This article employs a comparison group research design to examine the effects of the Medicaid expansions of the late 1990s on the insurance coverage of poor teenagers. Results suggest that the expansions were associated with a decrease in the likelihood of poor teens experiencing uninsured spells over the course of a calendar year, as measured by spending any part of the prior year uninsured and spending over half of the prior year uninsured. While the expansions were successful in increasing coverage among poor adolescents, they fell far short of facilitating near-universal coverage for this population.

INTRODUCTION

The expansions in eligibility in Medicaid and the Children’s Health Insurance Program (CHIP) implemented over the past several decades have been accompanied by intense concern surrounding the potential substitution of private coverage for newly available public coverage—a phenomenon termed “crowd-out”. And while the extent of crowd-out indeed has important implications for public coffers, an emerging literature finds that it is the stability of coverage as opposed to the type of coverage (public versus private) that matters for pediatric access to care outcomes. This finding suggests that the examination of the expansions’ impacts on the duration of coverage is an important exercise; however, very little existing research examines such effects. The objective of this article is to provide new evidence regarding the impact of the expansions on the duration of coverage held over the course of a year for poor older teenagers, a population that was granted Medicaid eligibility on a large scale for the first time in the late 1990s. Implementing a quasi-experimental methodology to account for the potentially confounding influences of secular trends, we find that the Medicaid expansions of the late 1990s greatly decreased the amount of time that poor older teens spent without insurance coverage, demonstrating an important channel through which changes in Medicaid policy may affect access to care outcomes for older adolescents.

BACKGROUND

Medicaid Expansions

Throughout the 1980s and 1990s, poor teenagers’ public insurance eligibility lagged that of their younger peers; this discontinuity in eligibility thresholds across children of different ages was largely eliminated by 2000. In this section we provide a broad summary of the expansions in public health insurance implemented between the late 1980s and 2000, focusing on the impact that these policy changes had on the eligibility of poor teenagers.

Up through the late 1980s, the Medicaid eligibility of poor children was largely determined by their families’ eligibility for
cash welfare receipt. A series of legislative acts, beginning in 1989 and continuing through 1996, first expanded Medicaid eligibility to slightly higher-income children and eventually formally severed the link between eligibility for cash welfare and Medicaid. States were granted some discretion in the timing of the expansions’ implementation, therefore eligibility thresholds across States were quite varied throughout the 1990s.

The Omnibus Budget Reconciliation Act of 1989 (OBRA 1989) mandated States to extend eligibility to all children under the age of six living in families with incomes of less than 133% of the Federal Poverty Level (FPL). One year later, the Omnibus Budget Reconciliation Act of 1990 (OBRA 1990) was passed, requiring States to gradually expand Medicaid eligibility to children of all ages living in families with incomes at or below 100% FPL. Specifically, the law mandated that States extend eligibility to all children ages 6-18 who were born after September 30, 1983; thus all 0-18 year olds in poor families would be eligible by October 1, 2002 if States did nothing but meet the Federal minimums. While some States chose to exceed these minimums, the majority did not, which led to a gradual phase-in of eligibility for older children. Welfare reform, as enacted by the Personal Responsibility and Work Opportunity Act of 1996 (PRWORA), formally delinked cash welfare eligibility and Medicaid eligibility. The law set Medicaid eligibility levels for older children not yet covered under the OBRA 1990 expansions at the 1996 cash welfare thresholds of their respective States.

By 1997, the pre-period of this study, the OBRA 1990 mandates covered children through the age of 14. Only 18 States provided coverage to all poor adolescents ages 18 and under as of March 1997 and only 5 States had equal income thresholds for all children regardless of age (Morreale and English, 2003). The 1996 cash welfare thresholds upon which subsequent Medicaid eligibility was based for older children ranged from 10%-85% FPL, with 29 States’ maximums falling at or below 50% FPL (Morreale and English, 2003). The thresholds for the States used in this study are displayed in Table 1. Alabama and Texas had the lowest thresholds among the study States (15% FPL and 17% FPL, respectively) and New York and Wisconsin had the highest thresholds (51% FPL and 45% FPL, respectively). It is worthwhile to reemphasize that as of 1997 younger children ages 1-5 were eligible at income levels up to 133% FPL (at minimum, depending on State) and children ages 6-14 were eligible at income levels up to 100% FPL (again, at minimum).

| Adolescents Ages 15-17 in Expansion States | 1997 cutoff | 2002 cutoff |
|-------------------------------------------|-------------|-------------|
| Alabama                                   | 15%         | 200%        |
| Colorado                                  | 37%         | 185%        |
| Florida                                   | 28%         | 200%        |
| Mississippi                               | 34%         | 200%        |
| New Jersey                                | 41%         | 350%        |
| New York                                  | 51%         | 250%        |
| Texas                                     | 17%         | 200%        |
| Wisconsin                                 | 45%         | 200%        |

SOURCE: Morreale, M.C. and English, A.: Eligibility and Enrollment of Adolescents in Medicaid and SCHIP: Recent Progress, Current Challenges. Journal of Adolescent Health 32(6 Suppl): 25-39, July 2003.

