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The Role of Public and Private Insurance Expansions and Premiums for Low-Income Parents

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Lessons From State Experiences

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Background: Numerous states have implemented policies expanding public insurance eligibility or subsidizing private insurance for parents.

Objectives: To assess the impact of parental health insurance expansions from 1999 to 2012 on the likelihood that parents are insured; their children are insured; both the parent and child within a family unit are insured; and the type of insurance.

Design: Cross-sectional analysis of the 2000–2013 March supplements to the Current Population Survey, with data from the Medical Expenditure Panel Survey—Insurance Component and the Area Resource File.

Methods: Cross-state and within-state multivariable regression models estimated the effects of health insurance expansions targeting parents using 2-way fixed effect modeling and difference-in-difference modeling. All analyses controlled for household, parent, child, and local area characteristics that could affect insurance status.

Results: Expansions increased parental coverage by 2.5 percentage points, and increased the likelihood of both parent and child being insured by 2.1 percentage points. Substantial variation was observed by type of expansion. Public expansions without premiums and special subsidized plan expansions had the largest effects on parental coverage and increased the likelihood of jointly insuring both the parent and child. Higher premiums were a substantial deterrent to parents' insurance.

Conclusions: Our findings suggest that premiums and the type of insurance expansion can have a substantial impact on the insurance status of the family. These findings can help inform states as they continue to make decisions about expanding Medicaid under the Affordable Care Act to cover all family members.

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As Americans continue to gain access to health insurance through the Affordable Care Act (ACA), it is important to consider the impact of state policy choices on insuring not only individuals, but also all family members. Parental insurance status can have important implications for insurance continuity and access to care among their family members.[1–5] Under the ACA, states retain significant flexibility in terms of eligibility and program structure, including the option to expand Medicaid to all individuals up to 138% of the federal poverty level (FPL). To date, 25 states and the District of Columbia have chosen to expand the traditional program, whereas 7 states are implementing alternative expansions under Section 1115 waivers.[6] The remaining 16 states that have not expanded can look at past and current experience in states using these alternative approaches.[6]

In addition to setting Medicaid eligibility levels for covered populations, states have the option to use waivers to provide subsidies for private health insurance. Beginning in 2015, states also have the option to shift to the Basic Health Program (BHP), which allows them to use federal premium tax subsidy funds to reduce the cost of a designated health plan offered outside the Health Insurance Marketplace for individuals with income between 139% and 200% FPL. Such plans can improve continuity of coverage for low-income families who experience income instability and may otherwise experience frequent transitions between Medicaid and Marketplace coverage. Beginning in 2017, states will gain the option to implement Section 1332 waivers allowing for further innovation and alternative policies regarding the individual mandate, employer mandate, benefits and subsidies, and the Marketplace and qualified health plans. Understanding the effects of prior state policies can help inform state policy decisions in this new environment of expanded state flexibility in the provision of health insurance for families.

Previous research has shown that health insurance expansions increased public coverage and decreased uninsurance among parents but have not focused on variation by type of expansion.[7–13] Parental health insurance expansions also have the potential to increase coverage among children

