The Association of Generation Status and Health Insurance Among US Children

AUTHORS: Rhonda BeLue, PhD, Patricia Y. Miranda, MPH, PhD, Bilikisu Reni Elewonibi, MPH, and Marianne M. Hillemeier, MPH, PhD

Department of Health Policy and Administration and Demography, The Pennsylvania State University, University Park, Pennsylvania

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 public 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.

www.pediatrics.org/cgi/doi/10.1542/peds.2013-3337

doi:10.1542/peds.2013-3337

Accepted for publication Apr 23, 2014

Address correspondence to Rhonda BeLue, PhD, Department of Health Policy and Administration and Demography, The Pennsylvania State University, 604 Donald H. Ford Building, University Park, PA 16802. E-mail: rzb10@psu.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

FINANCIAL DISCLOSURE: The authors have indicated they have no financial relationships relevant to this article to disclose.

FUNDING: No external funding.

POTENTIAL CONFLICT OF INTEREST: The authors have indicated they have no potential conflicts of interest to disclose.

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.[1] 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.[2] 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 public 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.[3]

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.[4] 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.[5] Medicaid eligibility for LPR under the ACA expansion may vary by state, leading to state-level variations among immigrant families.[6]

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,[7] a lack of knowledge about insurance plans, including eligibility requirements,[8] perceived difficulty of enrolling in insurance coverage,[9] stigma related to public health insurance,[10] and differences in perceived need for health insurance.[11]

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%.[12] 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; χ^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
	n = 4040	*n* = 445; 14.9%	*n* = 779; 29.3%	*n* = 2508; 55.8%	Difference by Generation
	% (SE)	% (SE)	% (SE)	% (SE)	
Demographics					
Age	9.3 (0.18)	11.5 (0.36)	8.8 (0.37)	8.9 (0.24)	$P < .001$
Gender, % male	54.3 (1.8)	58.0 (4.3)	53.2 (4.0)	53.9 (2.3)	$P < .05$
Race/ethnicity					
White	38.9 (1.7)	2.3 (0.8)	7.5 (1.2)	65.9 (2.3)	
Black	11.8 (1.2)	8.2 (2.3)	8.5 (2.0)	14.5 (1.8)	$P < .001$
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)	
Poverty level					
<100%	31.4 (1.9)	61.7 (4.6)	37.4 (4.1)	20.2 (1.9)	
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)	$P < .001$
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)	
Highest level of parental education					
<HS graduate	38.1 (1.9)	70.4 (4.1)	58.2 (4.1)	18.8 (1.7)	
HS graduate	28.7 (1.7)	17.6 (3.6)	19.6 (3.2)	31.4 (2.3)	$P < .001$
>HS graduate	32.2 (1.8)	11.9 (2.4)	22.3 (3.2)	42.8 (2.4)	
Hours parent worked per week					
None	9.4 (2.3)	3.8 (2.2)	4.2 (2.0)	11.3 (2.9)	
<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)	$P < .05$
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)	
Marital status					
Two-parent	75.6 (1.5)	80.9 (4.0)	82.6 (3.3)	70.2 (2.1)	
Single mother	20.3 (1.5)	14.7 (3.4)	15.6 (3.0)	24.5 (2.0)	$P < .01$
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)	$P < .001$
Major census region					
Midwest	22.2 (0.2)	11.6 (1.4)	12.5 (0.4)	25.5 (0.2)	
Northeast	17.0 (0.2)	22.1 (2.1)	16.0 (0.2)	16.3 (0.2)	$P < .001$
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)	
Health					
Child health status					
Excellent/Very Good/Good	94.0 (0.9)	88.7 (3.2)	93.5 (1.9)	95.8 (0.9)	$P = .028$
Fair/Poor	6.0 (0.9)	11.3 (3.2)	6.5 (1.9)	4.2 (0.9)	
Welfare/social program receipt					
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 χ^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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
Reason uninsured: Changing jobs or insurance policies, % yes	4.7 (0.8)	0.8 (0.4)	2.6 (1.0)	7.0 (1.3)	$P < .001$
Reason uninsured: Moving between states of policies, % yes	2.2 (0.5)	2.5 (1.0)	2.9 (1.4)	1.7 (0.5)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
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)	$P < .001$
Reason uninsured: Issues with application or paperwork, % yes	6.8 (1.1)	2.7 (1.2)	10.6 (2.9)	5.8 (1.3)	$P < .001$
Reason uninsured: Have applied-just waiting, % yes	3.0 (0.6)	3.1 (1.3)	4.0 (1.5)	2.3 (0.5)	$P < .001$