The sharp discontinuity in income eligibility across ages diminished in the aftermath of the Balanced Budget Act of 1997 (BBA 1997). The BBA 1997 allocated $40 billion dollars over 10 years to create the State Children’s Health
Insurance Program (now the Children’s Health Insurance Program), a joint Federal/State program targeting low-income children living in families with incomes slightly above Medicaid eligibility thresholds. By 2002, the post-period of this study and five years after the passing of BBA 1997, the modal threshold for income eligibility across States for children of all ages had risen to 200% FPL (National Governors Association, 2002). Teenagers greatly benefited from the CHIP-era efforts; by 2002 their eligibility levels had been equalized to those of younger school-age children.

Although this study focuses exclusively on a Medicaid-eligible population, it is important to recognize that the implementation of CHIP had important consequences for Medicaid. An overriding goal of CHIP was to reduce the rate of uninsurance among all low-income children, regardless of which program’s income thresholds they satisfied. Efforts were made to streamline the enrollment process as well as facilitate coverage renewal in both Medicaid and CHIP and States also focused considerable resources on outreach campaigns targeting eligible populations.

**Existing Literature**

Several studies utilize regression techniques to estimate the covariate-adjusted association between the length of a year spent uninsured with a variety of access to care outcomes, including having a usual source of care provider, delaying needed medical and dental care, and experiencing an unmet need (Aiken, Freed, and Davis, 2004; Cassedy, Fairbrother, and Newacheck, 2008; DeVoe et al., 2008; Halterman et al., 2008; Olson, Tang, and Newacheck, 2005). An additional study (Leininger, 2009) uses a child-level fixed effects methodology in which each child serves as her own control, providing an especially strong test of the relationship between lack of coverage over the year and access to care outcomes among children. These studies employ a wide variety of pediatric samples, including nationally representative pediatric populations culled from large population-based surveys such as the National Health Interview Survey, the Medical Expenditure Survey and the National Survey of Child Health, in addition to samples drawn from low-income pediatric populations and samples drawn from children with specific disease conditions (e.g., asthma). The results from this body of work are strikingly consistent: lack of coverage over the course of a year exhibits a roughly linear negative relationship with access to care outcomes. Longer uninsured spells are more strongly associated with access decrements than shorter uninsured spells, however even short uninsured gaps of as little as one month leave children vulnerable to suboptimal access to care outcomes. Given the finding that public and private coverage confer roughly equivalent access benefits for low-income children (Dubay and Kenney, 2001; Selden and Hudson, 2006), it becomes important to move past a focus on the type of coverage held towards a focus on the length of the year spent without coverage when assessing the potential health benefits of public insurance expansions.

To our knowledge, only one existing study (Banthin and Selden, 2003) examines the effects of Medicaid eligibility expansions on the duration of uninsured spells over the course of a year. The treatment group of interest in their study is poor children who gained public insurance eligibility during the Medicaid expansions of the late 1980s and early 1990s—a cohort primarily comprised of poor younger children. Employing a
comparison group of children who became eligible for CHIP after the study period of interest, the authors find that the expansions were associated with a 17 percentage point decrease in the probability of experiencing any uninsurance in the past 12 months. Similar effects are found for the dependent variables of spending the entire year uninsured and spending at least four months of the past year uninsured.

CONTRIBUTION

The current article builds upon the existing literature in several important ways. To our knowledge, this is the first article to focus on the impact of gaining Medicaid eligibility during the CHIP era. Existing work on the earlier Medicaid expansions focuses on poor younger children who were granted Medicaid eligibility in the late 1980s and early 1990s (Banthin and Selden, 2003; Cutler and Gruber, 1996; Dubay and Kenney, 1996; Shore-Sheppard, 2008), while studies from more recent years largely focus on higher-income children of all ages who were made eligible for SCHIP (LoSasso and Buchmueller, 2004; Gruber and Simon, 2008). Over 70% of the reduction in uninsurance among low-income children occurring between 1997-2005 is attributable to gains in Medicaid coverage (Dubay, Guyer, Mann, and Odeh, 2007) and it is critical to identify whether the large-scale expansion of Medicaid eligibility to poor teenagers over this time period served as a causal factor of the reduction. Additionally, as developed above, it is important to provide evidence regarding the effects of public insurance eligibility on the duration of uninsured spells, an outcome that has considerable potential to affect access to care outcomes but has received relatively little research attention. Finally, we are able to estimate a series of quasi-experimental models, allowing for a careful assessment of the robustness of our results to specification choice.