TABLE 1. State Health Insurance Expansions for Parents, 1999–2012

State	Within-state Analysis (N = 11)	Cross-state Analysis (N = 50)	Cross-state Analysis Classification: Public No Premium (N = 10)	Public Premium (N = 8)	Premium Assistance (N = 5)	Special Subsidized Plans (N = 5)	Control (N = 22*)	Year of Expansion	Preperiod Eligibility (% FPL): Nonworker	Preperiod Eligibility (% FPL): Worker	Postperiod Eligibility (% FPL): Nonworker	Postperiod Eligibility (% FPL): Worker
Alabama		X					X		13	21	11	24
Alaska		X					X		73	79	76	81
Arizona[†]		X	X					2001	36	36	100	107
Arizona[†]		X		X				2003[‡]	100	107	200	200
Arkansas	X	X				X		2006	17	19	—[§]	200[§]
California[†]		X	X					2000	74	81	100	107
California[†]		X		X				2010	100	106	200	200
Colorado[†,‖]		X	X					2006	35	38	60	67
Colorado[†,‖]		X	X					2010	60	66	100	106
Connecticut[†]		X	X					2001[¶]	100	106	150	157
Connecticut[†]		X	X					2005	100	106	150	157
Connecticut[†]		X		X				2008	185	191	300	300
Delaware		X					X		100	122	100	119
District of Columbia[#]												
Florida		X					X		25	66	20	58
Georgia		X					X		35	62	27	49
Hawaii		X					X		100	100	100	100
Idaho	X	X			X			2005	26	31	--[§]	185[§]
Illinois[#]												
Indiana[‖]	X	X		X				2008	20	26	200	206
Iowa	X	X		X				2005	33	82	200	250
Kansas		X					X		33	40	26	32
Kentucky		X					X		43	75	34	59
Louisiana		X					X		14	22	11	25
Maine[†]		X	X					2000	100	107	150	157
Maine[†]		X	X					2005	150	157	200	207
Maine[†]		X				X		2005	150	157	300	300
Maryland	X	X	X					2006	32	39	116	116
Massachusetts[‖]	X	X				X		2006	133	133	300	300
Michigan		X					X		39	66	37	63
Minnesota[#]												
Mississippi		X					X		30	38	24	44
Missouri[#]												
Montana		X					X		39	69	32	55
Nebraska		X					X		44	55	46	57
Nevada		X			X			2006**	25	90	—[§]	200[§]
New Hampshire		X					X		49	62	39	49
New Jersey	X	X		X				2001	35	42	200	200
New Mexico	X	X				X		2005	30	69	200	200
New York	X	X	X					2001	85	85	150	150
North Carolina		X					X		45	62	35	49
North Dakota		X					X		40	69	34	59
Ohio[#]												
Oklahoma	X	X			X			2005	36	45	185	185
Oregon[#]												
Pennsylvania		X		X				2002**	33	56	200	200
Rhode Island[#]												
South Carolina		X					X		50	100	50	91
South Dakota		X					X		65	65	52	52
Tennessee[#]												
Texas		X					X		23	32	12	26
Utah[†]		X		X				2002	48	55	150	150
Utah[†]		X			X			2003	48	55	—[§]	150[§]
Utah[†]		X			X			2012	—	150	—[§]	200[§]
Vermont	X	X				X		2007	185	192	300	300

(*Continued*)

TABLE 1. State Health Insurance Expansions for Parents, 1999–2012 (*continued*)

State	Within-state Analysis (N = 11)	Cross-state Analysis (N = 50)	Cross-state Analysis Classification: Public No Premium (N = 10)	Public Premium (N = 8)	Premium Assistance (N = 5)	Special Subsidized Plans (N = 5)	Control (N = 22*)	Year of Expansion	Preperiod Eligibility (% FPL): Nonworker	Preperiod Eligibility (% FPL): Worker	Postperiod Eligibility (% FPL): Nonworker	Postperiod Eligibility (% FPL): Worker
Virginia		X					X		24	31	25	31
Washington[#]												
West Virginia		X					X		21	28	16	32
Wisconsin[#]												
Wyoming		X					X		48	65	38	51

Notes: X indicates that a state's expansion is included in a given model. Preperiod eligibility is reported for the year before expansion, except for control states, where 1999 eligibility levels are reported.
*Control states did not change state eligibility policy or program type from 1999 to 2012, small observed changes in eligibility generally reflect fluctuation in eligibility relative to changes in the Federal Poverty Level.
†Multiple expansions of different types are included for this state.
‡Eligibility was rolled back in 2010.
§Eligibility was expanded for workers only.
||Expansion is excluded from dyad models due to a concurrent child eligibility expansion.
¶Eligibility was rolled back in 2002.
#We excluded 9 states and the District of Columbia for a number of reasons: eligibility expansions <25 percentage points (Ohio, Oregon, Wisconsin); consistent eligibility levels >200% FPL (District of Columbia, Minnesota); changes in program type without changes in eligibility (Illinois, Rhode Island); reductions in eligibility (Missouri, Washington); and concerns with policy data reliability (Tennessee).
**Eligibility was rolled back in 2012.
FPL indicates federal poverty level.
Sources: Eligibility and income requirements were obtained from the authors' review of reports from the Kaiser Family Foundation, the National Governor's Association, the National Alliance to Advance Adolescent Health, and Families USA as well as review of state waivers, state reports, and state plan amendments. Supplemental materials from local advocacy organizations and news reports were used to supplement missing data.

