.0)	38.2 (0.3)	
West	24.1 (0.3)	38.9 (0.4)	36.2 (0.9)	19.9 (0.3)	
<b>Health</b>					
<b>Child health status</b>					
Excellent/Very Good/Good	94.0 (0.9)	88.7 (3.2)	93.5 (1.9)	95.8 (0.9)	<i>P</i> = .028
Fair/Poor	6.0 (0.9)	11.3 (3.2)	6.5 (1.9)	4.2 (0.9)	
<b>Welfare/social program receipt</b>					
Welfare/TANF	6.8 (1.2)	8.3 (3.7)	5.4 (1.8)	7.1 (1.2)	NS
SNAP/Food Stamps	27.3 (1.9)	31.4 (4.8)	25.0 (3.8)	27.3 (2.3)	NS

HS, high school; NS, not significant; SNAP, Supplemental Nutritional Assistance Program; TANF, Temporary Assistance for Needy Families. Difference by generation: results from  $\chi^2$  analyses.

knowing where to obtain insurance information (51.5%) or knowing how to enroll in health insurance programs (43.5%) compared with second- (77.4%, 70.4%, respectively) and third-generation (86.7%, 85.0%, respectively; *P* < .001) families. Relatively few first-generation children had ever had employer-based insurance coverage

(23.2%) or Medicaid (8.8%) or had ever heard of Medicaid (86.7%) compared with children in second- (51.8%, 69.5%, 94.1%, respectively) and third-generation families (39.8%, 61.0%, 95.4%, respectively; *P* < .001). First-generation families were also less likely to think their children were eligible for insurance (22.5%) than

second- (49.2%) and third-generation (52.6%) families (*P* < .001).

More than half of all families perceived that enrolling in Medicaid insurance coverage was either very difficult or somewhat difficult; there was no difference by generational status in perceived difficulty. Similarly, most first- and second-generation families perceived

**TABLE 2** Reasons for Being Uninsured by Generation Status

	All Uninsured Children	1st Generation	2nd Generation	3rd Generation	P Value
	n = 4040	n = 445; 14.9%	n = 779; 29.3%	n = 2508; 55.8%	Difference by Generation, Unadjusted
	% (SE)	% (SE)	% (SE)	% (SE)	
Reason uninsured: Costs too much	29.5 (1.7)	19.6 (3.1)	24.5 (3.4)	35.4 (2.2)	<i>P</i> < .001
Reason uninsured: Health insurance not worth the money it costs, % yes	2.5 (0.7)	5.2 (2.6)	0.4 (0.3)	3.0 (1.0)	<i>P</i> < .001
Reason uninsured: Did not reapply when coverage ended, % yes	5.8 (1.2)	5.7 (3.2)	6.9 (2.2)	5.2 (1.6)	<i>P</i> < .001
Reason uninsured: Intend to apply but just haven't done so, % yes	2.7 (0.8)	0.1 (0.1)	5.5 (2.4)	1.0 (0.4)	<i>P</i> < .001
Reason uninsured: Don't know how to get insurance, % yes	1.0 (0.5)	1.7 (1.6)	1.6 (1.4)	0.4 (0.4)	<i>P</i> < .001
Reason uninsured: No one in the family currently employed/Job loss, % yes	5.5 (0.8)	0.7 (0.3)	5.5 (1.8)	6.9 (0.1)	<i>P</i> < .001
Reason uninsured: Can't get insurance through employer, % yes	5.6 (0.8)	3.2 (1.1)	4.1 (1.2)	7.2 (1.3)	<i>P</i> < .001
Reason uninsured: Changing jobs or insurance policies, % yes	4.7 (0.8)	0.8 (0.4)	2.6 (1.0)	7.0 (1.3)	<i>P</i> < .001
Reason uninsured: Moving between states of policies, % yes	2.2 (0.5)	2.5 (1.0)	2.9 (1.4)	1.7 (0.5)	<i>P</i> < .001
Reason uninsured: Insurance company refused to cover/preexisting condition, % yes	1.2 (0.5)	0.1 (0.1)	0.4 (0.3)	2.0 (0.9)	<i>P</i> < .001
Reason uninsured: Insurance company terminated coverage/Rule violation, % yes	1.5 (0.4)	0.8 (0.5)	1.5 (0.9)	1.7 (0.6)	<i>P</i> < .001
Reason uninsured: Income too high for public program, % yes	8.0 (1.1)	1.2 (0.4)	11.9 (2.5)	7.8 (1.4)	<i>P</i> < .001
Reason uninsured: Age/Child is too young or old for coverage, % yes	0.3 (0.2)	0 (0)	0.3 (0.3)	0.5 (0.3)	<i>P</i> < .001
Reason uninsured: Cannot meet residency/citizenship requirements/ Lack of SSN, % yes	6.5 (1.0)	37.8 (4.7)	1.2 (0.5)	0.2 (0.2)	<i>P</i> < .001
Reason uninsured: Ineligible due to other program requirement, % yes	3.8 (0.9)	3.2 (0.9)	8.0 (2.7)	1.7 (0.6)	<i>P</i> < .001
Reason uninsured: Issues with application or paperwork, % yes	6.8 (1.1)	2.7 (1.2)	10.6 (2.9)	5.8 (1.3)	<i>P</i> < .001
Reason uninsured: Have applied-just waiting, % yes	3.0 (0.6)	3.1 (1.3)	4.0 (1.5)	2.3 (0.5)	<i>P</i> < .001