DATA, METHODS, AND RESULTS

Data

The data are drawn from the 1997 and 2002 waves of the National Survey of America’s Families (NSAF). The NSAF is a nationally representative sample of the civilian, non-institutionalized population under the age of 65. It is comprised of three rounds of cross-sectional data collected in 1997, 1999, and 2002; the pooled cross-section includes information on over 100,000 children. We exclude observations from the 1999 wave as the Medicaid expansions for teenagers had not yet been fully implemented as of this date. The NSAF was designed and executed by the Urban Institute with the goal of tracking the economic and social well-being of families and children in the wake of welfare reform (Abi-Habib, Safir, and Triplett, 2004). Low-income families with children constituted the population of primary interest; they were oversampled in all three rounds of the NSAF. Survey content includes information on the following: household composition and demographics; public program participation; employment, income, and earnings; measures of economic hardship and poverty status; child support receipt; child care; health care utilization, insurance coverage, and access to care; and various social dimensions of well-being.

The devolution of welfare programs from the Federal to the State level was an integral part of welfare reform, consequently the NSAF was designed to provide estimates that are representative at the State level for 13 “focal States”. These focal States are: Alabama, California,
Colorado, Florida, Massachusetts, Michigan, Minnesota, Mississippi, New Jersey, New York, Texas, Washington, and Wisconsin. Over one-half of the U.S. population lives in the focal States; they were chosen for their variation with respect to geography, population size, and attitudes and traditions regarding welfare systems. The focal States account for 85% of the observations in the data and the sample used for this study includes only observations from these States.

Each household had a maximum of 2 children included in the survey: one under the age of 6, and the other between 6 and 17. If a household had 2 or more children under the age of 6, only 1 of them was (randomly) chosen for inclusion in the study; analogously, if a household had 2 or more children between the ages of 6 and 17, only 1 of them was chosen for the sample. The interviewer asked to speak to the adult who was most knowledgeable about the sample child’s education and health care; this adult (called the “most knowledgeable adult” or MKA) responded to all questions regarding the sample child.

The length of the past year spent uninsured serves as the outcome of interest. The NSAF asks respondents to report the number of months that they spent without coverage during the past 12 months. Using this measure, we create the following outcome variables to capture the dynamics of coverage gaps over the past year: being uninsured at the time of survey; spending any part of the past 12 months without coverage; spending at least 6 months without coverage; and spending the entire year without coverage.

Methods

Our estimate of interest is the difference between insurance gaps experienced by sample adolescents in the pre- and post-periods. Computing a simple pre-post difference is likely to yield a biased result, as there are several potentially confounding trends that occurred during the study period. Research has found that the 1996 welfare reform legislation influenced the insurance coverage of poor children in subsequent years, likely due to confusion regarding eligibility in the aftermath of the decoupling of the Medicaid and cash welfare programs (Cawley, Schroeder, and Simon, 2006; Kaestner and Kaushal, 2003). In addition, several States expanded public insurance eligibility to low-income parents during the time period of study. These expansions may have had important spillover effects on the coverage of poor children (Dubay and Kenney, 2003; Sommers, 2006). An additional concern is that the sharp increase in the price of employer-sponsored coverage over the study period likely played a primary role in driving coverage trends (Chernew, Cutler, and Keenan, 2005). The presence of these and other potential confounders—which may be unobservable and therefore impossible to model—necessitates the use of a comparison group methodology to isolate true program effects from the effects of competing trends.