through spillover effects. The effect on children could be attributable to changes in the family budget that make purchasing child insurance possible or to parents enrolling previously eligible but unenrolled children when the parent enrolls. Evidence of such spillover effects has been demonstrated with parental Medicaid expansions but joint coverage has not been studied.[14–16] Having a parent enrolled in public coverage also improves retention of children in Medicaid and the Children's Health Insurance Program (CHIP).[4,5] States considering expansion under the ACA are doing so with the CHIP program still in place.

Prior state-level expansions to parents have taken a variety of forms. One approach has been to provide public health insurance, largely Medicaid but in some instances with limited benefits, either with or without an enrollee premium. However, premiums may result in lower enrollment in public coverage, shortened spells of enrollment, and an increased likelihood of being uninsured,[17–23] particularly among individuals without access to employer-sponsored insurance (ESI).[24] Providing subsidies for private health insurance is an additional approach to increase coverage among parents. Subsidy programs have been structured 2 ways. First, premium assistance programs provide subsidies for the purchase of ESI or coverage through the individual market. Second, special subsidized plans provide subsidies for the purchase of insurance through a specific state-offered plan or a limited number of state-selected managed care plans. The impact of these programs is less understood although some evidence suggests they may be effective in reducing uninsurance rates.[20,25]

Limited evidence exists on the impact of parental health insurance expansions on both parent and child insurance coverage, the differential effects of alternative expansion approaches, and the impact of public and private health insurance premiums on parents in income ranges affected by state expansions. This study seeks to fill these gaps by estimating the impact of previous parental health insurance expansions on the health insurance status of parents and their children. Knowledge about the effects of these expansions can shed important insight on the potential impact of expansions implemented and designed under the ACA as a large number of states consider the approach that is effective and politically acceptable to residents.

METHODS

Design

We used the 2000–2013 March supplements to the Current Population Survey (CPS), a large database with detailed demographic, socioeconomic, and employment characteristics among individuals in the United States. The March CPS includes state identifiers and detailed information on family income, making it possible to determine eligibility for health insurance expansions given each state's eligibility criteria. In addition, the March CPS includes information on health insurance coverage in the previous year. Additional data on private health insurance premiums were obtained from the Medical Expenditure Panel Survey

Insurance Component, and county-level economic data were obtained from the Area Resource File.

We use variation in states' parental health insurance expansions from 1999 to 2012 to estimate the probability that parents are insured; their children are insured; both the parent and child within a family unit are insured; and both are insured publicly or privately. We used a hierarchy to assign one type of health insurance to each individual: those reporting private coverage, followed by public coverage, and uninsured. We examined the effect of expansions on the health insurance status of parents and their children using parent-child dyads, by randomly selecting a child age ≤ 18 years for each parent. A random child was used in creating the dyads to avoid overrepresentation of multichild households. We excluded 3 states (Colorado, Indiana, Massachusetts) from all dyad analyses given concurrent eligibility expansions for parents and children in those states. Our analysis included all parental health insurance expansions ≥ 25 percentage points of the FPL (Table 1). Our sample included parents aged <65 years without Medicare coverage.

Cross-State Analysis

In our cross-state analysis we exploit the variation in parental health insurance expansion implementation during our study period using 2-way fixed effects models. This methodology allows for the analysis of multiple expansions in a given state. We included dummy variables in the models that indicate the presence or absence of a parental health insurance expansion for each state-year based on the year of expansion implementation. We used multivariable logistic regression to estimate individual insurance coverage, and multinomial logistic regression to estimate insurance coverage among dyads.

