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State Level Special Issue–Part 2

Uninsurance among Children Whose Parents Are Losing Medicaid Coverage: Results from a Statewide Survey of Oregon Families

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Context. Thousands of adults lost coverage after Oregon's Medicaid program implemented cost containment policies in March 2003. Despite the continuation of comprehensive public health coverage for children, the percentage of uninsured children in the state rose from 10.1 percent in 2002 to 12.3 percent in 2004 (over 110,000 uninsured children). Among the uninsured children, over half of them were likely eligible for public health insurance coverage.

Research Objective. To examine barriers low-income families face when attempting to access children's health insurance. To examine possible links between Medicaid cutbacks in adult coverage and children's loss of coverage.

Data Source/Study Setting. Statewide primary data from low-income households enrolled in Oregon's food stamp program.

Study Design. Cross-sectional analysis. The primary predictor variable was whether or not any adults in the household recently lost Medicaid coverage. The main outcome variables were children's current insurance status and children's insurance coverage gaps.

Data Collection. A mail-return survey instrument was designed to collect information from a stratified, random sample of households with children presumed eligible for publicly funded health insurance programs.

Principal Findings. Over 10 percent of children in the study population eligible for publicly funded health insurance programs were uninsured, and over 25 percent of these children had gaps in insurance coverage during a 12-month period. Low-income children who were most likely to be uninsured or have coverage gaps were Hispanic; were teenagers older than 14; were in families at the higher end of the income threshold; had an employed parent; or had a parent who was uninsured. Fifty percent of the uninsured children lived in a household with at least one adult who had recently lost Medicaid coverage, compared with only 40 percent of insured children ($p = .040$). Similarly, over 51 percent of children with a recent gap in insurance coverage had an adult in the household who lost Medicaid, compared with only 38 percent of children without coverage gaps ($p < .0001$). After adjusting for ethnicity, age, household income,

and parental employment, children living in a household with an adult who lost Medicaid coverage after recent cutbacks had a higher likelihood of having no current health insurance (OR 1.44, 95 percent CI 1.02, 2.04), and/or having an insurance gap (OR 1.79, 95 percent CI 1.36, 2.36).

Conclusions. Uninsured children and those with recent coverage gaps were more likely to have adults in their household who lost Medicaid coverage after recent cutbacks. Although current fiscal constraints prevent many states from expanding public health insurance coverage to more parents, states need to be aware of the impact on children when adults lose coverage. It is critical to develop strategies to keep parents informed regarding continued eligibility and benefits for their children and to reduce administrative barriers to children's enrollment and retention in public health insurance programs.

Key Words. Insurance coverage, health care access, primary health care, Medicaid, children's health care

BACKGROUND

The lack of stable health insurance for millions of people in the United States is a growing problem. An estimated 46 million Americans were uninsured sometime during 2004 (Collins et al. 2006). Children have not escaped this rising tide. Even with recent efforts to expand coverage, over 9 million children in the United States remain uninsured, and many of them likely qualify for a publicly funded insurance program (Kaiser Commission on Medicaid and the Uninsured 2004). In Oregon, the percentage of uninsured children increased from 10.1 percent in 2002 to 12.3 percent in 2004 (over 110,000 uninsured children) (Office for Oregon Health Policy and Research 2005). Over half of Oregon's uninsured children appear to be eligible for public coverage (Office for Oregon Health Policy and Research 2005).

In the U.S. employer-based health insurance market, private insurance coverage for children has traditionally been tied to adult employment. This trend has defined insurance coverage as a "household good" rather than an "individual good." In contrast, public programs often target only individuals, such as needy children, without extending coverage to entire households.

