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Covered Today, Sick Tomorrow? Trends and Correlates of Children's Health Insurance Instability

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Abstract

Many children with health insurance will experience gaps in coverage over time, potentially reducing their access to and use of preventive health care services. This article uses the Survey of Income and Program Participation to examine how the stability of children's health insurance changed between 1990 and 2005 and to identify dynamic aspects of family life associated with transitions in coverage. Children's health insurance instability has increased since the early 1990s, due to greater movement between insured and uninsured states and between private and public insurance coverage. Changes in the employment and marital status of the family head are highly associated with an increased risk of a child losing and gaining public and private coverage, largely in hypothesized directions. The exception is that marital dissolution and job loss are associated with an increased probability of a child losing public insurance, despite there being no clear policy explanation for such a relationship.

Keywords

health insurance transitions; insurance gaps; uninsured; children

Public discourse often treats the lack of health insurance as a chronic state affecting the "uninsured." Yet substantial research documents the dynamic nature of health insurance coverage, which can include changes between sources, short gaps without coverage, and long periods with or without insurance (Fairbrother, Emerson, & Patridge, 2007; Leininger, 2009; Olson, Tang, & Newacheck, 2005; Satchell & Pati, 2005; Short & Graefe, 2003; Swartz, 1994). Furthermore, recent evidence suggests that health insurance coverage instability may be increasing for children (Cutler & Gelber, 2009).

Growing instability in children's health coverage may reflect increased reliance on public insurance, which has structural features that can decrease the continuity of coverage (Dick, Allison, Haber, Brach, & Shenkman, 2002; Fairbrother et al., 2007; Pullman, Heflinger, & Mayberry, 2010). Another key factor may be rising volatility in several aspects of family life that relate to insurance coverage, particularly parental employment (Osterman, 1999; Schultze, 2000) and family structure (Cherlin, 2010). Indeed, these two potential sources of

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instability (public insurance and family life) are likely to have compounding effects, as the least stable families may be the most likely to use public insurance.

Understanding the family-level determinants of transitions in children's health insurance coverage is critical to policy efforts aimed at improving child health care utilization. While the evidence is not conclusive that insurance gaps are causally related to decreased care, existing research is clear that even brief uninsured spells are associated with decreased access to and use of health care services among children (Aiken, Freed, & Davis, 2004; Cummings, Lavarreda, Rice, & Brown, 2009; DeVoe, Graham, Krois, Smith, & Fairbrother, 2008; Federico, Steiner, Beaty, Crane, & Kempe, 2007; Kogan et al., 1995; Leininger, 2009; Olson et al., 2005; Smith, Stevenson, & Chu, 2006). Furthermore, the costs of gaps in a child's coverage may be compounded over a lifetime (Swartz, 1994).

Studies of the instability of children's health coverage also provide a window into possible future dynamics of adult coverage. The recent passage of the Patient Protection and Affordable Care Act (PPACA) will lead to an increasingly mixed public-private system of coverage among nonelderly adults. The changes in family life associated with coverage instability among children today may be indicative of those faced by nonelderly adults in the future. At the same time, the implementation of insurance exchanges through PPACA may provide opportunities to increase the continuity of insurance coverage for both children and adults.

New Contribution

We begin by confirming that children's health insurance became less stable during the period 1990 to 2005. Cutler and Gelber (2009) examine changes in the incidence and duration of uninsured spells in two periods, 1983 to 1986 and 2001 to 2003, by age group, and find some evidence that children have become increasingly likely to experience short uninsured spells. Understanding how these changes evolved—and if they represent a clear trend over time rather than just a difference between two relatively different macroeconomic periods—is important for interpreting these results.