Specifically, it is useful to compare the changes over time for the group of interest to the changes over time for a control group (which we use interchangeably with the term “comparison group”). If the unobserved variables affect the control group in a parallel fashion to the treatment group, comparing the differences across the two leaves an unbiased estimate of the effect of the intervention. This research design is frequently referred to as a “differences-in-differences” (DD) strategy. The identifying assumption is that absent the intervention, the treatment and control groups would have experienced parallel trends in insurance coverage.
Our treatment group is comprised of 15-17 year olds in families with incomes between 50-100% FPL living in the States listed in Table 1, all of which expanded Medicaid eligibility to poor older adolescents between 1997-2002. The control group is children ages 6-13 in families with incomes between 50-100% FPL living in these same States. The younger children in the control group were eligible for Medicaid in both the pre- and post-periods while the older adolescents in the treatment group became eligible for Medicaid during the time period of study. The unadjusted DD estimator is detailed in equation (1):

\[
(1) \quad (\text{Ins}_{02} - \text{Ins}_{97})_{\text{Teen}} - (\text{Ins}_{02} - \text{Ins}_{97})_{\text{YoungChild}}
\]

\(\text{Ins}\) represents the insurance coverage variable of interest. \(\text{Teen}\) represents being in the treatment group and \(\text{YoungChild}\) is an indicator reflecting membership in the comparison group. The regression-adjusted analog of equation (1) is represented by:

\[
(2) \quad \text{Ins}_{it} = a + \beta_1 \text{Treatment}_i + \beta_2 \text{PostPeriod}_t + \beta_3 \text{Treatment}_i \times \text{PostPeriod}_t + \phi X + \epsilon_{it}
\]

\(\text{Treatment}\) represents being in the treatment group (i.e. a dummy for being 15-17 years old) and \(\text{PostPeriod}\) is an indicator reflecting post-period status (i.e., a dummy for the year 2002). In this specification, \(\beta_3\), the coefficient on the interaction term between being in the treatment group and the post-period dummy, is the estimate of the effect of the intervention on the treatment group. It represents the percentage point increase (or decrease, depending on the sign) in the outcome variable that is attributable to the expansions. The vector \(X\) contains the following covariates: sex; age; race; health status; presence of a limiting condition; immigrant status; parental education; parental age; presence of a full-time worker in the household; and family structure.

As detailed in Meyer (1995), it is advisable to assess the sensitivity of the choice of the comparison group employed in a DD framework. As a sensitivity test, we estimate models with an alternative comparison group: 15-17 year olds living in families with incomes between 50-100% FPL in States that granted Medicaid eligibility to poor adolescents prior to 1997 (an across-State comparison). Additionally, we estimate a triple-difference (DDD) model that utilizes the differences in the timing of the eligibility expansions across States. The DDD estimator compares the changes in insurance coverage between poor teenagers and their younger counterparts across States that expanded Medicaid eligibility before the study period and those that expanded eligibility during the study period. Adding this third dimension of comparison helps alleviate the concern that teenagers and young children may have had differential coverage trends absent the intervention.

For ease of interpretation and in keeping with convention in the related literature, we report estimates from linear probability models. To assess whether fitting linear models on nonlinear outcomes induces appreciable bias in the results, we have also estimated all models using a probit specification. Reassuringly, these results are quite similar to those from the linear specification (results available upon request). Standard errors are clustered at the State-year level to account for the non-independence of observations at this unit of aggregation. All analyses were performed in Stata 10. To account for the complex survey design of the NSAF and to adjust for nonresponse, all regression models were implemented using survey weights.
Results

As shown in Table 1, the subset of focal States that witnessed expansions in adolescent Medicaid eligibility during the study period are: Alabama, Colorado, Florida, Mississippi, New Jersey, New York, Texas, and Wisconsin. In these States there are 384 treatment group members in 1997 and 205 treatment group members in 2002. The control group is comprised of 1,076 observations in 1997 and 636 observations in 2002. Not included in these counts are the 30 observations for which data on MKA education and/or family structure is missing (original sample=2,331 observations; analytic sample=2,301 observations). We have estimated the unadjusted DD estimator for each dependent variable with and without the observations with missing data and the results are very similar across the two sets of models. Table 2 displays the demographic characteristics of the treatment and control groups. All descriptive statistics are weighted to correct for the complex survey design of the NSAF.

While treatment and control group children exhibit similar health profiles, the figures in Table 2 suggest that treatment group members are more socio-economically disadvantaged than control group members. Most notably, the two groups differ along the dimensions of parental education and the presence of a worker in the household. These and other family-level variables are potential predictors of insurance coverage and raise a concern about the appropriateness of the comparison group. It is worthwhile to revisit the underlying assumption of the comparison group methodology: absent

