Public Policy and the Dynamics of Children's Health Insurance, 1986-1999

John C. Ham
Department of Economics
University of Maryland
College Park, MD 20742
E-mail: ham@econ.umd.edu

Tel: 301-405-3497

Xianghong Li
Department of Economics
York University
Vari Hall 1068, 4700 Keele St
Toronto, ON, M3J 1P3, Canada
E-mail: xhli@econ.yorku.ca
Tel: (416)736-2100, Ext. 77036

Fax: (416)/36-2100, Ext. 7/0

Lara D. Shore-Sheppard (corresponding author)
Department of Economics
Williams College
203 South Academic Building
24 Hopkins Hall Drive
Williamstown, MA 01267

E-mail: <u>lshore@williams.edu</u> Tel: (413) 597-2226 Fax: (413) 597-4045

Public Policy and the Dynamics of Children's Health Insurance, 1986-1999

By John C. Ham, Xianghong Li, and Lara D. Shore-Sheppard*

The past twenty years have seen important changes in public policy with the potential for significant impacts on health insurance for children. These changes included both those explicitly intended to expand access to public insurance for children, including expansions in eligibility for Medicaid and the introduction of the State Children's Health Insurance Program (SCHIP), and other changes in anti-poverty policy. Since health insurance coverage among children is entwined with parental welfare participation and employment, shifts in policy designed to encourage work in place of welfare participation—such as welfare reform and the expansion of the Earned Income Tax Credit (EITC)—may have secondary impacts on children's health insurance coverage. As parents leave welfare, with its guaranteed health insurance through Medicaid, for jobs that may or may not have health insurance coverage offered as a benefit, children may experience a change in the source of their health insurance coverage or may become uninsured. Similarly, changes in health care markets and economic conditions such as rising health care prices and cyclicality in the availability of employment may also affect children's coverage.

Despite the potential importance of these factors for coverage, the fraction of children who are uninsured has remained largely constant, particularly through the 1990s. However, this relatively constant level of uninsurance may mask changes in the underlying dynamics of health insurance among children. In this paper, we use data from the 1986-1996 panels of the Survey of Income and Program Participation (SIPP) to examine patterns of health insurance coverage among children during the period 1986-1999, focusing on transitions between public coverage,

private coverage, and no coverage. Unlike most other panel data sets, the SIPP conducts interviews three times a year, allowing us to determine a child's insurance status at multiple points during the year. Using these data, we document a shift in the underlying dynamics of health insurance coverage among children. We show that this shift takes two forms: a general increase over the 1990s in the rate of transitions between all three insurance states—public insurance, private insurance, and no insurance, and a particular increase in transitions involving public coverage. We investigate whether there is evidence of a relationship between insurance transitions and various policy and economic variables, focusing on the impacts of expansions in public coverage availability (expanded Medicaid and the introduction of SCHIP), the effects of other policies directed at the poor that affect employment and insurance coverage (including welfare reform and changes in the Earned Income Tax Credit), and economic conditions. We find that several of the policy changes that took place over the 1990s had important effects on health insurance transitions for children.

I. Policy Changes Affecting Children's Health Insurance

The 1990s were a period of great policy activity, and many of the policies that were implemented had implications for children's health insurance. Probably the most significant of these policies was the expansion of public health insurance for children whose families did not qualify for cash assistance. Prior to the late 1980s, Medicaid eligibility for children was tied to eligibility for Aid to Families with Dependent Children (AFDC), resulting in stringent eligibility limits. Starting in the late 1980s, a series of federal law changes substantially diminished the link between Medicaid eligibility and AFDC eligibility by extending Medicaid coverage to pregnant

women and children with incomes above the AFDC limits. Following the Medicaid expansions, in 1997 the federal government expanded availability of public coverage further, establishing SCHIP, a block grant program that was designed to give states the means and flexibility to offer insurance coverage to more children. Overall, between Medicaid expansions and SCHIP implementation average eligibility limits increased over the period from less than half the federal poverty line to around twice the federal poverty line by the end of the 1990s. This increase in eligibility would be expected to increase the probability a child obtains public coverage, possibly at the expense of private coverage, thereby increasing transition rates.