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Despite this targeted approach, past studies have reported that eligible children actually gain more stable public coverage when enrollment regulations are relaxed and when insurance coverage is extended to entire households (Ku and Broaddus 2000; Dubay and Kenney 2001, 2003, 2004; Reschovsky and Hadley 2001; Institute of Medicine 2002; Fairbrother et al. 2004; Guendelman and Pearl 2004; Kronebusch and Elbel 2004). Less is known, however, about how terminating coverage for adults in the household can affect children. Relevant studies have looked at associations between parental uninsurance and children's health insurance coverage gaps. An analysis of the 2000 Current Population Survey showed that almost 75 percent of uninsured children eligible for Medicaid or State Children's Health Insurance Program (SCHIP) had at least one parent who was uninsured (Lambrew 2001). Davidoff et al. (2003) reported in 2003 that having an uninsured parent was associated with a 6.7 percent decrease in the likelihood of getting a well-child visit. In light of the evidence to support public programs moving in the direction of private plans that offer insurance as a household good, more study is needed to address the impact of reversing this trend and terminating public insurance coverage for adults in U.S. households.

The Oregon Health Plan (OHP) is an example of an innovative state Medicaid demonstration program that had expanded comprehensive coverage to entire households. However, similar to many states, Oregon's fiscal crisis led to the implementation of cost containment policies for the OHP, which have been associated with compromised access to insurance and health care services for thousands of adults (Solotaroff et al. 2005; Wright et al. 2005; Carlson, DeVoe, and Wright 2006). These policy changes involved the creation of two distinct Medicaid benefit packages in early 2003: *OHP Plus* and *OHP Standard*. Most of the original tenets of the OHP were preserved in OHP Plus, which was designed to serve the categorically eligible Medicaid population, including all children eligible for Medicaid and the SCHIP. OHP Standard was created for the "expanded eligibility" adult population. OHP Standard incorporated cost sharing arrangements, primarily in the form of premiums and copayments; offered a reduced benefit package that did not include behavioral health, chemical dependency, dental, durable medical equipment, and vision services; and employed tighter administrative rules that required a 6-month lockout for members who failed to pay the sliding-scale premium.

Although the OHP changes were aimed at adults, there may have been an indirect impact on children. This study of low-income Oregon families was specifically designed to identify barriers that have contributed to a lack of

access to health care services for children, with a specific focus on determining how the recent OHP policy changes may have affected their health insurance coverage patterns. The overall study objective was to contribute to the development of evidence-based policy options that ensure better access to health insurance and health care services for children.

Design and Methods

This study was a cross-sectional analysis using a mail-return survey instrument to collect statewide primary data from low-income families about their experience obtaining health insurance coverage and accessing health care services for their children.

Study Population—Sample of Parents

In order to gather information about low-income children eligible for publicly funded health insurance programs, this study included all Oregon households with children enrolled in the federal food stamp program at the end of January 2005. This population was selected because the food stamp program and the OHP have similar income eligibility requirements for children. Food stamp data are reported for groups of individuals living in the same household. It is often difficult to ascertain the exact relations of persons living together in a household or if the group of individuals assigned to a household considers themselves a family. So, for the purposes of this paper, the terms "family" and "household" will be used interchangeably with the recognition that these terms are not synonymous.