SSN, Social Security Number.

enrolling in SCHIP to be difficult ( $P < .01$ ). Fewer first-generation families (19.7%) worked at companies with >50 employees, thereby reducing their potential for insurance under the ACA employer mandate compared with second- (22.1%) and third-generation (36.9%) counterparts. However, these families may still qualify for marketplace coverage.

The last column of Table 3 displays AORs for the relationship between awareness and experience with insurance options, barriers to obtaining insurance, and generation status. In most cases, third-generation families had increased odds of reporting awareness and experience with in-

surance options compared with first-generation families, whereas enrollment of children in second-generation families typically did not differ from third-generation families. For example, third-generation families have ~7 times the odds of knowing how to enroll in health insurance or knowing where to find information compared with first-generation families. Third-generation families have significantly increased odds of having heard about Medicaid and CHIP and not having had their children enrolled in these programs. After controlling for socio-demographic variables, children in third-generation families had 9 times higher odds of having short periods of

being uninsured ( $P < .0001$ ) and almost 6 times higher odds of parents having employer-based insurance eligibility ( $P < .001$ ), compared with children in first-generation families. Perceived eligibility and past insurance history did not differ by insurance status after accounting for socio-demographic variables.

## DISCUSSION

Our analyses reveal that family generational status is associated with a multitude of barriers to health insurance coverage for children. In support of our hypotheses, we found that barriers for children in immigrant (first- and second-generation) families

**TABLE 3** Awareness/Experience and Barriers to Insurance Coverage, Parents of Uninsured Children in the 2011–2012 National Survey of Children's Health