We then focus on the most recent period, 2001 to 2005, and examine family characteristics and changes to family life that may be associated with a loss of health coverage by children. Prior research tells us that the demographic characteristics correlated with breaks in insurance are similar to those associated with long-term uninsured spells, including being Hispanic and from a low-income family (Federico et al., 2007; Klein, Glied, & Ferry, 2005; Leininger, 2009; Satchell & Pati, 2005; Short & Graefe, 2003). Yet few studies attempt to identify specific determinants of changes in insurance status, or even differentiate between static (e.g., race) and dynamic (e.g., income) factors associated with insurance instability. Even prior research that uses longitudinal data often relies on point-in-time or summary measures of dynamic characteristics (e.g., Klein et al., 2005; Satchell & Pati, 2005), limiting the ability to map the temporal ordering of changes in family life relative to changes in child health insurance status.

This study focuses on two changes in family life—parental employment and marital status—which are likely to be highly associated with transitions in health insurance coverage. Our contribution is to use longitudinal data to predict the probability that a child with (without) insurance in one month subsequently loses (gains) coverage a month later as a function of those family-level changes. Our analysis identifies separately the importance of family characteristics *prior to* a change in coverage and changes in family life *concurrent with* a change in coverage. In addition, we examine these relationships separately for transitions in and out of private and public coverage.

Conceptual Framework

Figure 1 depicts the probability of a child experiencing a transition in health insurance coverage as a function of both static and dynamic child, family, and macro-contextual determinants. Time-invariant family and child characteristics, such as race/ethnicity, nativity, and family socioeconomic status, have the potential to influence point-in-time coverage directly through eligibility requirements (particularly in the case of nativity) and take-up rates. In addition, ascribed characteristics are likely to alter the probability and type of coverage *indirectly* through correlations with instability in dynamic aspects of family life, particularly parents' employment and marital status. Our model suggests that these changes to family structure and economic circumstances are more likely than stable characteristics to directly influence the stability of coverage between two time points, conditional on having coverage at the start. Importantly, changes in family life can also interact with the dynamic economic and political context as well as changing administrative requirements of insurance programs, to alter both eligibility and disenrollment rates of children.

An important motivation for this study is evidence suggesting that both family life and the broader policy environment for health insurance have become increasingly unstable in the past few decades, particularly for lower-income families. Employer-sponsored insurance has become more costly to families, while public health insurance coverage for children increased from 18 million in 1987 to 30 million in 2007, primarily as a result of Medicaid and State Children's Health Insurance Program (SCHIP) eligibility expansions and major outreach and enrollment efforts by states (Shaefer, Grogan, & Pollack, 2011). For those on public insurance, though, income and age eligibility thresholds can act as a "built-in source of instability" (Fairbrother et al., 2007, p. 520).

At the same time, existing research suggests that several aspects of family life have also become more volatile over time, especially for lower-income families. The insecurity and unpredictability of employment has increased considerably in the past 30 years. In the 1980s and 1990s, the average job tenure for male workers dropped by as much as 30% (Osterman, 1999; Schultze, 2000). The Consolidated Omnibus Budget Reconciliation Act of 1986 made it more possible for workers and their families to continue coverage after job separations; however, it is expensive and take-up rates are low (Gruber & Madrian, 1997; Kaiser Commission on Coverage Basics, 2001).

The likelihood that a child will experience a change in parental marital status and family composition has increased as well. The rate of nonmarital childbearing has been steeply rising for 5 decades (with a brief plateau in the late 1990s). In 2005, the last year included in our study frame, 36.9% of all births were to unmarried mothers, with much higher rates among non-White, young, and low-income mothers (Ventura, 2009). In addition, 35% of children born to married parents and 78% of children born to cohabiting parents experience the dissolution of the parents' relationship by the age of 15 years in the United States (Andersson, 2002). While divorce rates among college-educated individuals declined somewhat after a peak in the 1970s, they have remained stable or continued to rise for those with a high school diploma or less (Cherlin, 2010; Martin, 2006; Raley & Bumpass, 2003).

Changes to parental employment and family structure have the potential to break the continuity of insurance coverage, and importantly, the direction of those effects is likely to differ for public and private sources. For example, parental job loss and relationship dissolution should increase the probability that a child loses private insurance coverage and gains public insurance. Parental job gain and marriage should predict the loss of public coverage and the gain of private coverage. In a perverse sense, the more diverse the

coverage sources available to children, the more vulnerable the child is to losing coverage or switching between sources over time.