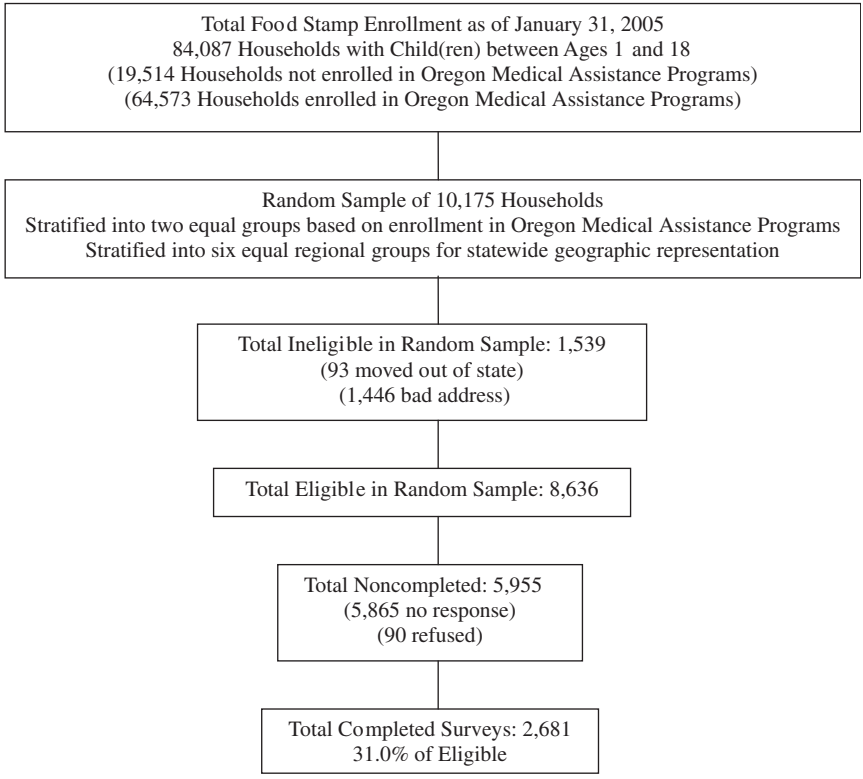
Using the survey selection procedure in *SAS* 9.1, a stratified random sample of 10,175 families was drawn from a total of 84,087 families with at least one child older than 1 year (eligible children under age 1 have different enrollment procedures). A focal child was then randomly selected from each household. Because the food stamp program is completely separate from public insurance programs in Oregon, it was possible to identify that approximately 25 percent of the families enrolled in food stamps did not have their children enrolled in public health insurance. Using the administrative data files from both programs, purposeful sampling stratification procedures were performed to select a study population with equal representation among families with none of their children enrolled in a public health insurance program and families with at least one child enrolled in public insurance. To ensure that children without public insurance were not merely in the

reenrollment process, insurance information 2 months before the sample draw was examined. Oversampling techniques were used to augment the sample size in rural areas, and *PASS* software was used to calculate power and achieve adequate subsample sizes. After excluding families who had moved out of state and those with no current address, 8,636 were eligible to participate.

Completed surveys were received from 2,681 eligible households, for a response rate of approximately 31 percent (Figure 1). This response rate is consistent with the national rates for other Medicaid surveys (Westat 2003).

Survey respondents had similar demographic characteristics to the total eligible survey population (see supplementary material Appendix S1). The largest differences were observed between the percentage of respondents by geographic region, race/ethnicity, and whether or not a child in the family was

Figure 1: Flow Diagram of Potential Study Participants



enrolled in public health insurance. In order to adjust for these nonresponse differences and the original probability of individual household case selection, a two-step weighting process was performed. First, households were weighted back to the original population. In this process, base weights were assigned to each case depending on the probability of original selection into the random sample from each of the two stratification groups (child[ren] enrolled in public health insurance versus no child enrolled in public insurance) and the oversampled geographic regions. Second, the base weights assigned to each respondent case were further adjusted to account for nonresponse. In this second weighting step, individual base weights were multiplied by a nonresponse adjustment factor derived from the difference in response rates by public insurance enrollment status, region, and race/ethnicity. (Demographic information about the nonresponders was available from the original administrative data file of all 10,175 in the random sample. This file included only one variable that combined race and ethnicity.) All reported results have been weighted back to the overall study population of 84,087 food stamp households.

Data Collection—Survey of Parents

A survey instrument was created to ask Oregon parents about specific barriers to publicly financed health insurance. Many of the survey questions were adapted from widely accepted national data collection tools, including the Consumer Assessment of Health Plans survey, the Community Tracking Study, and the Medical Expenditure Panel Survey (Agency for Healthcare Research and Quality 2002, 2004; Center for Studying Health System Change 2004). For validity, cognitive testing of the survey instrument, including a validation interview, was conducted with a small sample of parents of uninsured children. According to food stamp records, English, Spanish, and Russian were the most common languages spoken among this population; therefore, surveys were translated into Spanish and Russian, and then independently back translated to ensure fidelity of translation. Russian surveys were translated by native speakers using specialized software to enable print versions using the Cyrillic alphabet. Participants were sent surveys in their preferred language and given the option to return the survey and request another one of these three languages. The study instrument was a self-report, mail return survey containing 63 items. Four survey waves were conducted including two full survey mailings and two reminder postcards. All mailings were done in the preferred language of eligible participants. Information