	All Uninsured Children			3rd Generation			P Value	OR (CI) Multivariate Models*		
	n = 4040	1st Generation n = 445; 14.9%	2nd Generation n = 779; 29.3%	3rd Generation n = 2508; 55.8%	% (SE)	% (SE)		Difference by Generation, Unadjusted	1st Generation, Reference	2nd Generation
<b>Awareness and experience with insurance options</b>										
Do you know where to get insurance information? % yes	78.5 (1.7)	51.5 (5.3)	77.4 (3.6)	86.7 (1.5)			P < .001	7.7 (3.8–15.4)***	2.0 (1.1–3.8)**	
Do you know how to enroll for insurance? % yes	74.2 (1.8)	43.5 (5.1)	70.4 (3.9)	85.0 (1.8)			P < .001	7.1 (3.6–13.0)***	2.1 (1.2–3.8)**	
Do you think your child is eligible for insurance? % yes	47.1 (2.1)	22.5 (4.5)	49.2 (4.3)	52.6 (2.5)			P < .001	NS	NS	
Ever had employer-based insurance, % yes	39.8 (1.0)	23.2 (5.6)	51.8 (2.5)	39.8 (2.0)			P < .001	NS	NS	
Ever purchased your own insurance, % yes	14.0 (1.6)	10.9 (2.9)	12.6 (2.8)	15.5 (2.1)			NS			
Heard of Medicaid, % yes	93.6 (0.8)	86.7 (2.4)	94.1 (1.7)	95.4 (0.8)			P < .001	6.6 (2.4–17.1)***	NS	
Child ever on Medicaid, % yes	55.9 (2.0)	8.8 (2.2)	69.5 (3.7)	61.0 (2.4)			P < .001	50.7 (20.6)24.4)***	NS	
Heard of CHIP, % yes	75.3 (2.2)	52.5 (6.5)	73.9 (4.3)	83.1 (2.1)			NS	4.7 (2.2–10.4)***	NS	
Child ever on CHIP, % yes	33.3 (2.2)	6.5 (2.8)	43.6 (5.6)	50.0 (5.5)			NS	4.6 (1.3–15.8)**	NS	
<b>Barriers to obtaining insurance</b>										
Perceived difficulty of enrolling in Medicaid										
Very easy	13.7 (1.4)	8.7 (3.2)	11.5 (3.0)	16.4 (1.8)			NS		NS	
Somewhat easy	29.2 (1.9)	33.9 (5.1)	29.7 (4.0)	27.7 (2.3)						
Somewhat difficult	30.3 (2.0)	36.3 (5.2)	34.4 (4.3)	26.2 (2.2)						
Very difficult	22.1 (1.7)	16.6 (3.9)	22.5 (3.2)	23.4 (2.3)						
Perceived difficulty of enrolling in SCHIP										
Very easy	19.3 (2.3)	5.6 (2.2)	10.8 (3.5)	27.1 (3.4)			P = .006	2.0 (1.0–4.5)*	2.1 (1.2–3.8)**	
Somewhat easy	36.6 (3.0)	39.5 (9.2)	5.0 (5.3)	37.2 (3.9)						
Somewhat difficult	29.1 (2.9)	40.1 (8.9)	37.5 (5.8)	21.7 (3.1)						
Very difficult	15.0 (2.4)	14.8 (7.4)	16.7 (4.3)	14.0 (3.1)						
Length of time uninsured										
<6 mo	32.0 (1.9)	11.8 (3.5)	31.1 (3.1)	38.5 (2.5)			NS			
6 mo–1 y	13.0 (1.4)	4.4 (1.1)	18.0 (3.4)	12.8 (1.6)						
1–3 y	22.2 (1.6)	15.8 (2.7)	28.6 (3.9)	20.6 (1.8)						
>3 y	16.8 (1.4)	22.8 (4.4)	15.2 (2.6)	15.9 (1.7)						
Never insured	16.0 (1.5)	45.1 (4.8)	7.1 (1.8)	12.3 (1.9)						
Employer size										
>50	33.4 (7.5)	19.7 (16.0)	22.1 (9.1)	36.9 (9.2)			P < .001		NS	
Exactly 50	7.5 (4.5)	20.8 (18.0)	28.8 (17.2)	1.3 (0.6)						
<50	58.1 (7.7)	58.9 (20.3)	49.1 (15.0)	60.5 (9.1)						
Eligible for employer insurance?										
Yes, current employer	11.5 (1.3)	2.3 (0.9)	9.0 (2.4)	16.0 (2.1)			P < .001			
								5.9 (2.1–16.7)***	NS	

Multivariate analyses adjusted for poverty level, child age, major census region, parent education, race/ethnicity, and child health status. Binary outcomes modeled the probability of "no" so that ORs are expressed as >1. Ordinal outcomes are modeled based on the probability of increasing difficulty and increased time spent uninsured. CI, confidence interval; NS, not significant; OR, odds ratio.

\* P < .05; \*\* P < .01; \*\*\* P < .0001.

include awareness of and experience with various health insurance options, perceived costs and benefits of insurance, structural/policy restrictions on eligibility, and lower likelihood of working in large organizations that tend to offer employee insurance coverage.