The study sample for the cross-state models consisted of parents $\leq 300\%$ FPL in the 19 expansion states (representing 28 expansions) and 22 control states without a parental expansion during the study period. We estimated the overall effect of an expansion, and the effect of each type of expansion (public insurance expansion without a premium, public insurance with a premium, premium assistance, and special subsidized plans). We excluded 9 states and the District of Columbia for a number of reasons (Table 1). The remaining 22 states were chosen as control states because they made no changes for parents from 1999 to 2012.

Within-State Analysis

Our within-state analysis examined the impact of parental health insurance expansions on insurance status using difference-in-difference modeling and a within-state control group. With difference-in-difference modeling, changes in the outcomes from the control group are subtracted from those of the treatment group, controlling for any group-specific and time-specific effects that may have affected insurance status during the study years. The treatment group includes parents eligible for insurance expansions, whereas the control group consists of near eligible parents $\leq 300\%$ of the FPL in expansion states.[12,26] With this method, we were limited to states with one expansion (n = 11) during the study period (Table 1). We used logistic regression to estimate individual insurance coverage and multinomial logistic regression to estimate the joint insurance configuration among dyads.

Impact of Premiums

We used multinomial logistic regression models to estimate the impact of annual out-of-pocket public and private health insurance premiums for individual coverage on the probability of public insurance, private insurance, and uninsurance among parents. We obtained private insurance premiums from the Medical Expenditure Panel Survey Insurance Component by firm size/state/year level. We adjusted the premium by the likelihood an employee was offered coverage based on firm size to calculate out-of-pocket contributions, as previously done in the literature.[20,22] Those without a worker in the household were assigned the full premium. Public insurance premiums were obtained from a variety of sources (Table 1) and adjusted by income level if needed. As public premium levels are of increased importance among individuals without access to ESI,[24] we also estimated separate models among parents with or without a worker in the household. We conducted the premium analysis among all parents eligible for an insurance expansion.

Multivariable Analyses

All regressions controlled for household, parent, child, and area-level characteristics that could affect insurance status. Household characteristics included family income, family size, and the presence of a child. Parent and child characteristics included age, sex, race/ethnicity, health status, disability status, and citizenship status. Additional parent characteristics included education, marital status, work status, firm size, and spousal work status. Area-level characteristics included urban/rural status, county-level unemployment rate, and county-level per capita income. All analyses were conducted in Stata version 14.0, included state and year-fixed effects, and adjusted SEs for clustering at the state/year level.

Sensitivity Analyses

We examine a number of alternative models to test the sensitivity of our results to the analytic sample included. First, since the full effects of an eligibility expansion may not occur immediately, we estimate models excluding the expansion year in each state. Second, we estimate our models excluding noncitizen parents, as noncitizens may not be eligible for state parental health insurance expansions.

RESULTS

Insurance Status Over Time

During our study period, insurance coverage decreased by 2.4 percentage points among parents in expansion states, whereas insurance coverage decreased by 11.2 percentage points among parents in control states (Table 2). Among children, the percent insured increased by 5.5 percentage points among those in expansion states and by 3.4 percentage points among those in control states. The percent of dyads with both the parent and child uninsured fell by 4.3 percentage points among those in expansion states and by 2.2

TABLE 2. Insurance Coverage Among Parents, Children, and Parent-child Dyads Among Eligible Parents, 1999 and 2012