This framework supports a set of hypotheses about (1) changes in insurance coverage stability over time and (2) the importance of dynamic aspects of family life in predicting transitions in and out of insurance coverage:

Hypothesis 1: Health insurance coverage instability has risen over time, as reflected in lower rates of stable uninsurance and insurance states and higher rates of transitions in and out of insurance coverage and between sources. Children are more likely to have stable coverage through private sources than public sources, but instability will have increased over time in both types.

Hypothesis 2: Dynamic aspects of family life, such as changes in parental employment and marital status, will be more predictive than static child and family characteristics of loss of both private and public insurance.

Hypothesis 2a: Parental marital dissolution is more likely to predict a loss in private insurance and the gain of public insurance, while parental marriage is more likely to predict a gap in public insurance.

Hypothesis 2b: Parental job loss is more likely to predict the loss of private insurance and the gain in public insurance, while parental job gain is more likely to predict the loss of public insurance and a gain of private insurance.

Data and Method

We use the Survey of Income and Program Participation (SIPP), collected by the U.S. Census Bureau, which offers a longitudinal representation of the civilian noninstitutionalized population in the United States. The survey selects a nationally representative sample by clustering addresses within cities and counties based on population counts from the most recent decennial census. Interviews are conducted every 4 months about each individual in the household for each intervening month, gathering data on demographics, income sources, welfare, household and family structure, jobs and work history, and health insurance. Responses are known to be most accurate for the reporting month, due to recall issues. For this reason, our sample uses only responses from reporting months (three per year).

In our first set of analyses that look at changes in coverage stability over time (presented in Table 1), we descriptively examine annual health coverage transitions by children ages 0 to 17 years, using a pooled sample of data from the 1990, 1991, 1992, 1993, 1996, 2001, and 2004 SIPP panels. With these panels, we create a sample with nearly continuous data from the start of 1990 to the end of calendar year 2005. All analyses are undertaken in Stata, and standard errors are adjusted using the *svy* routine to account for the SIPP stratified sample design. Assignments of statistical significance use these robust, adjusted standard errors. Furthermore, in assigning statistical significance in Table 1, we use a two-sided *t* test of the difference of means (in most cases proportions) for large and independent random samples, because we stack multiple panels of the SIPP.

For all observations, we compare the respondent's insurance state in time *t* (in the fourth reference month of a wave) to their insurance state in time *t* + 1 (in the first reference month of the next wave). We focus on health insurance state transitions from month to month because such an analysis faces fewer concerns about nonrandom attrition than ones based on longer periods. In alternative models, we measured transitions between *t* and *t* + 4 (two reporting months), and results were substantively similar. In our analysis of the full study

period, we stack years into three periods, 1990 to 1994 (pre-SCHIP), 1996 to 1999 (SCHIP implementation), and 2001 to 2005 (post-SCHIP). 1990 to 1994 and 2001 to 2005 are particularly good for comparison: both included a mild recession and an economic recovery.

The second part of our analysis focuses on identifying child and family characteristics associated with transitions in insurance states (both losing and gaining coverage) in the most recent period, 2001 to 2005. We use demographic characteristics of families in time t and a set of dynamic characteristics (indicating changes in family characteristics) that are marked by a change between time t and time $t + 1$. For a change in employment, we code a change in the employment of the family head between the two interviews—working (not working) full-time at time t to not working (working) full-time in $t + 1$. A change in marital status is defined by the married (unmarried) family head at time t changing to unmarried (married) in time $t + 1$. All analyses are weighted using the person weight from month t .

