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The Effect of Lowering Public Insurance Income Limits on Hospitalizations for Low-Income Children

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abstract

BACKGROUND AND OBJECTIVES: Thirty million children are currently covered by public insurance; however, the future funding and structure of public insurance are uncertain. Our objective was to determine the number, estimated costs, and demographic characteristics of hospitalizations that would become ineligible for public insurance reimbursement under 3 federal poverty level (FPL) eligibility scenarios.

METHODS: In this retrospective cohort study using the 2014 State Inpatient Databases, we included all pediatric (age <18) hospitalizations in 14 states from January 1, 2014, to December 31, 2014, with public insurance as the primary payer. We linked each patient's zip code to the American Community Survey to determine the likelihood of the patient being below 3 different public insurance income eligibility thresholds (300%, 200%, and 100% of the FPL). Multiple simulations were used to describe newly ineligible hospitalizations under each threshold.

RESULTS: In 775 460 publicly reimbursed hospitalizations in 14 states, reductions in eligibility limits to 300%, 200%, or 100% of the FPL would have resulted in large numbers of newly ineligible hospitalizations (~155 000 [20% of hospitalizations] for 300%, 440 000 [57%] for 200%, and 650 000 [84%] for 100% of the FPL), equaling \$1.2, \$3.1, and \$4.4 billion of estimated child hospitalization costs, respectively. Patient demographics differed only slightly under each eligibility threshold.

CONCLUSIONS: Reducing public insurance eligibility limits would have resulted in numerous pediatric hospitalizations not covered by public insurance, shifting costs to families, other insurers, or hospitals. Without adequately subsidized commercial insurance, this reflects a potentially substantial economic hardship for families and hospitals serving them.



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Dr Bettenhausen proposed the study idea, participated in the study design, analysis, and interpretation of the data, and was the primary author of the manuscript; Drs Hall, Colvin, Puls, and Chung participated in the study design, analysis, and interpretation of the data and were authors of the manuscript; and all authors provided critical intellectual content in the revision of the manuscript and approved the final manuscript as submitted.

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WHAT'S KNOWN ON THIS SUBJECT: The availability of public insurance expanded health care access for children, including many in low-income working families. States are dependent on federal financial support for public insurance; decreased federal funding may push states to limit public insurance enrollment for children.

WHAT THIS STUDY ADDS: If public insurance eligibility limits were reduced to 300%, 200%, or 100% of the federal poverty level, numerous publicly reimbursed hospitalizations would become ineligible (~155 000, 440 000, and 650 000 annually, respectively), resulting in shifting costs to families, other insurers, or hospitals.

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Medicaid and the Children's Health Insurance Program (CHIP) provide health care to over 30 million children. Income eligibility limits for Medicaid have historically directed Medicaid-funded health care to children in poverty. In 1997, the introduction of CHIP (hereafter, Medicaid and CHIP will be referred to simply as "public insurance") expanded health care access for children, including many in low-income working families.^{1,2} Increases in child health care access resulted in more consistent primary care use, decreases in avoidable hospitalizations, and decreases in child mortality.^{3,4} Rollbacks in public insurance eligibility criteria may potentially result in large increases in both noninsurance and underinsurance owing to the cost of obtaining commercial insurance coverage for low income families.⁵

Currently, Medicaid spends \$100 billion per year in health care payments for children.^{6,7} Several recent proposals for cost-saving mechanisms (including block grant and per-capita caps) are aimed at controlling rising federal Medicaid expenditures.^{8,9} These financing options are typically adjusted by annual growth rates, with a goal of adequate health care access and controlled costs.¹⁰ However, if annual growth rates are set inappropriately low (eg, global budgetary pressures, unanticipated increases in disease burden, or care pricing), these models may fail to account for year-to-year increases in health care costs and may leave states to absorb a greater financial burden.¹¹