accompanying the survey gave parents details about the purpose of the study and the process used for protecting the confidentiality of respondents. It was also designed to instruct parents to answer all of the survey questions about the one focal child who had been randomly selected from each of the participating households. The survey and all aspects of the study protocol were approved by the Oregon Health and Science University Institutional Review Board (OHSU IRB #00001717).

Primary Measures

The main outcomes measured were children's current insurance status and children's insurance coverage gaps during the 12-month period before the survey. These outcome variables were constructed from several survey questions pertaining to the topics of interest. The main insurance question ("At this time, what type of health insurance is YOUR CHILD covered by?") was followed by several options including the option to check a box indicating "My child is not currently covered by any kind of health insurance." Coverage gaps were determined by consistent responses to the following questions: "At any time in the *last 12 months*, was YOUR CHILD *without* health insurance?" and "*In the last 12 months*, about how many months was YOUR CHILD *without* any health insurance coverage?" An additional question was asked to determine the most recent type of insurance coverage for children currently uninsured. For validity, a child was determined to be uninsured or have a coverage gap if parental responses to all relevant questions were consistent.

The primary predictor variable was whether or not any adults in the household recently lost OHP coverage. The survey was fielded 1 year after the major 2003 OHP cost containment policies were implemented, and one specific question was designed to assess loss of adult coverage in the household since the date of these changes: "*Since January 2003*, did any *adults (19 years and older)* in your household lose *Oregon Health Plan (OHP)* health insurance coverage?" Although it cannot be determined that the adult losing coverage was a parent, there were strong associations with responses to more detailed questions about current parental health insurance coverage.

Analysis

Statistical tests were performed using *SPSS* 14.0 with the complex samples module to account for complex sampling design effects. Descriptive analyses were conducted to identify statistically significant differences in demographic characteristics between insured and uninsured children through bivariate

analysis and individual logistic regression models. To assess the net affect of the main predictor variable (adult loss of OHP coverage) on the two key children's insurance status outcomes, multivariable logistic regression models were used to estimate the relative odds of each outcome. Those variables with a *p*-value of $\leq .25$ in the descriptive analysis were included in the regression models. Covariates for the final regression models included: ethnicity, age, household income, and parental employment. There were no significant interactions between any of the selected predictor variables, so the final model included only the main predictor variable and the demographic covariates that had shown significant associations in the simpler models.

RESULTS

Demographics and Children's Insurance Status

All ages were well represented among survey respondents, with a slightly lower percentage of children older than 14 years when compared with children in the younger age categories. Nearly one-fourth of the population (23.8 percent) described themselves as Hispanic. The self-reported race breakdown included 65.4 percent white, 4.4 percent black or African American, 2.6 percent American Indian or Alaskan Native, 1.5 percent Asian, and 1.2 percent Native Hawaiian or other Pacific Islander. Nine percent of the respondents reported being more than one race, and 15.9 percent reported being a race other than those previously listed or did not respond to the question. (Most respondents who selected "other race" designated their race as "Hispanic," "Mexican," or "Latino.") Almost half of the parents (41.7 percent) reported being currently employed or self-employed. Over 35.4 percent reported that at least one adult in the household lost OHP health insurance after January 2003. Over 13 percent of households had zero income, and the majority of households had monthly earnings below 100 percent of the federal poverty level (table not shown).

Current Children's Insurance Coverage

Among the children in the study population with a known insurance status ($N = 2{,}649$), over 10 percent (10.9 percent) were uninsured, 73 percent had only public insurance coverage (mostly OHP), and 16.1 percent had private coverage. For the purposes of this analysis, the main outcome was whether or not the child was currently insured. No differentiation was made between public or private coverage. Low-income children who were most likely to be

without health insurance coverage were Hispanic; were teenagers older than 14; lived in families at the higher end of the income threshold; had an employed parent; or had an adult in the household who recently lost OHP coverage (see Table 1).