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 insurance 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 sociodemographic 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 sociodemographic 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	1st Generation	2nd Generation	3rd Generation	*P* Value	OR(CI) Multivariate Models*
	n = 4040	*n* = 445; 14.9%	*n* = 779; 29.3%	*n* = 2508; 55.8%		3rd Generation
	% (SE)	% (SE)	% (SE)	% (SE)	Difference by Generation, Unadjusted	2nd Generation
						1st Generation, Reference
Awareness and experience with insurance options						
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
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
Ever purchased your own insurance, % yes	14.0 (1.6)	10.9 (2.9)	12.6 (2.8)	15.5 (2.1)	NS	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 (20.6124.4)***, 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
Barriers to obtaining insurance						
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					$P = .006$	2.0 (1.0–4.5)*, 2.1 (1.2–3.8)**
Very easy	19.3 (2.3)	5.6 (2.2)	10.8 (3.5)	27.1 (3.4)		
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						9.1 (5.3–15.6)***, NS
<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?						5.9 (2.1–16.7)***
Yes, current employer	11.5 (1.3)	2.3 (0.9)	9.0 (2.4)	16.0 (2.1)	$P < .001$	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[7,8] 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.[9] Gaps as large as 20% in coverage between citizen children of immigrant and nonimmigrant parents have been demonstrated in many states.[10] 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.[11] 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.[13] First-generation households reported higher odds of uninsured Latino children compared with later-generation households,[14] and those with households in which Spanish was the primary language reported higher odds of uninsured children.[15,16]

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.[17] 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[18] 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.[19,20]

Additional limitations include that the NSCH may have considerable nonresponse 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,[21] which could lead to challenges in negotiating the health care and the public health system.[22]

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.[23] 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.