States are dependent on federal financial support for public insurance; the federal share of public insurance costs exceeds 50% in all states and is >70% in one-quarter of states.¹² A decrease in federal funding may push states to employ fiscal reduction strategies for children covered by Medicaid, including limitation of public insurance

enrollment, covered services, or access to preventive and acute care services. One likely method for reducing expenditures would be to decrease enrollment by lowering income eligibility thresholds. Public insurance eligibility thresholds for children vary by state between 152% and 405% of the federal poverty level (FPL). If income eligibility thresholds were reduced from their current levels, some children currently insured by public insurance would lose public coverage and would be eligible only for commercial insurance. If they were unable to obtain commercial insurance, some combination of 3 events would occur: (1) families would become directly responsible for health care expenses, (2) hospital systems would become responsible for unpaid expenses, or (3) care would be forgone.

Inpatient hospitalization represents 1 of the highest health care costs for children with public insurance.¹³ Therefore, our primary objective was to describe the impact of decreasing public insurance eligibility threshold on insurance coverage of pediatric hospitalizations. We sought to provide the number and estimated costs of hospitalizations that would become ineligible on the basis of 3 hypothetical eligibility scenarios for public insurance (maximums of 300% of the FPL, 200% of the FPL, and 100% of the FPL). Our secondary objective was to describe the demographic characteristics of children currently covered by public insurance whose hospitalizations would become ineligible under the 3 eligibility threshold scenarios.

METHODS

Study Design and Setting

We conducted a retrospective cohort study using the 2014 Agency for Healthcare Research and Quality's State Inpatient Databases (SID). The SID are a set of state-based all-payer inpatient databases for

all hospitalized patients.¹⁴ The SID do not include information about individual family income. Therefore, states were included only if the zip code for patients' home residence was available (14 states; Table 1). To obtain the percentage of families living at various thresholds of the FPL (<100%, 100%–199%, and 200%–299%), and thus the percentage of children insured by public insurance, we geocoded each patient's zip code to the US Census Bureau's 2014 American Community Survey (ACS).¹⁵ This procedure is similar to previous work in which zip codes were used as a proxy for household income to estimate the effects of income on pediatric health services use.¹⁶ The FPL threshold for state-level Medicaid and CHIP eligibility in 2014 was collected from the Kaiser Family Foundation's Commission on Medicaid and the Uninsured.¹⁷

Study Population

We included all pediatric (age <18 years) hospitalizations in the 14 states from January 1, 2014, to December 31, 2014, with public insurance as the primary payer. Hospitalizations with missing or erroneous zip codes were excluded (0.1%).

Main Exposure

The main exposure was lowering public insurance eligibility thresholds to 300%, 200%, and 100% of the FPL for children currently insured through public insurance.

Main Outcome

The main outcomes were the number, estimated costs, and demographic characteristics of children whose hospitalizations would become ineligible under each of the 3 different public insurance income eligibility thresholds.

Study Definitions

Normal newborns were defined as any hospitalization with a principal

TABLE 1 State-Level Public Insurance Eligibility Limits Based on the FPL and Hospital Use for Children Enrolled in Public Insurance in 2014

State	State-Level Public Insurance Eligibility (% FPL) and Enrollment, N (%)			Hospitalizations for Children Enrolled in Public Insurance ^a	
	Children ^b , N	Public Insurance Eligibility, % FPL ^c	Children Enrolled in Public Insurance ^b , %	N	Total Costs (\$, in Millions)
Arizona	1 618 368	152	37	64 938	395.4
Colorado	1 232 503	266	30	34 166	295.1
Florida	4 011 668	215	40	200 986	1164.9
Iowa	723 081	317	33	39 934	114.3
Kentucky	1 016 118	218	40	41 764	287.0
North Carolina	2 281 113	216	41	80 172	436.2
Nebraska	461 286	218	30	8717	45.4
New Jersey	2 031 951	355	29	49 605	291.3
New York	4 263 500	405	39	155 834	1174.0
Oregon	858 892	305	37	25 282	173.7
Rhode Island	217 046	266	35	8490	74.2
Vermont	124 685	318	46	2960	21.1
Washington	1 588 492	305	36	42 013	437.0
Wisconsin	1 314 966	306	33	40 566	310.0

^a The total number of hospitalizations and costs were taken from the Agency for Healthcare Research and Quality's 2014 SID.