	Expansion States				Control States			
	1999		2012		1999		2012	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Individual insurance status								
Parent insured	73.9	72.6–75.1	71.5	70.4–72.6	72.7	71.4–74.1	61.5	60.3–62.7
Child insured	81.5	80.4–82.6	87.0	86.2–87.9	81.4	80.2–82.5	84.8	84.0–85.7
Insurance status of the parent-child dyad								
Both insured	71.1	69.8–72.4	69.9	68.8–71.0	70.2	68.8–71.6	59.9	58.7–61.1
Parent only insured	2.8	2.3–3.3	1.6	1.3–1.9	2.5	2.1–3.0	1.6	1.3–1.9
Child only insured	10.4	9.5–11.2	17.0	16.2–18.0	11.3	10.3–12.2	24.7	23.6–25.8
Both uninsured	15.8	14.8–16.8	11.5	10.7–12.3	16.0	15.0–17.2	13.8	13.0–14.7
Type of insurance among insured dyads								
Both private	79.7	78.3–81.1	61.6	60.1–63.0	85.7	84.4–87.0	71.6	70.1–73.0
Both public	17.4	16.1–18.8	32.0	30.6–33.4	10.8	9.7–12.0	18.2	17.0–19.5
One public/one private	2.9	2.4–3.5	6.5	5.8–7.2	3.5	2.9–4.3	10.2	9.3–11.2

Sample includes parents up to 300% federal poverty level in the 19 expansion states and 22 control states without a parental expansion during the study period.
CI indicates confidence interval.

percentage points among those in control states. The percent of dyads with the parent and child both covered with private insurance fell by 18.1 percentage points among those in expansion states and 14.1 percentage points among those in control states. At the same time, the percent of dyads with a publicly insured parent and child increased by 14.6 percentage points among dyads in expansion states and 7.4 percentage points among those in control states.

Impact of Parental Insurance Expansions

The cross-state models indicate that parental insurance expansions were associated with significant changes in coverage among parents and their children (Table 3). Across all types of expansions, these policies increased insurance coverage by 2.5 percentage points among parents, and increased the likelihood of both the parent and child being insured by 2.1 percentage points. The impact of parental expansions varied by expansion type, with the largest effect on parental insurance coverage found among public insurance expansions without a premium and special subsidized plan expansions, increasing parental coverage by 4.0 and 4.2 percentage points, respectively. Public insurance expansions without a premium and expansions using special subsidized plans also increased the likelihood that the parent and child were insured by 4.8 and 3.1 percentage points, respectively, while no significant effect was observed for other expansion types. In addition, there was weak evidence that parental public insurance expansions without a premium increased coverage among children, while no significant effect for children was found among other expansions types.

Among insured dyads, the expansions increased the likelihood that both the parent and child were covered with public insurance by 1.4 percentage points, and deceased the likelihood that both were privately insured by 1.0 percentage points. This finding suggests that some type of "crowd out" is occurring among insured dyads, with a shift in the source of joint coverage away from private insurance and towards public insurance. This impact varied by expansion type. The largest increases in joint public insurance were observed among public insurance expansions without a premium and special subsidized plan expansions, with increases of 3.1 and 1.3 percentage points, respectively.

Consistent with our findings in the cross-state models, the within-state analysis indicates that parental insurance expansions were associated with significant changes in coverage among parents and importantly, indicate significant effects for their children (Table 4). The expansions increased insurance coverage by 3.1 percentage points for newly eligible parents, increased coverage by 1.8 percentage points for their children, and increased the likelihood of both the parent and child being insured by 2.1 percentage points.

Impact of Premiums

The average annual public health insurance premium faced by eligible parents was $150 (including those without a public premium), while the average private health insurance premium for individual coverage was $2450 (data not shown). A $500 increase in the annual public premium decreased the probability of public insurance by 1.9 percentage points, increased the probability of private insurance by 1.2 percentage points, and increased the probability of being uninsured by 0.6 percentage points (Table 5). Meanwhile, a $500 increase in private premiums decreased the probability of private insurance by 1.2 percentage points, increased the probability of public insurance by 0.8 percentage points, and increased the probability of being uninsured by 0.5 percentage points.

The impact of public and private premiums varied based on the presence of a worker in the household. Among parents with a worker in the household, private premiums had a substantial impact on insurance status. A $500 increase in private premiums decreased the probability of private insurance by 3.3 percentage points, increased the probability of public insurance by 1.0 percentage points, and increased the probability of being uninsured by 2.4 percentage points. Among parents without a worker in the household, private premiums did not have a significant impact on insurance status, while public premiums had a substantial impact.