In this analysis, we use a discrete-time hazard (DTH) model, given that spells are measured discretely in the SIPP data. We use logistic regression because it offers a convenient and robust functional form for DTH models (Grogger, 2004). Our models control for a series of demographic and environmental characteristics taken at time t that are known to be associated with health insurance status including child age (in dummies for 0-5, 6-14, 15-17 years), child's race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, and other), the highest education level in the family (less than a high school degree, a high school degree, more than a high school degree), number of children in the family (dummies for 1, 2, or 3+ children), whether the family head was married, whether the family head is employed full-time, the state-month unemployment rate, and state and year fixed effects.

The key predictors of insurance status at $t + 1$ are measures for two key forms of family instability: changes in the marital status of the family head (no change, married to unmarried, unmarried to married) and changes in the employment of the family head (no change, employed full-time to not employed full-time, not employed full-time to employed full-time). Finally, using a set of dichotomous variables, we control for the length of a respondent's insured (or uninsured) spell in the months prior to period t . All spells longer than 24 months are coded as 1 in a "more than 24" variable, and another variable is included to signal whether the spell was left censored (had begun prior to the first month in which the respondent was in the sample).

Trends in Children's Health Insurance Coverage Stability

Table 1 presents the possible health insurance state transitions for our three time periods: 1990 to 1994, 1996 to 1999, and 2001 to 2005. The top panel presents results for children starting with private coverage in time t , the middle panel restricts the sample to children with public coverage in time t , and the bottom panel restricts the sample to children who are uninsured at time t . Values in the columns within panels add to 100.

The first row of each panel presents the proportion of children starting with that particular insurance status (private coverage, public coverage, or uninsured). A small proportion of children report both public and private coverage. We consider them to be publicly covered. These rows make clear that, between 1990 to 1994 and 2001 to 2005, there has been a big increase in public coverage of children (18.4% to 26%), a decrease in private coverage (66.5% to 60%), and a slight decrease in the proportion uninsured (from 15.1% to 14%). These changes occurred almost completely between the later two periods; however, as there are no statistically significant differences in the probability of starting with private, public, or no insurance between 1990 to 1994 and 1996 to 1999. This is consistent with the timing of expansions in public health insurance (particularly the introduction of the SCHIP program

in 1997) as well as documented declines in the availability of affordable employer-sponsored insurance policies.

Table 1 also shows that the likelihood of experiencing a month-to-month transition in insurance status is small, but has been increasing over time. Consistent with Hypothesis 1, private insurance is more stable than public insurance in every period, but the probability of losing or switching coverage has increased for both private and public insurance over the three periods. For instance, in 1990 to 1994, 94.7% of children with private insurance in one month remained privately insured a month later. By 2001 to 2005, the same was true of only 91.3% of children starting with private insurance (a 3.6% decrease). This reflects some increase in privately insured children losing coverage entirely, but a much larger increase in the likelihood that a child will switch from private to public insurance coverage between 2 months. These changes to private insurance occurred primarily between the late 1990s and early 2000s.

Children starting with public insurance saw an even larger decline in the stability of their coverage, but that change occurred primarily between the early and late 1990s. The proportion of children with public coverage in a month who lost it in the next month was 7.8% in 1990 to 1994, 13.6% in 1996 to 1999, and 12.5% in 2001 to 2005. The proportion changing to private from public coverage also grew from 5.9% in 1990 to 1994 to 7.8% in 2001 to 2005. This suggests that the growth in the proportion of children switching from private to public was offset by a growth in switches from public to private.

Interestingly, the biggest decline in steady coverage status was among those who started without insurance. By 2001 to 2005, nearly 40% of the uninsured in a given month were covered a month later, up from 25% percent in 1990 to 1994. Among those going from uninsured to insured, there were gains in both private and public coverage, although the increase was bigger for children gaining public coverage.

These results suggest that children's health insurance coverage—both public and private—did indeed become less stable over the period 1990 to 2005. These trends reflect the decline of stable uninsurance, which is likely to be beneficial to children's health, but also the decline in the stability of private and public insurance sources. We turn next to explaining transitions on and off of insurance coverage as a function of changes in family life.