^b The number of children and percent of children enrolled in public insurance was taken from the 2014 ACS.

^c Public insurance income eligibility requirements (% of the FPL) were taken from the Kaiser Family Foundation. Public insurance includes Medicaid and CHIP.

diagnosis of birth (*International Classification of Diseases, Ninth Revision, Clinical Modification*) and a length of stay of 3 days or less. Age groups were then defined as normal newborn, other infants <1 year, children 1 to 4 years, 5 to 9 years, and 10 to 17 years. Race and ethnicity were categorized as non-Hispanic white, non-Hispanic African American, Hispanic, other, and missing. Hospitalizations missing race and/or ethnicity were primarily from Nebraska, which does not report race and/or ethnicity. Hospitalizations for children with complex chronic conditions (CCCs) were determined by using a previously established set of *International Classification of Diseases, Ninth Revision, Clinical Modification* codes and represent conditions that are expected to last longer than 12 months and are associated with high rates of morbidity and/or mortality.^{18,19} Rurality for each patient was determined by linking each patient's home zip code to the rural-urban commuting area code.²⁰

Hospitalization costs were estimated from billed hospital charges by using hospital-specific cost-to-charge ratio files.²¹

State-Level FPL Scenarios

For states where the public insurance eligibility limit exceeded 300% of the FPL ($n = 6$ of 14 states), we lowered the FPL limit to 300%. Next, we calculated the number, percent, estimated costs, and characteristics of hospitalizations in 2014 that would have become ineligible on the basis of that new public insurance income eligibility threshold. We repeated this procedure for public insurance income eligibility limits of 200% of the FPL (lowering eligibility limits for 13 of 14 states) and 100% of the FPL (lowering eligibility limits for all included states).

Statistical and Simulation Methods

Categorical variables were summarized with frequencies and percentages, whereas continuous variables were summarized with medians with interquartile ranges (IQRs). Linear relationships between

state-level measures were assessed with linear regression. The actual family household income level for each patient was unknown. However, the ACS provided the percentage of households living at different levels of the FPL (<100%, <200%, and <300%) in each patient's residential zip code. We performed 1000 simulations for each FPL eligibility scenario (100%, 200%, and 300%), and during each simulation, we randomly set each hospitalization to be from a child living above or below the eligibility limit using a Bernoulli trial, with the probability being the proportion of children in the patient's zip code living at less than the eligibility limit (Supplemental Fig 2). After each simulation, the number and percent of 2014 hospitalizations with public insurance as the primary payer that would have been ineligible for public insurance (ie, over each FPL scenario limit) and the characteristics of these hospitalizations (estimated costs, clinical characteristics, and demographics) were determined as stated above. The results of simulations were summarized with medians and IQRs.

All statistical analyses were performed by using SAS v 9.4 (SAS Institute, Inc, Cary, NC), and P values <.05 were considered statistically significant.

The Office of Research Integrity at Children's Mercy Hospital deemed this study exempt from institutional board review.

RESULTS

Change in Public Insurance Status Under 3 Income Eligibility Scenarios

The 14 states examined in this study included 30.6% of family households within the United States. Of included families, 43.1% lived below 300% of the FPL, 27.2% below 200% of the FPL, and 11.2% below 100% of the FPL (Supplemental Fig 3). Six states