In addition to policies explicitly focused on health insurance, there was substantial policy activity surrounding work and welfare participation. Welfare reform, implemented by some states beginning in 1993 in the form of waivers of federal requirements for AFDC and then implemented across the country with the passage of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) in 1996, was generally intended to encourage welfare recipients to work. Both "carrot" (e.g. increased earnings disregards) and "stick" (e.g. work requirements and time limits) policies were adopted. Along with the changes in the program rules, there was a general reduction in the maximum cash benefit (relative to the poverty line) available to families with no earnings throughout the period studied, from slightly less than half the poverty line, on average, to a little more than a third. Such policies are likely to have an effect on children's health insurance coverage, since they encourage families to leave the welfare rolls and begin work. One potential effect is to reduce Medicaid coverage for children, since participation in the AFDC program conferred automatic Medicaid coverage. However, to reduce the chance that children lost insurance, PRWORA required states to provide Medicaid coverage

to any family that met the pre-PRWORA welfare eligibility limits. The other potential effect is on private coverage—as mothers began to work they increased their chances of obtaining health insurance through an employer. To the extent that former welfare recipients are unable to find jobs offering health insurance benefits, however, the impact on private coverage transitions may be small. Welfare reform is indicated in the data by the presence of a statewide waiver or the implementation of Temporary Assistance to Needy Families (TANF) in place of AFDC.

Along with welfare reform, the mid- to late-1990s saw a substantial increase in the EITC. The EITC increases the return to working since only workers are eligible for it, and initially the more the person works the more he or she is allowed to take home. The federal government increased the phase-in rate (the negative income tax rate) substantially, and many states followed suit with their own earned income credits. Over the period we study, the combined average federal-state phase-in rate more than tripled. As a result of this change and changes in the phase-out rates, the maximum credit also rose, increasing more than six-fold between 1986 and 2000. Expansions of the EITC have ambiguous predicted effects on insurance coverage—they increase the return to working, which may increase transitions into private coverage, but if the jobs obtained do not offer insurance to their workers, it is possible that transitions out of public coverage may increase while private coverage transitions remain unchanged. Also, conditional on working family incomes will be higher, which should raise the demand for private insurance.

II. Data

Our primary data source is the Survey of Income and Program Participation (SIPP), a series of longitudinal data sets covering the U.S. population collected by the Census Bureau.

Each SIPP panel contains approximately 17,000 households, on average. A quarter of the sample is interviewed each month about employment and program participation during the previous four months. We use the 1986, 1987, 1988, 1990, 1991, 1992, 1993, and 1996 panels, which cover the period from October 1985 to February 2000.

Our analysis sample is composed of children who are younger than 19 years old, are not the head or spouse of their own family, and live in states that are identified in the SIPP (41 states and the District of Columbia are identified—the others are grouped for confidentiality). To address the possibility that our results may be driven by spurious transitions, we recode the data to eliminate any spells of one month duration except for those occurring at the beginning or end of the sample period.

Using the state of residence information available in the SIPP, we link information from other sources to our data, including the Medicaid or SCHIP eligibility limits applying to each child, welfare and welfare reform variables, state-level Medicare expenditure data as a measure of health care costs, the EITC maximum credit applying to each family, the monthly unemployment rate in the state, and the minimum wage in the state. (Information about the sources of these variables, their means, and the means of the SIPP data are provided in the online Data Appendix.)

III. Changing Patterns of Children's Health Insurance Coverage, 1986-1999

Figure 1 shows estimates of coverage rates by type (public and private) by month in the SIPP data. Each point in the figure is the mean rate for a month from a particular panel, calculated using the weight for the first year of the panel. Because the SIPP is composed of overlapping panels, most months have data from more than one panel. The data are sparse in

early 1990 and 1995, however, as those years were only covered by at most one panel (the 1990 and 1993 panels, respectively). Another caveat is that since the SIPP, like all panel data sets, suffers from attrition, means from later in each panel are likely to be more noisy as they are estimated from fewer observations. In addition to plotting the estimated rates, we plot the trend smoothed using a locally weighted regression smoothing method.