REFERENCES

1. Kenney GM, Buettgens M, Guyer J, Heberlein M. Improving coverage for children under health reform will require maintaining current eligibility standards for Medicaid and CHIP. *Health Aff (Millwood)*. 2011; 30(12):2371–2381
2. Foundation for Child Development. 2012. Children in immigrant families: essential to America's future. Available at: http://kff.org/health-reform/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/. Accessed April 7, 2014
3. Commonwealth Fund. 2013. Undocumented and uninsured. Barriers to health affordable care for immigrant populations. Available at: www.commonwealthfund.org/~/media/Files/Publications/Fund%20Report/2013/Aug/1699_Wallace_undocumented_uninsured_barriers_immigrants_v2.pdfndocumented
4. Ku L, Jewers M. 2013. Health care for immigrant families: current policies and issues. Washington DC: Migration Policy Institute. Available at: www.migrationpolicy.org/research/health-care-immigrant-families-current-policies-and-issues. Accessed April 7, 2014
5. Kaiser Commission on Medicaid and the Uninsured. 2013. Key facts on health coverage for low-income immigrants today and under the Affordable Care Act. Available at: http://kaiserfamilyfoundation.files.wordpress.com/2013/03/8279-02.pdf. Accessed April 7, 2014
6. Kaiser Family Foundation. The coverage gap: uninsured poor adults in states that do not expand Medicaid. Available at: http://kff.org/health-reform/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/. Accessed April 7, 2014
7. Seiber EE. Covering the remaining uninsured children: almost half of uninsured children live in immigrant families. *Med Care*. 2014;52(3):202–207
8. Shields MK, Behrman RE. Children of immigrant families: analysis and recommendations. *Future Child*. 2004;14(2):4–15
9. Flores G, Abreu M, Brown V, Tomany-Korman SC. How Medicaid and the State Children's Health Insurance Program can do a better job of insuring uninsured children: the perspectives of parents of uninsured Latino children. *Ambul Pediatr*. 2005;5(6):332–340
10. Derose KP, Escarce JJ, Lurie N. Immigrants and health care: sources of vulnerability. *Health Aff (Millwood)*. 2007;26(5):1258–1268
11. Centers for Disease Control and Prevention. 2011–2012 National Survey of Children's Health 2. Available at: ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/slaits/nsch_2011_2012/01_Frequently_asked_questions/NSCH_2011_2012_FAQs.pdf
12. Ziemer CM, Becker-Dreps S, Pathman DE, et al. Mexican immigrants' attitudes and interest in health insurance: a qualitative descriptive study [published online ahead of print February 26, 2013]. *J Immigr Minor Health*. doi: 10.1007/s10903-013-9794-8
13. Buchmueller TC, Lo Sasso AT, Lurie I, Dolfin S. Immigrants and employer-sponsored health insurance. *Health Serv Res*. 2007;42 (1 pt 1):286–310
14. Carrasquillo O, Carrasquillo AI, Shea S. Health insurance coverage of immigrants living in the United States: differences by citizenship status and country of origin. *Am J Public Health*. 2000;90(6):917–923
15. Ojeda VD, Brown ER. Mind the gap: parents' citizenship as predictor of Latino children's health insurance. *J Health Care Poor Underserved*. 2005;16(3):555–575
16. Seiber EE. Which states enroll their Medicaid-eligible, citizen children with immigrant parents? *Health Serv Res*. 2013;48 (2 pt 1):519–538
17. Blake V. Citizenship requirements for Medicaid coverage. *Virtual Mentor*. 2012;14(4):324–328
18. Singh GK, Lin SC. Marked ethnic, nativity, and socioeconomic disparities in disability and health insurance among US children and adults: the 2008–2010 American Community Survey. *Biomed Res Int*. 2013;2013:627412
19. Hudson JL. Families with mixed eligibility for public coverage: navigating Medicaid, CHIP, and uninsurance. *Health Aff (Millwood)*. 2009;28(4):w697–w709
20. Percheski C, Bzostek S. Health insurance coverage within sibships: prevalence of mixed coverage and associations with health care utilization. *Soc Sci Med*. 2013;90:1–10
21. Kutner M, Greenberg E, Jin Y, Paulsen C. *The Health Literacy of America's Adults: Results From the 2003 National Assessment of Adult Literacy (NCES 2006–483).U.S. Department of Education*. Washington, DC: National Center for Education Statistics; 2006
22. Freedman DA, Bess KD, Tucker HA, Boyd DL, Tuchman AM, Wallston KA. Public health literacy defined. *Am J Prev Med*. 2009;36(5):446–451
23. Centers for Medicare and Medicaid Services. 2014. Opportunity announcement for navigators in federally-facilitated and state partnership marketplaces. Available at: www.cms.gov/CCIIO/Resources/Fact-Sheets-and-FAQs/navigator-foa.html

The Association of Generation Status and Health Insurance Among US Children

Rhonda BeLue, Patricia Y. Miranda, Bilikisu Reni Elewonibi and Marianne M. Hillemeier

Pediatrics 2014;134;307
DOI: 10.1542/peds.2013-3337 originally published online July 7, 2014;

PEDIATRICS®
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

The Association of Generation Status and Health Insurance Among US Children

Rhonda BeLue, Patricia Y. Miranda, Bilikisu Reni Elewonibi and Marianne M. Hillemeier

Pediatrics 2014;134;307
DOI: 10.1542/peds.2013-3337 originally published online July 7, 2014;