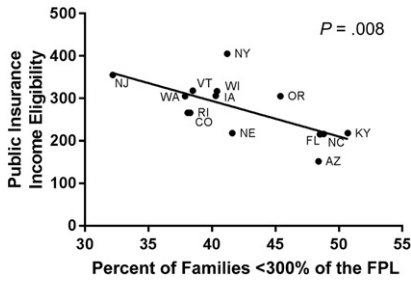


FIGURE 1 Percentage of families living <300% of the FPL and 2014 public insurance eligibility limits. The percent of families with incomes <300% of the FPL was taken from the 2014 ACS. Public insurance income eligibility requirements (% of the FPL) were taken from the Kaiser Family Foundation. Public insurance includes Medicaid and CHIP. AZ, Arizona; CO, Colorado; FL, Florida; IA, Iowa; KY, Kentucky; NC, North Carolina; NE, Nebraska; NJ, New Jersey; NY, New York; OR, Oregon; RI, Rhode Island; VT, Vermont; WA, Washington; WI, Wisconsin.

had public insurance eligibility limits >300% of the FPL, 13 states had limits >200% of the FPL, and all 14 states had limits >100% of the FPL. Public insurance eligibility limits differed considerably across states (Table 1). Public insurance FPL eligibility limits tended to be lower in states with a greater percentage of families below 300% of the FPL (Fig 1; $P = .01$).

After 1000 simulations, we identified 7 994 484 children as eligible for public insurance in the 14 included states, equaling 21.3% of publicly insured US children. For the 795 427 pediatric hospitalizations for this sample of children, total estimated hospitalization costs were calculated at \$5.2 billion.

In 7 states, 2014 public insurance eligibility exceeded 300% of the FPL. By reducing public insurance eligibility to 300% of the FPL in those states, the number of hospitalizations currently reimbursed by public insurance that would no longer be eligible was ~155 000 (45.5%–58.3% of hospitalizations by state; Table 2, Supplemental Table 4). These reductions would exclude at least 1 hospitalization for ~144 000 children and their families. Median per-hospitalization estimated costs

TABLE 2 Public Insurance Hospitalizations in 2014 for Children in 3 Public Insurance FPL Limit Eligibility Scenarios

	Percent of Current Public Insurance Hospitalizations That Would Become Ineligible, Median (IQR)	Cost per Hospitalization That Would Become Ineligible, \$, Median (IQR)
Eligibility limit reduced to 100% FPL		
Arizona	79.8 (79.7–79.9)	6093 (6061–6125)
Colorado	86.7 (86.6–86.8)	8660 (8617–8706)
Florida	83.5 (83.4–83.6)	5790 (5773–5806)
Iowa	89.2 (89.1–89.3)	2859 (2840–2879)
Kentucky	82.6 (82.5–82.7)	6882 (6834–6930)
North Carolina	84.0 (83.9–84.1)	5436 (5412–5458)
Nebraska	86.5 (86.2–86.7)	5176 (5122–5225)
New Jersey	84.0 (83.9–84.1)	5910 (5887–5931)
New York	81.0 (80.9–81.1)	7469 (7450–7490)
Oregon	86.1 (86.0–86.3)	6872 (6831–6908)
Rhode Island	82.4 (82.1–82.6)	8810 (8697–8928)
Vermont	90.6 (90.2–90.9)	7153 (7049–7238)
Washington	88.0 (87.9–88.2)	10 434 (10 389–10 475)
Wisconsin	85.2 (85.1–85.3)	7581 (7534–7629)
Eligibility limit reduced to 200% FPL		
Arizona		Limit is <200%
Colorado	67.6 (67.4–67.7)	8672 (8603–8752)
Florida	61.3 (61.3–61.4)	5778 (5748–5806)
Iowa	72.3 (72.1–72.4)	2854 (2817–2889)
Kentucky	62.1 (62.0–62.3)	6915 (6839–6997)
North Carolina	63.3 (63.1–63.4)	5440 (5403–5474)
Nebraska	66.8 (66.5–67.2)	5137 (5048–5221)
New Jersey	65.6 (65.4–65.7)	5956 (5922–5990)
New York	61.2 (61.1–61.3)	7397 (7363–7431)
Oregon	67.2 (67.0–67.4)	6883 (6811–6957)
Rhode Island	62.2 (61.9–62.5)	8879 (8701–9063)
Vermont	75.1 (74.6–75.6)	7200 (7054–7363)
Washington	71.1 (71.0–71.3)	10 515 (10 441–10 589)
Wisconsin	67.2 (67.0–67.3)	7536 (7455–7618)
Eligibility limit reduced to 300% FPL		
Arizona		Limit is <300%
Colorado		Limit is <300%
Florida		Limit is <300%
Iowa	54.0 (53.8–54.1)	2859 (2806–2909)
Kentucky		Limit is <300%
North Carolina		Limit is <300%
Nebraska		Limit is <300%
New Jersey	50.0 (49.9–50.2)	5991 (5944–6039)
New York	45.5 (45.4–45.6)	7360 (7314–7408)
Oregon	49.3 (49.1–49.5)	6872 (6775–6974)
Rhode Island		Limit is <300%
Vermont	58.3 (57.7–58.9)	7308 (7057–7538)
Washington	54.7 (54.5–54.8)	10 634 (10 525–10 749)
Wisconsin	49.6 (49.5–49.8)	7514 (7407–7625)