Racial variations in current children's insurance coverage were also observed; however, the numbers in many of the race categories were extremely small, making it difficult to achieve statistical significance. When several of the race groups were combined to create race categories, a lower percentage of white children were uninsured (9.8 percent), compared with American Indians or Alaskan Natives (12.8 percent), and other races (14.7 percent) ($p = .0001$).

Gaps in Children's Insurance Coverage

Among the children for whom information was available about gaps in health insurance coverage, 26.3 percent went without health insurance coverage at some time during the 12-month period immediately before the study. Among the children with a health insurance coverage gap, 34.2 percent had no health insurance for more than 6 months, while 65.8 percent were uninsured for fewer than 6 months. When comparing demographic and other characteristics of children with gaps in coverage to children who maintained continuous enrollment, there were significant differences by age, parental employment, monthly income, and whether or not an adult in the household recently lost OHP coverage (see Table 2).

Uninsured Children and Adults Who Lost OHP

When compared with children with current public or private insurance coverage, a higher percentage of uninsured children lived in households with an adult who had lost OHP coverage shortly after the cost-containment policy changes were implemented. Fifty percent of uninsured children lived in a household with at least one adult who had recently lost OHP coverage, compared with only 40 percent of children with current health insurance coverage ($p = .040$, Figure 2). After adjusting for ethnicity, age, household income, and parental employment, children living in a household with an adult who lost OHP coverage after the recent cutbacks had a higher likelihood of having no current health insurance (OR 1.44, 95 percent CI 1.02, 2.04; Table 3).

Similarly, a higher percentage of children with an insurance coverage gap in the 12-month period immediately before the study were also found to be living in households with at least one adult who lost OHP coverage. More

Table 1: Comparing the Prevalence of Uninsured Children versus Insured Children in Different Demographic Subgroups

	Percent Uninsured Children (Weighted %)	*Percent Insured Children (Weighted %)*
Total (unweighted $N = 2{,}649$)	10.9	89.1
Main predictor variable		
Adult in household with OHP coverage (unweighted $N = 2{,}288$)*		
No adults in the household recently lost OHP	8.0	92.0
At least one adult in the household recently lost OHP	10.9	89.1
Demographic covariates		
Age (unweighted $N = 2{,}649$) (years)**		
1–4	6.6	93.4
5–9	11.8	88.2
10–14	12.7	87.3
15–18	14.2	85.8
Race (unweighted $N = 2{,}505$)		
White	9.8	90.2
American Indian or Alaskan Native	12.8	87.2
Asian	9.0	91.0
Black or African American	7.0	93.0
Native Hawaiian or other Pacific Islander	11.6	88.4
More than one race	8.5	91.5
Other—unknown race	18.9	81.1
(some cells too small to determine statistical significance)		
Ethnicity (unweighted $N = 2{,}593$)**		
Hispanic	15.7	84.3
Not Hispanic	9.5	90.5
Parental employment (unweighted $N = 2{,}590$)**		
Employed or self-employed	13.3	86.7
Not currently employed	9.0	91.0
Household monthly income (unweighted $N = 2{,}591$)*		
Zero income	8.2	91.8
1–50% FPL	10.7	89.3
51–100% FPL	10.4	89.6
101–133% FPL	12.1	87.9
>133% FPL	19.0	81.0

*$p < .05$;

**$p < .01$.

This table contains only the households for whom information was available regarding health insurance coverage status and the specific demographic variables listed.

FPL, federal poverty level.