| Table 2 |
| --- |
| Descriptive Statistics |

| Variable                   | Treatment (N = 589) | Control (N = 1712) | Entire sample (N = 2301) |
|----------------------------|---------------------|--------------------|-------------------------|
| Female                     | 0.471               | 0.485              | 0.482                   |
| Age                        | 15.965              | 9.285              | 10.846                  |
| Black                      | 0.277               | 0.305              | 0.298                   |
| Hispanic                   | 0.358               | 0.359              | 0.359                   |
| White                      | 0.296               | 0.303              | 0.301                   |
| Other race                 | 0.067               | 0.033              | 0.041                   |
| Fair or poor health        | 0.138               | 0.132              | 0.133                   |
| Limiting condition         | 0.171               | 0.155              | 0.159                   |
| Immigrant                  | 0.189               | 0.120              | 0.136                   |
| MKA < HS degree            | 0.394               | 0.261              | 0.292                   |
| MKA has HS degree          | 0.533               | 0.667              | 0.635                   |
| MKA has college +          | 0.073               | 0.073              | 0.073                   |
| MKA age                    | 41.800              | 36.435             | 37.689                  |
| Does not live w/2 parents  | 0.653               | 0.577              | 0.595                   |
| At least 1 worker in HH    | 0.613               | 0.692              | 0.674                   |
| No worker in HH            | 0.377               | 0.298              | 0.317                   |
| # workers in HH missing    | 0.010               | 0.010              | 0.010                   |

* Treatment and control differ at p < 0.05.

NOTES: All reported statistics are weighted to account for the complex survey design of the NSAF. MKA= most knowledgeable adult.

SOURCE: Leininger, L., University of Wisconsin-Madison, 2009.
the intervention the trends in insurance coverage of the treatment and control group members would have been equal. The research design is valid as long as the underlying differences between the treatment and control group members affect only the levels of coverage, not the trends. This is an assumption that cannot be definitively tested and is an important caveat of all comparison group studies.

As displayed in Table 3, a majority (55%) of treatment group adolescents had an uninsured spell in the year prior to the pre-period survey, a figure that is more than 20 percentage points higher than the corresponding figure for control group children. In 2002, the percent of treatment group members who spent at least one month in the previous year uninsured dropped to 26%; this result is especially notable when compared with the 1 percentage point drop experienced by the control group. The treatment group experienced similarly large drops in spending at least 6 months of the previous year without coverage and spending the entire year without coverage, while the control group had much more modest decreases for these two outcomes. It is striking that the large gap in the uninsured rates between the treatment and control groups in 1997 was completely closed—and for some coverage measures reversed—by 2002.

The regression results are presented in Table 4. In the regression-adjusted specification, becoming eligible for public insurance is associated with a 27 percentage point decrease in the likelihood of spending any part of the year without coverage ($p < 0.01$) and a 15 percent point decrease in the likelihood of being uninsured at survey ($p < 0.05$). The estimated impact of the expansions on spending at least 6 months of the past year without coverage is also negative and statistically significant; becoming eligible for public insurance is associated with a 20 percentage point decrease in the likelihood of being uninsured for 6 or more months ($p < 0.01$). Results suggest that the eligibility expansions also exerted a negative effect on the probability of being uninsured for the entirety of the past year, however these results are only significant at the 10% level in the regression-adjusted specification. Reassuringly, the results from the alternate comparison group specification and the triple difference specification are largely consistent with those from the baseline model.

### Table 3
Lack of Coverage Pre- and Post- Expansions

|                          | Treatment ($N = 589$) | Control ($N = 1712$) |
|--------------------------|-----------------------|----------------------|
| % uninsured at time of survey, 1997 | 0.453                 | 0.271                |
| % uninsured at time of survey, 2002 | 0.234                 | 0.212                |
| % spent any part of past yr uninsured., 1997 | 0.545                 | 0.328                |
| % spent any part of past yr uninsured., 2002 | 0.255                 | 0.318                |
| % spent > 6 mths. of past yr uninsured., 1997 | 0.496                 | 0.282                |
| % spent > 6 mths. of past yr uninsured., 2002 | 0.242                 | 0.242                |
| % spent entire year uninsured, 1997 | 0.395                 | 0.196                |
| % spent entire year uninsured, 2002 | 0.205                 | 0.193                |