The number of hospitalizations with public insurance as a primary payer as well as costs were taken from the Agency for Healthcare Research and Quality's 2014 SID. The ACS provided the percentage of households living at different levels of the FPL (<100%, <200%, and <300%) in each patient's residential zip code. We then performed 100 simulations for each FPL eligibility scenario (100%, 200%, and 300%). After each simulation, the number and percent of 2014 hospitalizations with public insurance as the primary payer that would have been ineligible for public insurance (over each FPL scenario limit) is reported.

associated with these ineligible hospitalizations ranged from \$5991 to \$10 634, accumulating \$1.2 billion in estimated costs.

The 2014 eligibility limits exceeded 200% of the FPL in 13 of the 14

states. (Only 1 state included in the study, Arizona, has an eligibility level below 200% of the FPL.) If eligibility limits were reduced to 200% of the FPL, ~440 000 hospitalizations would no longer be covered by

TABLE 3 Characteristics of Hospitalized Children Covered by Public Insurance in 2014 Who Would Become Ineligible for Public Insurance on the Basis of 3 FPL Limit Eligibility Scenarios

	Characteristics of All Public Insurance Hospitalizations, Mean %	Characteristics of Hospitalized Children Over Various FPL Eligibility Scenarios, Mean %		
		100% FPL	200% FPL	300% FPL
Age				
Normal newborn	53.2	53.3	53.1	54.8
Other infants, y				
<1	18.6	18.5	18.6	18.4
1–4	8.7	8.6	8.6	8.5
5–9	5.8	5.8	5.8	5.6
10–17	13.8	13.8	13.9	12.7
Race and/or ethnicity				
Non-Hispanic white	38.0	39.4	41.2	40.1
Non-Hispanic African American	20.2	19.3	19.5	15.1
Hispanic	24.5	23.8	21.1	20.2
Other	11.2	11.0	11.2	16.2
Missing	6.2	6.4	7.1	8.3
Patient residence				
Urban	84.2	84.0	83.5	85.5
Rural	15.8	16.0	16.5	14.5
CCC	12.9	12.9	12.9	12.4

The number of hospitalizations with public insurance as a primary payer were taken from the Agency for Healthcare Research and Quality's 2014 SID. The ACS provided the percentage of households living at different levels of the FPL (<100%, <200%, and <300%) in each patient's residential zip code. We then performed 100 simulations for each FPL eligibility scenario (100%, 200%, and 300%). After each simulation, the demographic characteristics of 2014 hospitalizations with public insurance as the primary payer that would have been ineligible for public insurance (over each FPL scenario limit) is reported.

public insurance (61.2%–75.1% of hospitalizations by state). Nearly 412 000 children and their families would be responsible for at least 1 hospitalization under these changes. Median estimated costs of these ineligible hospitalizations varied from \$2854 to \$10 515, totaling \$3.1 billion in estimated costs.