TABLE 3. Effects of Parent Expansions on Insurance Status—Cross-state Models

			Type of Expansion†							
	Overall*		Public Insurance Without a Premium		Public Insurance With a Premium		Premium Assistance		Special Subsidized Plans	
	Marginal Effect	*P*	Marginal Effect	*P*	Marginal Effect	*P*	Marginal Effect	*P*	Marginal Effect	*P*
Individual insurance status										
Parent insured	0.025	<0.001	0.040	<0.001	0.009	0.068	0.017	0.038	0.042	<0.001
Child insured	0.002	0.715	0.018	0.094	−0.007	0.188	−0.001	0.908	0.005	0.561
Insurance status of the parent-child dyad										
Both insured	0.021	0.002	0.048	<0.001	0.006	0.278	0.011	0.248	0.031	0.001
Parent only insured	0.001	0.365	−0.001	0.736	0.003	0.035	0.002	0.370	−0.001	0.711
Child only insured	−0.018	<0.001	−0.030	0.003	−0.010	0.024	−0.011	0.099	−0.026	0.002
Both uninsured	−0.005	0.366	−0.018	0.046	0.002	0.701	−0.002	0.811	−0.005	0.539
Type of insurance among insured dyads										
Both private	−0.010	0.032	−0.009	0.232	−0.004	0.490	0.008	0.356	−0.011	0.160
Both Public	0.014	0.004	0.031	0.001	0.002	0.761	0.001	0.835	0.013	0.044
One public/one private	−0.004	0.390	−0.022	0.039	0.002	0.612	−0.010	0.144	−0.001	0.814

Sample includes parents and parent/child dyads up to 300% federal poverty level in the 19 expansion states and 22 control states without a parental expansion during the study period. Individual insurance status models are estimated with logistic regression, whereas dyad insurance status models are estimated with multinomial logistic regression. Models control for household characteristics (family income, family size, and having an infant), parent and child characteristics (age, sex, race/ethnicity, health status, disability status, and citizenship status), additional parent characteristics (education, marital status, working status, firm size, and spousal working status), area-level characteristics (urban/rural status, county-level unemployment rate, and county-level per capita income), and state and year-fixed effects.

*Model specification: $\text{InsuranceStatus}_{ijt} = \beta_0 + \beta_1 \text{Expansion}_{ijt} + \beta_2 X_{ijt} + \gamma \text{State}_j + \theta \text{Year}_t + \epsilon_{ijt}$

†Model specification: $\text{InsuranceStatus}_{ijt} = \beta_0 + \beta_1 \text{PublicPrem}_{ijt} + \beta_2 \text{PublicNoPrem}_{ij} + \beta_3 \text{PremAst} + \beta_4 \text{SpSubPlan} + \beta_5 X_{ijt} + \gamma \text{State}_j + \theta \text{Year}_t + \epsilon_{ijt}$

PublicPrem indicates Public Insurance With a Premium; PublicNoPrem, Public Insurance Without a Premium; PremAst, Premium Assistance; SpSubPlan, Special Subsidized Plans.

Specifically, a $500 increase in public premiums decreased the probability of public insurance by 9.8 percentage points, increased the probability of private insurance by 2.9 percentage points, and increased the probability of being uninsured by 6.9 percentage points.

TABLE 4. Effects of Parent Expansions on Insurance Status—Within-state Models

	Overall	
	Marginal Effect	*P*
Individual insurance status		
Parent insured	0.031	<0.001
Child insured	0.018	0.029
Insurance status of the parent-child dyad		
Both insured	0.021	0.036
Parent only insured	0.002	0.535
Child only insured	−0.005	0.598
Both uninsured	−0.018	0.012
Type of insurance among insured dyads		
Both private	0.006	0.604
Both public	−0.001	0.949
One public/one private	−0.006	0.521

Sample includes parents in expansion states who became eligible for the public health insurance expansions, and similar parents who were not eligible for the expansion with income higher than the eligibility level (up to 300% federal poverty level). Individual insurance status models are estimated with logistic regression, while dyad insurance status models are estimated with multinomial logistic regression. Models control for household characteristics (family income, family size, and having an infant), parent and child characteristics (age, sex, race/ethnicity, health status, disability status, and citizenship status), additional parent characteristics (education, marital status, working status, firm size, and spousal working status), area-level characteristics (urban/rural status, county-level unemployment rate, and county-level per capita income), and state and year-fixed effects.