Family Characteristics Associated With Insurance Transitions

Table 2 reports odds ratios and marginal effects (in brackets) from a series of DTH models estimating the risk of losing or gaining health insurance in a month, conditional on coverage status in the prior month. The point estimates for the baseline characteristics track closely with those from previous studies. For instance, Hispanics are especially likely to lose both public and private coverage, compared with Whites or Blacks. Also, children in families in which the head works full-time are less likely to lose private coverage but more likely to lose public coverage than children in families without a head working full-time.

Interestingly, teens aged 15 to 17 years are less likely to lose coverage of both types than are younger children, even though teens are more likely to be uninsured at a given point in time (DeNavas-Walt, Proctor, & Smith, 2009). Furthermore, 15- to 17-year-old children who are uninsured are less likely to gain either public or private coverage than younger children.

Consistent with Hypotheses 2, the results shown in Table 2 indicate that changes in the marital or employment status of the family head are highly predictive of transitions in health insurance. More specifically, Hypothesis 2a stated that marital dissolution would be most likely associated with losing private insurance and gaining public insurance, while marriage would be associated with higher odds of losing public insurance and gaining private

insurance. The data generally support this hypothesis, with the exception that a transition by the family head from married to unmarried is associated with a considerable increase in the odds of a child losing *both* public and private coverage. After controlling for other characteristics, children in families that experienced such a transition are 3.1 times (7.1 percentage points) more likely to lose private coverage and 2.1 times (10 percentage points) more likely to lose public coverage than children in families where the head's marital status remained constant across the two periods. The effect of marital dissolution on public health insurance stability is particularly notable, given that there is no specific policy reason as to why such a marital transition should change child eligibility for public insurance.

Hypothesis 2b was that parental job loss would increase the likelihood of losing private insurance and gaining public insurance, while parental job gain would have the opposite effect. Again, this hypothesis is largely supported by these data: loss of full-time employment by the head increases the odds that a child loses private insurance by 2.1 times and increases the odds that an uninsured child transitions on to public insurance by 1.6 times. In contrast, a gain of parental employment predicts an increased probability of losing public insurance and gaining private. Similar to the estimates for changes in marital status, the one surprising finding is that parental job loss *increases* the odds that a child will lose *public* insurance. Public insurance appears to be sensitive to changes in parental marital and employment status in ways that we do not yet fully understand.

Discussion

This study uses the SIPP to examine transitions in children's health insurance over time and the importance of changes in a family's circumstances for understanding why children lose or gain health coverage. We find that children's health insurance coverage became less stable between 1990 and 2005. This period not only saw a rise in the proportion of children losing their coverage, it also saw a rise in the proportion gaining coverage and switching between public and private sources. At the same time, the proportion of children with no change to their insurance status fell. These findings hold true for both public and private coverage, although the timing of the growth in instability differed: Public insurance became less stable during the late 1990s, while private insurance dynamics did not change until the early part of the new century.

Our multivariate analysis of data from 2001 to 2005 suggest that a number of child and family characteristics associated with socioeconomic disadvantage predict higher risk of health insurance loss among children, which is consistent with analysis of earlier periods (Klein et al., 2005; Satchell & Pati, 2005). In addition, we find that teenagers' insurance coverage is more stable, on average, than the coverage of younger children. This is a potentially important nuance to the existing knowledge about adolescents' health insurance coverage patterns. In general, teenagers go uninsured at higher rates than younger children (DeNavas-Walt et al., 2009), but our study suggests that—if insured—they are less likely to become uninsured in the next month. Additional research is needed to replicate this finding and to understand what about teenage coverage might make it less likely to lapse.

A key contribution of this study is to examine two types of changes in family circumstances that could have consequences for health insurance coverage: shifts in the marital status and employment of the family head. Both these dynamic characteristics are associated with considerably heightened risk of losing coverage. It appears that changes in the marital status of the family head are associated with the greatest increase in the risk of losing coverage. Perhaps surprisingly, we find that marital dissolution and a loss of full-time employment by the family head is associated with elevated odds of losing public health insurance. This suggests that public coverage is sensitive to changes in family circumstances that should

plausibly lead to greater eligibility rates. This is an important area for future research since it has significant implications for the increasingly mixed public-private health insurance system following passage of the PPACA.