The 2014 eligibility limits of all 14 included states exceeded 100% of the FPL. If the FPL eligibility threshold of those states were reduced to 100% of the FPL, the number of hospitalizations currently reimbursed by public insurance that would no longer be eligible would increase to ~650 000 (79.8%–90.6% of hospitalizations by state). Close to 608 000 children and their families would be affected 1 or more times by these reductions. The median per-hospitalization estimated costs of ineligible hospitalizations remained relatively stable (\$2859–\$10 434), but the total estimated costs summed \$4.4 billion.

Characteristics of Hospitalizations of Children Losing Public Insurance Eligibility Under 3 Eligibility Scenarios

The entire study population of hospitalized, publicly insured children was generally young, with a plurality (38.0%) being non-Hispanic white (20.2% were non-Hispanic African American and 24.5% were Hispanic). Most hospitalizations were for public insurance recipients living in urban settings (84.2%; Table 3). The demographics of patients who would lose public insurance under lowered eligibility thresholds differed only slightly across thresholds. For instance, when eligibility levels were reduced to 300% of the FPL, newly ineligible hospitalizations were 40.1% non-Hispanic white (compared with 38.0% under current thresholds).

Hospitalization types also differed only slightly for each reduction in public insurance eligibility limits. For example, when eligibility

levels were reduced to 300% of the FPL, the greatest proportion of hospitalizations were for normal newborns (54.8% compared with 53.2% under current eligibility thresholds). The proportion of hospitalizations for children with CCCs was also relatively equal (12.4% compared with 12.9%) to current eligibility thresholds (12.4% compared with 12.9%). These proportions did not change substantially with reductions of public insurance eligibility to 200% of the FPL and 100% of the FPL.

Normal Newborns

Normal newborns who are currently publicly insured represent the majority of children affected by reductions of income eligibility requirements at all levels (300%, 200%, and 100% of the FPL). For example, the number of normal newborn hospitalizations covered by public insurance would decrease by 96 375 (23%) if income eligibility levels were decreased to 300% of the FPL (7 states), 249 317 (59%) if decreased to 200% of the FPL (13 states), and 355 828 (84%) if reduced to 100% of the FPL (14 states; Supplemental Tables 5 and 6). Estimated costs associated with normal newborn hospitalizations would equal \$149 million, \$303 million, and \$423 million for reductions to 300% of the FPL, 200% of the FPL, and 100% of the FPL, respectively.

DISCUSSION

In this study of 795 427 hospitalizations of children with public insurance across 14 geographically diverse states, we found that public insurance would no longer reimburse half or more of currently covered hospitalizations and their associated estimated costs under each of 3 scenarios of lowered income eligibility criteria and would result in up to \$4.4 billion

of estimated hospital costs ineligible for public insurance reimbursement. With these findings, we suggest that reducing public insurance eligibility may potentially result in a large number of children who are currently publicly insured having to either purchase commercial insurance or become uninsured. With these findings, we also predict substantial shifts in costs to lower income families, commercial insurance (if obtainable by families), and/or the health care institutions that serve them.

Impacts on Families and Children

Under 3 scenarios of decreased income eligibility criteria, loss of public insurance would disproportionately affect healthy newborns. Although they vary by state, existing income eligibility criteria for newborns greatly exceeds that for any other age group, and current law (Children's Health Insurance Program Reauthorization Act of 2009, Public Law 111-3) allows for fast-tracking public insurance coverage for newborn infants until 12 months provided that their mothers received or were eligible for Medicaid or CHIP coverage during pregnancy.²²⁻²⁴ Newborn hospitalization is 1 of the fastest-rising costs in pediatric care.²⁵ In our study, hospitalization costs for normal newborns ranged from ~\$700 to \$2000. Depending on whether a family can obtain commercial insurance for their child after losing public insurance eligibility, the cost of the newborn hospitalization (or potentially the charges, which generally exceed the costs) may represent a significant financial strain for those families. Across all types of hospitalizations, however, the estimated costs associated with a hospitalization ranged from ~\$3000 to \$10 000. Given that 200% of the FPL for a family of 4 is \$59 640, the cost of a single hospitalization may represent

~5% to 15% of a family's annual income.^{26,27} This may represent an untenable financial burden.