Table 2: Comparing the Prevalence of Children with Health Insurance Coverage Gaps versus Children with No Coverage Gaps in Different Demographic Subgroups

	Percent with a Coverage Gap[†]	*Percent with No Coverage Gap*[‡]
Total (unweighted $N = 2{,}510$)	26.3	73.7
Main predictor variable		
Adult in household with OHP coverage (unweighted $N = 2{,}189$)**		
No adults in the household recently lost OHP	21.4	78.6
At least one adult in the household recently lost OHP	31.5	68.5
Demographic covariates		
Age (unweighted $N = 2{,}510$) (years)*		
1–4	22.7	77.3
5–9	25.4	74.6
10–14	27.4	72.6
15–18	33.1	66.9
Race (unweighted $N = 2{,}381$)		
White	25.6	74.4
American Indian or Alaskan Native	17.7	82.3
Asian	46.1	53.9
Black or African American	20.9	79.1
Native Hawaiian or other Pacific Islander	51.4	48.6
More than one race	24.6	75.4
Other-unknown race (some cells too small to determine statistical significance)	31.8	68.2
Ethnicity (unweighted $N = 2{,}443$)		
Hispanic	29.7	70.3
Not Hispanic	25.9	74.1
Parental employment (unweighted $N = 2{,}454$)*		
Employed or self-employed	29.3	70.7
Not currently employed	24.2	75.8
Household monthly income (unweighted $N = 2{,}457$)**		
Zero income	32.4	67.6
1–50% FPL	24.4	75.6
51–100% FPL	22.9	77.1
101–133% FPL	31.6	68.4
> 133% FPL	32.4	67.6

[†]Child did not have health insurance sometime during the 12 months before the survey (weighted %)

[‡]Child had continuous health insurance coverage for all of the 12 months before the survey (weighted %)

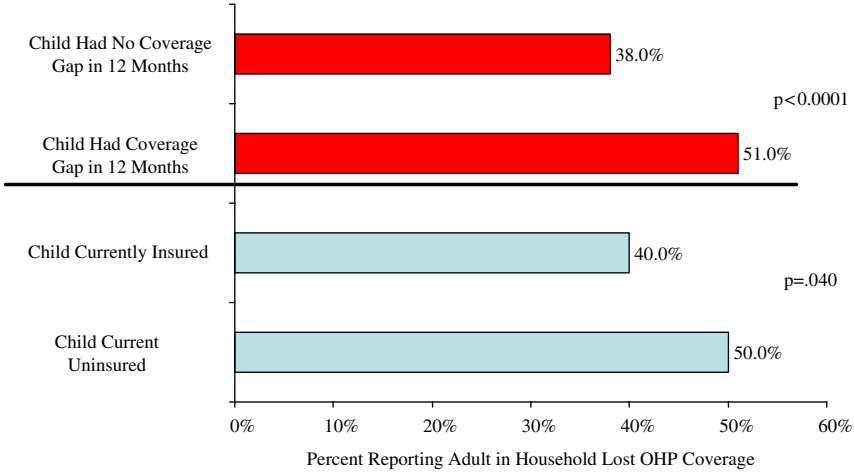
*$p < .05$;

**$p < .01$.

This table contains only the households for whom information was available regarding health insurance coverage gaps and the specific demographic variables listed.

FPL, federal poverty level.

Figure 2: Percentage of Children in Households with Adults Who Lost Oregon Health Plan (OHP) by Insurance Status and Coverage Gaps



than 51 percent of children with a recent gap in insurance coverage had an adult in the household who recently lost OHP, compared with only 38 percent of children without coverage gaps ($p<.0001$, Figure 2). After adjusting for ethnicity, age, household income, and parental employment, children living in a household with an adult who lost OHP coverage after the recent cutbacks had a higher likelihood of having a gap in insurance coverage (OR 1.79, 95 percent CI 1.36, 2.36; Table 3).

Discussion and Policy Implications

Stable, continuous health insurance is essential to the health and well-being of all children in the United States (Kaiser Commission on Medicaid and the Uninsured 2002). Gains in insurance coverage for children have been attributed to the expansion of public programs for children, such as the SCHIP (Cunningham 2003; Kenney and Chang 2004; Shone and Szilagyi 2005; Vistnes and Rhoades 2006). Similar to many other states, SCHIP dollars have enabled Oregon to expand health insurance coverage to pregnant women and children in needy families earning below 185 percent of the federal poverty level. All Medicaid and SCHIP eligible children can enroll in the OHP, which currently offers comprehensive public health insurance coverage for children.