NOTES: All reported statistics are adjusted to account for the complex survey design of the NSAF.
SOURCE: Leininger, L., University of Wisconsin-Madison, 2009.
### Table 4
Regression Results: Differences-in-Differences (DD) Models

| Dependent Variable                  | Unadjusted DD Estimator \(N = 2301\) | Adjusted DD Estimator \(N = 2301\) | Across-State Adjusted DD Estimator \(N = 897\) | DDD Estimator \(N = 3203\) |
|------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------------------|---------------------------|
| Uninsured at Survey               | -0.160 \(\text{**}(0.062)\)          | -0.147 \(\text{**}(0.054)\)       | -0.157 \(\text{*}(0.072)\)                    | -0.136 \(\text{*}(0.069)\) |
| Ever Uninsured During Year         | -0.280 \(\text{***}(0.044)\)         | -0.268 \(\text{***}(0.044)\)      | -0.202 \(\text{***}(0.059)\)                  | -0.208 \(\text{***}(0.067)\) |
| Uninsured > 6 Months During Year   | -0.214 \(\text{***}(0.055)\)         | -0.195 \(\text{***}(0.046)\)      | -0.159 \(\text{**}(0.064)\)                   | -0.125 \(\text{**}(0.060)\) |
| Uninsured Full Year                | -0.133 \(\text{*}(0.073)\)           | -0.116 \(\text{*}(0.064)\)        | -0.143 \(\text{**}(0.063)\)                   | -0.121 \(\text{**}(0.088)\) |

* \(p < 0.10\); ** \(p < 0.05\); *** \(p < 0.01\).

NOTES: Results from linear probability models estimated with probability weights and cluster-corrected at the State-year level. Adjusted models include the following controls: age; female dummy; fair/poor health dummy; limiting condition dummy; Black dummy; Hispanic dummy; other race dummy; immigrant status dummy; MKA < HS degree dummy; MKA college plus dummy; MKA age; lives with one parent dummy; presence of at least 1 worker in the household dummy; and worker information missing dummy.

SOURCE: Leininger, L., University of Wisconsin-Madison, 2009.

The most important limitation of this study is shared with all difference-in-differences studies: the parallel trends assumption cannot be definitively tested. While it is reasonable to hypothesize that the control and treatment groups in the current study are appropriately similar and the robustness of the results to various specifications is reassuring, it remains possible that secular trends for the treatment and control groups would have diverged even absent the intervention.

**DISCUSSION**

This study provides new evidence regarding the effects of recent Medicaid insurance expansions on the insurance coverage of poor adolescents. The findings imply that as a result of this policy effort poor teenagers spent a greater proportion of the year covered by insurance than they did a decade prior. The results are robust across specifications employing alternate comparison groups and the estimation of a triple-difference model. The estimates are both statistically significant and qualitatively large; indeed, they are larger than the...
results from a comparable existing study that focuses on earlier Medicaid expansions targeting younger children.

The implications of the findings are of paramount importance for teenagers’ access to care, as insurance serves as what has been classified as a noteworthy “enabling factor” in the production of appropriate health care utilization (Aday and Andersen, 1974; Andersen, 1995). The emerging empirical literature on the impact of coverage duration on access to care convincingly demonstrates the primacy of coverage stability in facilitating appropriate access outcomes for pediatric populations, motivating the need for public policies explicitly targeting the retention of coverage and the smooth transition between coverage types when changes occur. And while the recent expansions of public insurance eligibility were successful in decreasing the amount of time that poor teenagers spent uninsured, it is imperative to acknowledge that eligibility alone did not lead to near-universal coverage stability of the population of interest. Almost 1/5 of sample children—all of whom were eligible for public coverage—were uninsured for the entirety of 2002 and over 1/4 of sample children were uninsured at some point over the year.

It remains the case that many eligible poor children are not enrolling in Medicaid, highlighting the need for improvements in program outreach. One successful example of the efficacy of coverage expansions coupled with aggressive outreach in enrolling children is the recent launch of BadgerCare+ (BC+) in Wisconsin. The program’s launch involved expanding coverage to children of all income levels in addition to implementing a targeted outreach campaign, including the introduction of a statewide “all kids” marketing effort and the provision of financial incentives to community organizers to enroll eligible children. The great majority of take-up—representing over 2/3 of new child enrollees—came from low-income children who met income requirements already in place prior to BC+, suggesting that changing the portrayal of Medicaid as a “welfare” program to a more universally targeted program is an effective measure to enroll eligible children (DeLeire et al., 2009).

In addition to policies targeting the enrollment of new children, there is great need for the implementation of policies that facilitate better retention among current Medicaid enrollees. Illustratively, among sample children who were uninsured at 2002 survey, over 1/4 had been enrolled in Medicaid at some point over prior year. The granting of 12 month continuous Medicaid eligibility, guaranteeing children a full year of coverage regardless of changes in family circumstances, is a key policy tool that States may use to facilitate coverage stability within Medicaid. Currently only 18 States have implemented 12 month continuous eligibility for children of all ages within Medicaid; in contrast, 30 States have implemented such a policy for their relatively higher-income CHIP populations (Ross and Marks, 2009).