Impacts on Institutions

Decreases in health care coverage for children and families would also have implications for health care institutions serving lower income children. The specific impact of those changes would depend on whether newly ineligible children would be able to obtain commercial insurance as well as the specific health benefits of those commercial plans. What is clear is that a large amount of reimbursement (albeit reimbursement that is typically below costs) would be at stake. For the 14 states examined in this study, estimated hospitalization costs for children who would lose public insurance eligibility equaled \$1.2 billion when income eligibility was reduced to 300% of the FPL, \$3.1 billion at 200% of the FPL, and \$4.4 billion at 100% of the FPL. Consequently, changes in public insurance income eligibility criteria may place health care institutions at greater financial risk, especially safety-net hospitals, which already operate at narrower financial margins,^{28,29} and other hospitals serving large numbers of newborns and low-income families.³⁰

State-Level Effects of Reduced Federal Funding for Public Insurance

Funding of public insurance comprises a large proportion of state budgets.¹² Outside of our analysis of public insurance eligibility changes, we found that state-level public insurance FPL eligibility criteria were indirectly proportional to the percentage of state population near poverty (ie, states with higher proportions of children in poverty had lower public insurance eligibility thresholds). It is likely that higher income eligibility thresholds in states with many near-poor residents would result in higher marginal costs

compared with higher thresholds in states with fewer near-poor residents. State government budgets are more restrictive, including legal requirements for a balanced budget and debt limits in many states.³¹ Therefore, any reductions in state-level funding for pediatric public insurance programs may result in lowering of eligibility thresholds.

Limitations

This study has several limitations. First, our sample was limited to the 14 states in the SID that reported zip codes. However, these states represented approximately one-third of US families and were diverse in their geography, population characteristics, and public insurance FPL eligibility criteria. Second, we did not account for public insurance eligibility for people with disabilities that may have resulted in some children retaining coverage. Although small in number, children with special health care needs represent a large fraction of child health care spending and may have more frequent and complex admissions. The costs specifically attributable to medical complexity are relevant but difficult to validly assess within this data set. Third, CHIP income eligibility limits equaled or exceeded age-specific limits for Medicaid and/or Title XXI CHIP for children of all ages in all states except Iowa (separate CHIP limits 317% of the FPL versus age-specific Title XXI CHIP funding for infants aged 0–1 year 380% of the FPL). As a result, we likely underestimate the effects of a reduction in benefits for infants aged 0 to 1 year in Iowa but likely not in other states. Fourth, although we used cost-to-charge ratio files provided specifically for the SID from the Healthcare Cost and Utilization Project, estimated hospitalization costs varied significantly on the basis of states. Information about hospitalizations within the SID is collected by states but may include

different entities within states, which may or may not include observation status.^{32,33} It is also likely that differences in cost of living contribute to differences in hospitalization costs (eg, the wage index for Washington is among the highest at 1.13, whereas Iowa is much lower at 0.89).³⁴ Last, given the nature of our data set, individual child-level income characteristics are unknown and were based on zip codes. Zip codes have been shown to be a reasonable proxy for socioeconomic factors but may not fully reflect the

characteristics of all individuals within a given area.^{35–38}

well-being of their families and health care institutions would be greatly impacted.

CONCLUSIONS

Eligibility scenarios in which reductions in public insurance eligibility thresholds for children are simulated resulted in the loss of public insurance coverage for a large number of pediatric hospitalizations. If families of children losing public insurance were unable to obtain commercial insurance, the health of those children and the economic

ABBREVIATIONS

ACS: American Community Survey
CCC: complex chronic condition
CHIP: Children's Health Insurance Program
FPL: federal poverty level
IQR: interquartile range
SID: State Inpatient Databases

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