Table 3: Odds of Children in Different Demographic Subgroups Being Uninsured and/or Experiencing Insurance Coverage Gaps

	Odds of Child Being Currently Uninsured N = 2,197 OR (95% CI)		*Odds of Child Experiencing a Coverage Gap in 12-Month Period N = 2,105 OR (95%CI)*	
	Crude Odds Ratios	*Adjusted Odds Ratios*	*Crude Odds Ratios*	*Adjusted Odds Ratios*
Main predictor variable				
Adult in household with Oregon Health Plan (OHP) coverage				
No adults in the household lost OHP	1.00	1.00	1.00	1.00
At least one adult in the household lost OHP	**1.40 (1.01, 1.96)**	**1.44 (1.02, 2.04)**	**1.69 (1.30, 2.19)**	**1.79 (1.36, 2.36)**
Demographic covariates				
Age (years)				
1–4	1.00	1.00	1.00	1.00
5–9	**1.89 (1.26, 2.83)**	**1.77 (1.09, 2.89)**	1.16 (0.84, 1.58)	1.16 (0.82, 1.65)
10–14	**2.05 (1.34, 3.15)**	**2.02 (1.19, 3.43)**	1.29 (0.92, 1.79)	1.32 (0.90, 1.95)
15–18	**2.34 (1.50, 3.64)**	**2.64 (1.56, 4.47)**	**1.68 (1.17, 2.41)**	**1.73 (1.14, 2.62)**
Ethnicity				
Not Hispanic	1.00	1.00	1.00	1.00
Hispanic	**1.77 (1.31, 2.39)**	**1.49 (1.02, 2.20)**	1.20 (0.92, 1.57)	1.14 (0.81, 1.60)
Parental employment				
Not currently employed	1.00	1.00	1.00	1.00
Employed or self-employed	**1.55 (1.15, 2.08)**	1.37 (0.97, 1.94)	**1.30 (1.03, 1.66)**	1.24 (0.95, 1.64)
Household monthly income				
Zero income	1.00	1.00	1.00	1.00
1–50% FPL	1.34 (0.75, 2.26)	0.82 (0.45, 1.50)	0.67 (0.45, 1.01)	0.53 (0.34, .83)
51–100% FPL	1.30 (0.75, 2.24)	0.99 (0.52, 1.87)	0.62 (0.41, .94)	0.50 (0.32, .77)
101–133% FPL	1.54 (0.87, 2.74)	1.40 (0.74, 2.62)	0.97 (0.61, 1.53)	0.79 (0.48, 1.30)
> 133% FPL	**2.64 (1.41, 4.91)**	**2.04 (1.02, 4.10)**	1.01 (0.60, 1.69)	0.81 (0.46, 1.45)

Bold face indicates statistical significance (those odd ratios for which the confidence interval does not cross 1.00).
FPL, federal poverty level.

Despite these expansions in eligibility for public coverage and the availability of private coverage for some low-income children, a growing percentage of Oregon's children are uninsured. One possible explanation for this alarming trend is that children may never be completely immune from policy changes intended to impact adults only. Oregon's uninsured children and those with recent coverage gaps were more likely to live in households with adults who lost OHP coverage shortly after recent statewide cutbacks.

Oregon's movement to control Medicaid costs is not unique. With the recent economic downturn and budget shortfalls, all 50 states have implemented some form of cost containment in their Medicaid programs (Smith et al. 2004). As states cutback on providing public insurance for adults, policy makers need to be aware of the impact on children when adults in their household lose coverage. It is critical to develop strategies to keep parents informed regarding continued eligibility and benefits for their children and to reduce administrative barriers to children's enrollment and retention in public health insurance programs.