Model specification: $\text{InsuranceStatus}_{ijt} = \beta_0 + \beta_1 \text{Post}_{ijt} + \beta_2 \text{Eligible}_{ij} + \beta_3 \text{Post*Eligible}_{ijt} + \beta_4 X_{ijt} + \gamma \text{State}_j + \theta \text{Year}_t + \epsilon_{ijt}$

Sensitivity Analyses

Overall, the various sensitivity checks showed the same pattern of results, implying a generally robust relationship between parental insurance expansions and health insurance status regardless of the analytic sample included. In our models excluding the initial year of expansions, we find similar patterns, but larger magnitudes. This suggests that the effects of the parental expansions may take some time to be fully realized.

DISCUSSION

Our analysis found that recent health insurance expansions among parents were effective in increasing health insurance coverage among both parents and their children, but that these effects varied by the type of expansion used by the state. The most effective expansions for parental insurance coverage were those for traditional Medicaid coverage without premiums and for special subsidized plans that subsidized costs for individuals to purchase state-sponsored plans. The subsidization of state-sponsored plans is the expansion type most analogous to states' (most notably Arkansas) use of waiver authority to use federal Medicaid expansion funds to purchase qualified health plan coverage for newly Medicaid-eligible individuals through the Health Insurance Marketplace. While the Southern states have been slow to expand under the ACA provisions, some states may be "watching" the Arkansas experiment as a politically feasible approach in their state.

The relative effects of these expansions for parents on parental insurance coverage, 4.0 percentage points for traditional Medicaid and 4.2 percentage points for state-sponsored

TABLE 5. Marginal Effects of a $500 Increase in Public and Private Premiums on Parent Health Insurance Status

	All Eligible Parents (n = 100,901)		Worker in Household (n = 75,363)		No Worker in Household (n = 25,538)	
	Marginal Effect	*P*	Marginal Effect	*P*	Marginal Effect	*P*
Parent uninsured						
Public premium	0.0063	0.067	0.0004	0.900	0.0692	<0.001
Private premium	0.0046	<0.001	0.0235	<0.001	0.0001	0.986
Parent public						
Public premium	−0.0186	<0.001	−0.0085	0.025	−0.0981	<0.001
Private premium	0.0077	<0.001	0.0096	<0.001	−0.0011	0.833
Parent private						
Public premium	0.0123	<0.001	0.0080	0.011	0.0289	<0.001
Private premium	−0.0123	<0.001	−0.0331	<0.001	0.0010	0.803

Sample includes parents eligible for public health insurance expansions. Models control for household characteristics (family income, family size, and having an infant), parent and child characteristics (age, sex, race/ethnicity, health status, disability status, and citizenship status), additional parent characteristics (education, marital status, working status, firm size, and spousal working status), area-level characteristics (urban/rural status, county-level unemployment rate, and county-level per capita income), and state and year-fixed effects.

Model specification: $\text{InsuranceStatus}_{ijt} = \beta_0 + \beta_1 \text{PublicPremium}_{ijt} + \beta_2 \text{PrivatePremium}_{ijt} + \beta_2 X_{ijt} + \gamma \text{State}_j + \theta \text{Year}_t + \epsilon_{ijt}$

plans, suggests that states using Section 1115 or other waivers to purchase coverage in special subsidized plans for low-income residents through the Marketplace will increase parental coverage perhaps as effectively as traditional Medicaid. Similar findings were also observed for joint parent and child coverage, in which public insurance without a premium and special subsidized plan expansions increased the likelihood of joint coverage among parents and their children. However, the effects of parental expansions on child coverage were mixed. Although the within-state models indicate that parental expansions increase the likelihood of child coverage, only weak effects were observed in the across state models and were limited to parental expansions of public insurance without a premium. Together, these findings suggest that the effect of parental health insurance expansions on increased coverage among children may be confined to parental expansions using the traditional Medicaid program.