In general, lower rates of employer-sponsored health insurance<sup>7,8</sup> heavily influence higher rates of uninsured among immigrant children. Children of noncitizen parents, regardless of length of residence in the United States, are more likely to be uninsured and have parents without employer-sponsored health insurance.<sup>9</sup> Gaps as large as 20% in coverage between citizen children of immigrant and non-immigrant parents have been demonstrated in many states.<sup>10</sup> However, immigrants in general incur lower health care costs than the US born. An exception is emergency department expenditures, which are higher among immigrant compared with nonimmigrant children.<sup>11</sup> States with more uninsured children also have higher numbers of second-generation families, compared with states with more first-generation families and lower rates of uninsured children.<sup>13</sup> First-generation households reported higher odds of uninsured Latino children compared with later-generation households,<sup>14</sup> and those with households in which Spanish was the primary language reported higher odds of uninsured children.<sup>15,16</sup>

Although noncitizen immigrants are not covered by ACA insurance expansions, only 37.8% of first-generation families report being uninsured because of the inability to meet citizenship requirements. However, we must take into consideration that the number of families that report that their child does not have insurance because of the inability to meet citizenship requirements may be underestimated due to perceived

stigma and social desirability. More than half of second-generation and more than one-third of third-generation children in our sample were <140% FPL, whereas almost two-thirds of first-generation children live in families <140% FPL. Almost all children in families <140% FPL are eligible for Medicaid as a result of the ACA, but only if they meet the citizenship requirement.

Families <400% FPL receive tax credits to go toward the purchase of insurance.<sup>17</sup> Most families in this sample also worked for employers with <50 employees, making them less likely to benefit from expansions in employer-based insurance and, as a result, reliant on Medicaid expansions and state and federal exchanges. Only 3.3% and 9.4% of second- and third-generation children respectively in our sample were >400% FPL, making them ineligible for insurance expansions and tax credits. Families >400% may still benefit from the marketplace because of the employer mandate, universal community rating, the elimination of the preexisting conditions exclusion, and the inclusion of an essential benefits package in all marketplace plans. Singh and Lin<sup>18</sup> found that socioeconomic status accounts for most of the variability in insurance status and prescribed health policies to target these disparities. The disparities we uncovered disproportionately affect one of the most vulnerable populations: children of immigrant families who are qualified, yet not receiving preventive care that is key to reducing future health disparities.

Our study has several limitations. First, our data are cross-sectional in nature and do not allow us to infer causality. Second, we do not have information that would further reveal the potential for insurance, such as legal status or length of stay in the United States among first-generation immigrant children, siblings,

or their parents. Children in families with mixed LPR status and, as a result mixed insurance eligibility status, are at increased risk for uninsurance compared with uniform eligibility families.<sup>19,20</sup>

Additional limitations include that the NSCH may have considerable non-response bias among certain households, such as those lacking legal status. Parental explanations for a child's lack of insurance are strongly susceptible to social desirability bias (which can influence what they attribute as the causes of uninsurance and their own willingness to enroll in public programs). A lack of insurance can be either episodic or long term, but the NSCH sample looks only at a snapshot. Long-term uninsured children may be very different from those experiencing a short-term coverage gap.

The results of this study highlight challenges and the need for assistance for families in obtaining insurance. More than half of all families in this sample believe that purchasing insurance is difficult, and many believe that insurance is not worth the cost. In addition, many immigrant families speak languages other than English, and a significant percentage of families have low educational attainment (less than high school). Immigrants who speak a language other than English and those who have less than high school-level educational attainment often have poor health literacy,<sup>21</sup> which could lead to challenges in negotiating the health care and the public health system.<sup>22</sup>

The ACA requires states to fund navigators to provide information and help those obtaining coverage in the exchanges in choosing the optimal insurance plan to meet their needs. It is the navigator's role to provide expertise on eligibility requirements, to conduct community events to raise awareness about ACA exchanges, and

to provide this information in a culturally and linguistically appropriate manner.<sup>23</sup> These navigators, as well as health care and services professionals, should be aware of potential challenges in teaching immigrant families

to negotiate Medicaid expansions and state and federal exchanges.

Given that all immigrants in need of insurance may not have the opportunity to interact with a navigator, states also should consider the role of local

schools, medical providers, and social services programs in informing immigrant families about insurance options and connecting them to a navigator who can assist them in negotiating the health care system under the ACA.

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