As states struggle to contain costs in their Medicaid programs, often with limited evidence about the impact of sweeping policy changes, it is essential to continue studying how these "natural policy experiments" affect vulnerable populations. The use of food stamp administrative data is one way to easily identify a sample of low-income households for further study. Although there is the potential that food stamp and Medicaid enrollees may be almost identical, approximately one-quarter of Oregon households receiving food stamps did not have their children enrolled in public health insurance. Although each state is unique, it is likely that several other states could benefit from the use of food stamp data as a way to quickly and accurately identify a potentially eligible population not enrolled in health insurance.[1] The accuracy of income data for this population may vary from state to state; however, federal law requires frequent verification of income to establish continued eligibility for this program. In addition, this population is highly mobile, which has resulted in the development of rigorous statewide efforts to keep updated contact details and demographic information.

Another strength of this study was the explicit objective to address specific and timely questions being asked by Oregon policy makers, thus maximizing its potential to impact future policy decisions. The results from this study have already been presented to state legislators on the Senate Committee for Children's Health, the Governor's health policy advisors, and the state Medicaid Advisory Committee. Leaders in the Oregon Office for Medical Assistance Programs have reviewed the study findings and are

currently drafting a federal waiver application to allow them to design policy changes that address some of the key concerns raised by parents in the survey population. Oregon's governor has launched a new "Healthy Kids" initiative to work toward expanding children's health insurance coverage.

STUDY LIMITATIONS

This study had several important limitations. First, the sample of low-income families was drawn from food stamp data. Families enrolled in the food stamp program are already connected to a system of public benefits. These families likely have higher rates of enrollment and retention in medical benefit programs and may encounter fewer insurance coverage gaps compared with a more general low-income population. Because the data from this study can only be generalized to the food stamp population, these results may be understating the problem in the general population. Although it was not possible to reach a broader sample of low-income families for this study, it is likely that the significant association between the instabilities in adult health insurance coverage and unstable children's insurance coverage are of larger magnitude in families not already accessing food stamps and other public services.

Second, for budgetary reasons, the survey was only administered in English, Spanish, and Russian; and telephone follow-up was not possible. Although a four-wave survey methodology was employed (two surveys and two reminder postcards in each of the three languages), the response rate was 31 percent. This rate is comparable to the response rates of other studies of Medicaid populations, even those that employ telephone follow-up (Westat 2003); however, nonresponse bias remains an important consideration. It is important to note that the respondents were demographically similar to nonrespondents, and it was possible to use food stamp administrative data to adjust for nonresponse and to weight results back to the entire food stamp population of 84,087 households. This complex adjustment for nonresponse addressed much of the concern about anticipated response bias.

Finally, as with any self-reported data, there is always the potential for recall bias. To minimize recall bias, respondents were asked to recall events and occurrences only in the past 12 months, and several questions pertained to similar topics in order to verify consistency in responses. In determining key predictors, only cases with consistent responses were included in the constructed variables for children's insurance status and coverage gaps.

CONCLUSIONS

As public health insurance programs shift away from the private insurance tradition of providing coverage to households and focus more narrowly on expanding individual coverage for children, the unintended consequence may be a loss of coverage for children. State policy makers looking for ways to expand children's health insurance coverage need to be more aware of the association between health insurance coverage for both parents and children. Children's health care coverage initiatives will likely never reach their policy goals if parents are not also brought into coverage. Whenever possible, programs designed to expand coverage for children should focus on providing stable coverage for entire households.

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Disclaimer: There are no disclaimers.

NOTE

1. Administrative data about children enrolled in the free and reduced lunch program kept by the Oregon Department of Education were another potential source of data for this study. In Oregon, however, the state Attorney General determined that use of these contact details for a survey about access to health care would violate policies in the "No Child Left Behind" legislation, which limits contact to education-related issues.

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SUPPLEMENTARY MATERIAL

The following supplementary material is available for this article:

Appendix S1: Comparison of Respondent Characteristics to Overall Food Stamp Sample Population

This material is available as part of the online article from: http://www.blackwell-synergy.com/doi/abs/10.1111/j.1475-6773.2007.00764.x (this link will take you to the article abstract).

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