The relative costs to both federal and state governments of these 2 types of expansions might mean one is more cost-effective than the other in terms of covering families. One argument for using premium assistance for Qualified Health Plans, for example, is reduced "churning" between public and private insurance sectors and, hence, reduced costs to taxpayers; a form of this hypothesis is being tested in 2 states (Arkansas and Iowa) at this time.[27] States with these waivers claim budget neutrality, arguing that the state would have had to increase Medicaid physician reimbursement rates to private rates to assure access for new enrollees, and that these states might be able to eventually set lower capitated payment rates for managed care plans since they will have a larger and more stable clientele. However, our finding that expansions designed as public programs without premiums targeting parents can also increase coverage among children should enter into this policy deliberation.

Another important consideration for insuring both parent and child is the so-called "family glitch." Determination of whether an employee's offered ESI plan is "affordable" is based only on the costs of an individual insurance plan. If an individual plan is determined to be affordable, that employee is unable to receive federal subsidies for family coverage through the marketplace, even if family coverage offered by their employer is unaffordable. This "glitch" may result in parents purchasing the "affordable" individual ESI plan for themselves and not covering their child through ESI. In such instances, CHIP serves an important role of providing public coverage for an otherwise uninsured child. In states with relatively lower CHIP income eligibility levels, however, parents may have no subsidized coverage option for their child. Moreover, if CHIP is not renewed in 2017 these parents would face large increases in the costs of obtaining child coverage because they are not eligible for subsidies. Parents without access to ESI could take advantage of the subsidies but would typically still face higher costs for coverage than the current generally modest CHIP premiums for their child. State designed buy-in options could address this issue for families, especially those in the 139%–200% FPL income range for which states can use the BHP option.

Our findings also provide information regarding the impact of premiums on the insurance status of parents. Among parents, higher public premiums were associated with a reduction in public insurance, and increased the likelihood of private insurance or being uninsured. This impact varied however, based on the presence of a worker in the household. Although parents without a worker in the household are a relatively small percentage of all parents, private premiums had no measureable impact on the likelihood of being insured among this population. Public premiums, however, were a significant deterrent to coverage for parents in nonworker households, and had effects on public coverage that were >10 times as large as the effects among working families. Among parents with a worker in the household, both the public and private premiums had a significant impact on insurance status; policymakers will need to assess the rate of increase in private premiums for their effects on parents, particularly those purchasing in the marketplace.

This analysis has limitations. Although the CPS is a standard dataset to measure insurance status, it may be subject to error. Individuals are asked in March about

insurance coverage during the preceding year, which may result in respondents erroneously reporting their coverage during the current year. Moreover, participant-reported distinctions between public coverage and nongroup private coverage may not be reliable, especially for plans administered for the states by private insurance carriers or networks of providers. We use annual income measures to determine expansion eligibility, but administrative determinations of eligibility consider income at a specific point in time. Our reliance on imputed health insurance premiums may introduce measurement error into our analysis. Lastly, the generalizability of our findings maybe limited given some key differences between our expansions and those under the ACA, namely the presence of the individual mandate and online eligibility systems.

Our analysis shows that expansions of public coverage without premiums for parents are successful at not only insuring parents, but may also increase insurance coverage among their children. This indicates that states expanding Medicaid for newly eligible adults under the ACA will see greater increases in insurance coverage for children than nonexpanding states. Our results suggest that using section 1115 or eventually, 1332 waivers to provide subsidies for the purchase of coverage through special subsidized plans for low-income residents through the Health Insurance Marketplace is an effective alternative option for increasing parental coverage, but might not result in higher coverage rates for children. Whether this approach is cost-effective needs to be evaluated. Putting states in control of the subsidy structure under 1115 or 1332 waiver options or use of the BHP option for families with incomes 139-200% FPL could moderate the impact of the family glitch inherent in current Internal Revenue service regulations regarding the ACA-based subsidies by creating alternative pathways to joint coverage of parents and children.

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