Additional efforts are needed to help beneficiaries navigate the recertification process. Recent experiments by States to increase retention via the simplification of administrative processes required at recertification have proven successful. For example, through coordinating beneficiary information sharing between databases across a variety of social programs, Louisiana was able to decrease the administrative burden facing recipients and increase retention rates among Medicaid enrollees (Summer and Mann, 2006).

While public plans constitute the primary source of insurance coverage for poor children, it is important to recognize
that an appreciable minority of this population holds private coverage, as evidenced by the approximately 18% of privately insured sample children at the time of the 2002 survey. Accordingly, implementing public policies targeting the stability of private coverage is of considerable importance in achieving a reduction in coverage gaps among poor children. Subsidizing the cost of COBRA premiums is one simple way to help ensure that children remain covered during times of parental employment instability.

In recent months the discussion surrounding Federal health care reform has reached a fever pitch, with President Obama having expressed a public commitment to facilitating Congress’ passing of reform legislation. While the details of the likely legislation remain unspecific, the options under serious discussion may in fact do little to ensure the stability of coverage among poor children. While President Obama has expressed support for an individual mandate requiring all citizens to obtain coverage, he also has articulated a preference for exempting poor individuals from any such mandate (Obama, 2009)—a policy position similar to what has been implemented in Massachusetts. Consequently, the policy options detailed above—increasing Medicaid enrollment via targeted outreach, facilitating improved retention within Medicaid, and the subsidization of COBRA premiums—likely will remain the most promising tools in shoring up the stability of coverage among poor children.

ACKNOWLEDGEMENT

The author would like to thank Will Manning for his help and support in this project.

REFERENCES

Abi-Habib, N., Safir, A., and Triplett, T.: NSAF Survey Methods and Data Reliability Methodology Reports No. 1. The Urban Institute. 2004. Internet address: http://www.urban.org/UploadedPDF/900733_2002_Methodology_1.pdf (Accessed 2009.)

Aday, L.A. and Andersen, R.M.: A Framework for the Study of Access to Medical Care. Health Services Research 9(3): 208-220, Fall 1974.

Aiken, K., Freed, G., and Davis, M.: When Insurance Status Is Not Static: Insurance Transitions of Low-Income Children and Implications for Health and Health Care. Ambulatory Pediatrics 4(3): 237-243, May 2004.

Andersen, R.M.: Revisiting the Behavioral Model and Access to Medical Care: Does It Matter? Journal of Health and Social Behavior 36(1): 1-10, March 1995.

Banthin, J.S. and Selden, T.M.: The ABC’s of Children’s Health Care: How the Medicaid Expansions Affected Access, Burdens, and Coverage between 1987 and 1996. Inquiry 40(2): 133-145, Summer 2003.

Cassedy, A., Fairbrother, G., and Newacheck, P.W.: The Impact of Insurance Instability on Children’s Access, Utilization, and Satisfaction with Health Care. Ambulatory Pediatrics 8(5): 321-328, September 2008.

Cawley, J., Schroeder, M., and Simon, K.I.: How Did Welfare Reform Affect the Health Insurance Coverage of Women and Children? Health Services Research 41(2): 486-506, April 2006.

Chernew, M., Cutler, D.M., and Keenan, P.S.: Increasing Health Insurance Costs and the Decline in Insurance Coverage. Health Services Research 40(4): 1021-1039, August 2005.

Cutler, D.M. and Gruber, J.: Does Public Insurance Crowd Out Private Insurance? Quarterly Journal of Economics 111(2): 391-430, May 1996.

DeLeire, T., Bergum, A., Friedsam, D., et al.: Wisconsin’s BadgerCare Plus Coverage Expansion: Early Evaluation Results. Presentation to Academy Health Annual Research Meeting, 6/2009.

DeVoe, J.E., Graham, A., Krois, L., et al.: Mind the Gap in Children’s Health Insurance Coverage: Does the Length of a Child’s Coverage Gap Matter? Ambulatory Pediatrics 8(2): 129-134, March-April 2008.

Dubay, L., Guyer, J., Mann, C., et al.: Medicaid at the 10-Year Anniversary of SCHIP: Looking Back and Moving Forward.: Health Affairs 26(2): 370-381, March-April 2007.
Dubay, L. and Kenney, G.M.: The Effects of Medicaid Expansions on Insurance Coverage of Children. *The Future of Children* 6(1): 152-61, Spring 1996.