Overall uninsurance rates in the SIPP fell slightly in the early part of the period, were flat through the early 1990s, and then fell again at the end of the period. Examining the changes in the underlying types of coverage illustrated in Figure 1, it appears that the declines in uninsurance occur when private insurance coverage is increasing, with public coverage either flat or falling. The relatively flat uninsurance rate in the early 1990s masks significant changes in public and private coverage, with public coverage increasing substantially and private coverage declining. This was the period of the initial Medicaid expansions as well as a recession, and this figure shows clearly why researchers of the Medicaid expansions focused on examining whether the expansions led to crowding out of private insurance. A strong cyclical component is evident in insurance coverage, particularly for private coverage, which is not surprising as private coverage is tied so closely to employment.

We next move from examining static coverage rates to investigating transitions. In Figure 2A we graph the rate at which transitions into insurance occur, while in Figure 2B we graph the rate of transitions out of insurance. Over the 1986-1999 period, children appeared to gain and lose insurance at a fairly steady rate, despite the many changes in policy. Though the estimated rates are noisy, the rate at which children gain insurance appears to have fallen slightly at the beginning and the end of the period, indicating that parents had more difficulty obtaining

insurance for their children in these years. In contrast, between about 1991 and 1996 the entry rate appeared to rise slightly. Most strikingly, the pattern in transitions out of insurance (shown in Figure 2B) is very similar to the insurance entry pattern, rather than mirroring it as one might expect if transitions out of insurance increased when transitions into insurance fell. Instead, both sets of transition rates appeared to rise slightly between 1991 and 1996, indicating an overall higher level of turnover in insurance during this period.

To analyze the factors that influence health insurance coverage transitions and determine whether and how they are related to the policy changes that took place during this period, we estimate descriptive models of insurance transition probabilities. Using simple linear probability models for ease of interpretation, we estimate equations of the form:

(1) $Transition_{ist} = Policy_{st} B + Demog_{ist} \Gamma + v_t + \lambda_s + u_{ist}$,

where *Transition* is a binary variable indicating the occurrence of a transition (coverage gain or loss, overall and by type of coverage), *Policy* indicates a vector of variables measuring changes in policy and economic variables (including the public insurance income eligibility limits, the maximum credit for the combined federal and state EITC, whether a state has a waiver or TANF in place, the level of the state's maximum welfare benefit, the state unemployment rate, the state's minimum wage, and the level of Medicare spending in the state), *Demog* is a vector of demographic variables (age and its square, male, race, ethnicity, headship status of the family, and the family head's education, disability status, and age), v_t is a set of year dummies, and λ_s is a set of state dummies. These equations are estimated on SIPP monthly data, with a dummy variable for the "seam month" included to account for the fact that transitions are more likely to be reported as occurring between interviews than as occurring during an interview period (in other

work we show that this approach produces results roughly comparable to the results from a more complex seam bias correction).

We do not show the coefficients from our estimated models in the interest of space (full results are available in the online Appendix) and instead discuss the conclusions that can be drawn from these results. Keeping in mind that this is a descriptive approach, we find evidence that several of the policy moves pursued over this period are strongly associated with changes in insurance transition probabilities, while others either show no evidence of association or are associated in a counterintuitive way.

Most notably, higher public insurance eligibility limits are associated with increases in both types of transitions involving public coverage. The finding that higher eligibility limits are associated with greater rates of public coverage exit, as well as entry, has interesting implications for the use of income eligibility-based expansions of public coverage to provide insurance coverage to children. Further research exploring the reasons for this finding would be useful. For example, it may be due to greater income mobility among the newly eligible, whose families are slightly more well-off and likely to have greater attachment to the labor market. Another possible explanation is that families unaccustomed to obtaining coverage from public sources are more likely to drop public coverage or allow it to lapse. These alternative explanations have different implications for the well-being of the children the policy is intended to help.