Unlike prior studies, our analysis leveraged longitudinal data to identify associations between child and family characteristics measured prior to a loss of insurance, as well as a set of factors that changed during the same period that insurance was lost. Nonetheless, our techniques are not designed to draw conclusive causal inference between any one characteristic and change in family life and a loss in insurance. There are many aspects of family life that were not observed in this study but may partially explain these relationships. There are a number of additional limitations to this study. Both sets of analyses rely on multiple SIPP panels with different samples. In part because of concerns about nonrandom attrition, we have focused this analysis on month-to-month transitions between insurance states, which is only one of many possible measures of insurance instability. Further analysis may uncover longer-term patterns of insurance instability and isolate the changes in family life most likely to precipitate multiple or ill-timed insurance transitions.

Despite these limitations, this article offers new evidence that health insurance coverage has become less stable even as public insurance coverage has expanded and point-in-time uninsurance rates have decreased slightly. Furthermore, it appears that instability in family life is strongly associated with transitions in a child's health insurance status. Paired with studies indicating that short gaps in insurance decrease the regularity and consistency of children's preventive medical care, this finding has important consequences for the implementation of health care reform under the PPACA. In the context of PPACA-driven expansions in Medicaid eligibility and the creation of other public health insurance options, policy makers may want to explore program components that can lead to longer periods of continuous coverage, such as longer recertification periods. Perhaps most important, the new insurance exchanges have a role to play, not just in connecting consumers to policies but also in helping families navigate the increasingly mixed insurance marketplace in a way that allows for as much continuity in coverage as possible.

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Figure 1.
Conceptual model of the dynamics of child health insurance coverage

Table 1

Changes in the Month-to-Month Stability of Children's Health Insurance by Starting Insurance Coverage: 1990-2005

	1990-1994	1996-1999	2001-2005	Percent Change From 1990-1994 to 2001-2005
Started with private insurance	.665 (.004)	.675 (.005)	.600 (.003) ^{*/+}	-9.8%
Lost coverage	.038 (.001)	.036 (.001)	.053 (.001) ^{*/+}	39.5%
Changed source of coverage	.015 (.000)	.015 (.001)	.034 (.001) ^{*/+}	126.7%
No change—stably insured	.947 (.001)	.949 (.001)	.913 (.001) ^{*/+}	-3.6%
Started with public insurance	.184 (.003)	.176 (.004)	.260 (.003) ^{*/+}	41.3%
Lost coverage	.078 (.002)	.136 (.003) *	.125 (.002) ^{*/+}	60.3%
Changed source of coverage	.059 (.003)	.066 (.002)	.078 (.002) ^{*/+}	32.2%
No change - stably insured	.862 (.002)	.797 (.004) *	.797 (.003) *	-7.5%
Started uninsured	.151 (.003)	.148 (.003)	.140 (.002) ^{*/+}	-7.3%
Gained private	.161 (.003)	.165 (.004)	.198 (.004) ^{*/+}	23%
Gained Public	.085 (.002)	.123 (.004) *	.185 (.004) ^{*/+}	117.6%
No change - stably uninsured	.754 (.004)	.712 (.004) *	.617 (.006) ^{*/+}	-18.2%

Source: Authors' calculations from a pooled sample of the Survey of Income and Program Participation.

* Difference with 1990-1994 is statistically significant at or above the .05 level.

+ Difference with 1996-1999 is statistically significant at or above the .05 level.