Dubay, L. and Kenney, G.M.: Health Care Access and Use among Low-Income Children: Who Fares Best? *Health Affairs* 20(1): 112-121, January-February 2001.

Dubay, L. and Kenney, G.M.: Expanding Public Health Insurance Coverage to Parents: Effects on Children's Coverage under Medicaid. *Health Services Research* 38(5): 1283-1301, October 2003.

Gruber, J. and Simon, K.I.: Crowd-Out 10 Years Later: Have Recent Public Insurance Expansions Crowded Out Private Health Insurance? *Journal of Health Economics* 27(2): 201-217, March 2008.

Halterman, J.S., Montes, G., Shone, L.P., et al.: The Impact of Insurance Gaps on Access to Care among Children with Asthma in the United States. *Academic Pediatrics* 8(1): 43-49, January 2008.

Ham, J. and Shore-Sheppard, L.D.: The Effect of Medicaid Expansions for Low-Income Children on Medicaid Participation and Private Insurance Coverage: Evidence from the SIPP. *Journal of Public Economics* 89(1): 57-83, January 2005.

Kaestner, R. and Kaushal, N.: Welfare Reform and Health Insurance Coverage of Low-Income Families. *Journal of Health Economics* 22(6): 959-981, November 2003.

Leininger, L.J.: Partial-Year Insurance Coverage and the Health Care Utilization of Children. *Medical Care Research and Review* 66(1): 49-67, February 2009.

LoSasso, A.T. and Buchmueller, T.C.: The Effect of the State Children's Health Insurance Program on Health Insurance Coverage. *Journal of Health Economics* 23(5): 1059-82, September 2004.

Meyer, B.D.: Natural and Quasi-Experiments in Economics. *Journal of Business and Economic Statistics* 13(2): 151-161, April 1995.

Morreale, M.C. and English, A.: Eligibility and Enrollment of Adolescents in Medicaid and SCHIP: Recent Progress, Current Challenges. *Journal of Adolescent Health* 32(6 Suppl): 25-39, July 2003.

National Governors Association.: *MCH Update 2002: State Health Coverage for Low-Income Pregnant Women, Children, and Parents*. Internet address: http://www.nga.org/Files/pdf/MCHUPDATE02.pdf. (Accessed 2009.)

Obama, B.: *Text of a Letter from the President to Senator Edward M. Kennedy and Senator Max Baucus, June 2, 2009*. Internet address: http://www.whitehouse.gov/the_press_office/Letter-from-President-Obama-to-Chairmen-Edward-M-Kennedy-and-Max-Baucus/. (Accessed 2009.)

Olson, L.M., Tang, S.S., and Newacheck, P.W.: Children in the United States with Discontinuous Health Insurance Coverage. *New England Journal of Medicine* 353(4): 382-391, July 2005.

Ross, D.C. and Marks, C.: *Challenges of Providing Health Coverage for Children and Parents in a Recession: A 50 State Update on Eligibility Rules, Enrollment, and Renewal Procedures, and Cost-Sharing Practices in Medicaid and SCHIP* in 2009. Internet address: http://www.kff.org/medicaid/upload/7855.pdf. (Accessed 2009.)

Selden, T.M. and Hudson, J.L.: Access to Care and Utilization among Children: Estimating the Effects of Public and Private Coverage. *Medical Care* 44(5 Suppl): I19-I26, May 2006.

Shore-Sheppard, L.D.: Stemming the Tide? The Effect of Expanding Medicaid Eligibility on Health Insurance Coverage. *The B.E. Journal of Economic Analysis & Policy (Advances)* 8(2): Article 6, 2008. Available at: http://www.bepress.com/bejeap/vol8/iss2/art6. (Accessed 2009.)

Sommers, B.D.: Insuring Children or Insuring Families: Do Parental and Sibling Coverage Lead to Improved Retention of Children in Medicaid and CHIP? *Journal of Health Economics* 25(6): 1154-1169, November 2006.

Summer, L. and Mann, C.: *Instability of Public Health Insurance Coverage for Children and Their Families: Causes, Consequences, and Remedies*. Internet address: http://www.commonwealthfund.org/Content/Publications/Fund-Reports/2006/June/Instability-of-Public-Health-Insurance-Coverage-for-Children-and-Their-Families--Causes--Consequence.aspx. (Accessed 2009.)

Reprint Requests: Lindsey Jeanne Leininger, Ph.D., University of Wisconsin-Madison, 610 Walnut Street, 707 WARF, Madison, WI 53726-2397. E-mail: lleininger@wisc.edu