The implementation of TANF is also associated with public coverage transitions, with more transitions out of public coverage and fewer transitions into public coverage following TANF. Since eligibility for Medicaid continued for most children whose mothers did not participate in welfare due to stricter eligibility rules under TANF, this finding suggests that the

mechanism of automatic enrollment via welfare was an important one for Medicaid take-up among eligible children, so that although eligibility continued, enrollment did not. The variable indicating the presence of a major AFDC waiver in a state has coefficients that are more difficult to interpret, however, indicating that a major waiver is associated with *fewer* transitions out of public coverage. The state's maximum benefit level shows little evidence of an effect. The results for the EITC are also mixed, as we find that a higher maximum credit is counterintuitively associated with gaining public coverage but is also associated with a more easily explained reduction in the probability of losing coverage overall.

In the case of variables measuring economic conditions, we find that higher unemployment is associated with a reduction in the probability of public coverage loss, perhaps because a child's family is less likely to become income-ineligible through employment, while a higher minimum wage is associated with an increase in the probability of private coverage loss. Health care costs are positively associated with transitions involving public coverage and negatively associated with transitions involving private coverage. The demographic variables are almost always statistically significant in all regressions, and interestingly almost always have the same sign regardless of whether the regression is explaining a transition into or out of coverage. These results indicate that children who are minority race, Hispanic, younger, from single parent families, and who have younger, less educated family heads have substantially higher rates of coverage transitions in both directions, indicating lack of coverage stability for these children. Finally, even after controlling for these individual-level characteristics, state policies, and state fixed effects, we find evidence that national-level trends contributed to coverage dynamics over this time period, particularly during the recession years of 1989-1991 (which saw reductions in all

types of transition probabilities except movements into public coverage) and the later years of the sample (which saw increases in all types of transition probabilities).

IV. Conclusion

In this paper, we use data from the 1986-1996 SIPP panels to provide descriptive evidence about the dynamics of children's health insurance between 1986 and 1999. We find that several of the policy changes that took place over the 1990s had important effects on health insurance transitions for children. In particular, we find that the expansion of public insurance eligibility was associated with an increase in the probability of transitions both into and out of public coverage, while the implementation of TANF was associated with an increase in public coverage exit and a reduction in public coverage entry. Few policies affect private coverage transitions once state and year fixed effects are controlled for, with the exception of the minimum wage, which is associated with a higher rate of private coverage loss.

Overall, our results indicate that policies affecting children's health insurance directly have important effects on children's health insurance dynamics, not surprisingly. Of the other policy changes that took place, we find evidence of an impact of welfare reform on coverage, but only a weak relationship between coverage and expansions of the EITC. We also find that cyclical factors (as reflected in unemployment rates) and factors affecting the cost of health care influence insurance dynamics. Finally, we find some evidence of a secular trend towards an increase in the rate of transitions even after accounting for changes in policy. This finding, together with the findings of increases in transitions associated with some policies and a generally higher level of insurance transitions for some types of children, suggest that further research is

needed to establish the effects of increased insurance transitions on measures of child well-being such as access to needed health care and health.

Figures:

Figure 1

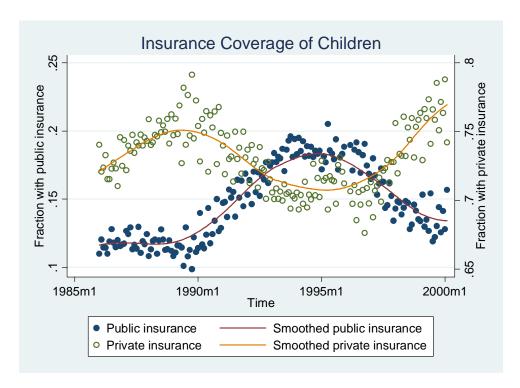


Figure 2A

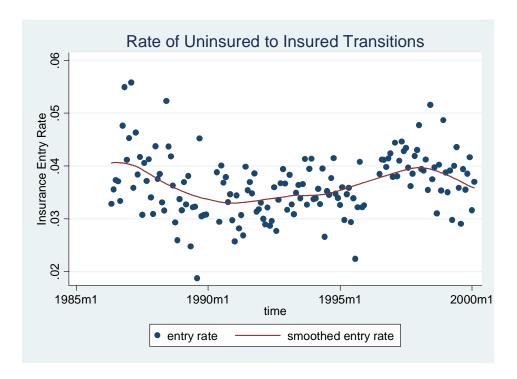


Figure 2B