Table 2

Odds Ratios From Logistic Regressions Predicting the Probability of Transitions in Health Insurance Coverage

	Lost Coverage		Gained Coverage	
	Private at <i>t</i>	Public at <i>t</i>	Private at <i>t</i> + 1	Public at <i>t</i> + 1
Dynamic characteristics (changes between <i>t</i> and <i>t</i> + 1)				
Head marital status				
No change (omitted)	—	—	—	—
Married to unmarried	3.080 *** (0.511) [0.071]	2.146 *** (0.476) [0.103]	1.197 (0.268) [0.022]	1.663 * (0.445) [0.071]
Unmarried to married	0.704 (0.154) [−0.011]	1.413 ** (0.233) [0.040]	2.436 *** (0.433) [0.140]	0.996 (0.195) [−0.000]
Full-time employment				
No change (omitted)	—	—	—	—
Loss of full-time employment	2.136 *** (0.146) [0.039]	1.274 *** (0.093) [0.027]	0.987 (0.070) [−0.002]	1.609 *** (0.126) [0.064]
Gain of full-time employment	1.031 (0.0714) [0.001]	1.323 *** (0.077) [0.031]	2.035 *** (0.160) [0.103]	0.892 (0.072) [−0.013]
Baseline characteristics (measured at <i>t</i>)				
Child age (years)				
0-5 (omitted)	—	—	—	—
6-14	1.106 *** (0.035) [0.004]	1.115 *** (0.033) [0.011]	1.042 (0.030) [0.005]	0.700 *** (0.024) [−0.042]
15-17	0.421 *** (0.026) [−0.025]	0.877 *** (0.036) [−0.013]	0.860 *** (0.045) [−0.017]	0.634 *** (0.034) [−0.047]
Child race and ethnicity				
White, non-Hispanic (omitted)	—	—	—	—
Black, non-Hispanic	1.285 *** (0.073) [0.010]	0.966 (0.053) [−0.004]	0.668 *** (0.037) [−0.043]	1.789 *** (0.100) [0.078]
Hispanic	1.427 *** (0.093) [0.015]	1.359 *** (0.067) [0.033]	0.487 *** (0.031) [−0.077]	1.543 *** (0.113) [0.054]
Other	1.329 *** (0.089) [0.012]	1.030 (0.082) [0.003]	0.662 *** (0.052) [−0.042]	1.517 *** (0.123) [0.055]
Family education (highest among adults)				
Less than high school degree (omitted)	—	—	—	—
High school degree	0.809 *** (0.057) [−0.007]	0.990 (0.057) [−0.001]	1.562 *** (0.130) [0.056]	0.974 (0.064) [−0.003]
More than high school degree	0.565 *** (0.039) [−0.025]	0.986 (0.048) [−0.001]	2.831 *** (0.249) [0.122]	0.632 *** (0.037) [−0.054]
Number of kids in family				
1 (omitted)	—	—	—	—
2	0.941 (0.038) [−0.002]	0.947 (0.039) [−0.006]	1.008 (0.047) [0.001]	1.105 ** (0.054) [0.012]
3+	1.080 (0.050) [0.003]	0.917 ** (0.034) [−0.008]	0.904 ** (0.044) [−0.012]	1.271 *** (0.058) [0.028]
Family head married	0.528 *** (0.020) [−0.029]	1.005 (0.040) [0.001]	1.333 *** (0.060) [0.033]	0.696 *** (0.027) [−0.044]
Full-time worker in family	0.584 *** (0.023) [−0.022]	1.102 ** (0.044) [0.010]	1.715 *** (0.078) [0.062]	0.642 *** (0.029) [−0.053]
Unemployment rate	0.965 (0.023) [−0.001]	0.984 (0.028) [−0.002]	1.213 *** (0.040) [0.023]	1.172 *** (0.040) [0.019]

	Lost Coverage		Gained Coverage	
	Private at <i>t</i>	Public at <i>t</i>	Private at <i>t</i> + 1	Public at <i>t</i> + 1
Additional controls				
Spell duration	X	X	X	X
State and year fixed effects	X	X	X	X
<i>N</i>	174,444	84,136	48,398	48,489

Source: Authors' calculations from a pooled sample of the Survey of Income and Program Participation, 2001-2005.

Note: Standard errors in parentheses; marginal effects in brackets.

 $p < .01$.

**
 $p < .05$.

*
 $p < .1$.