

# The Role of Public Health Insurance in Reducing Child Poverty



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## ABSTRACT

Over the past 30 years, there have been major expansions in public health insurance for low-income children in the United States through Medicaid, the Children's Health Insurance Program (CHIP), and other state-based efforts. In addition, many low-income parents have gained Medicaid coverage since 2014 under the Affordable Care Act. Most of the research to date on health insurance coverage among low-income populations has focused on its effect on health care utilization and health outcomes, with much less attention to the financial protection it offers families. We review a growing body of evidence that public health insurance provides important financial benefits to low-income families. Expansions in public health insurance for low-income children and adults are associated with reduced out of pocket medical spending, increased financial stability, and improved material well-being for families. We also review the potential poverty-reducing effects of public health insurance coverage. When out of pocket medical expenses are taken into account in defining the poverty rate, Medicaid plays

a significant role in decreasing poverty for many children and families. In addition, public health insurance programs connect families to other social supports such as food assistance programs that also help reduce poverty. We conclude by reviewing emerging evidence that access to public health insurance in childhood has long-term effects for health and economic outcomes in adulthood. Exposure to Medicaid and CHIP during childhood has been linked to decreased mortality and fewer chronic health conditions, better educational attainment, and less reliance on government support later in life. In sum, the nation's public health insurance programs have many important short- and long-term poverty-reducing benefits for low-income families with children.

**KEYWORDS:** Children's Health Insurance Program; Medicaid; poverty; public health insurance; child poverty

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THE LINK BETWEEN poor health and poverty has been well documented and the relationship is complex. Not only is poverty a contributing factor to poor health outcomes, but people in poor health often have low incomes as a result of their health problems. The financial burden of medical care, measured as out of pocket spending relative to total family income, is substantially greater for low-income families with children than for families with higher incomes and for families that have children or other family members with special health care needs.<sup>1,2</sup> More than a quarter of poor families with children have total out of pocket expenditures exceeding 10% of family income,<sup>1</sup> a threshold commonly used to capture catastrophic spending or being “underinsured.”

By subsidizing many of the costs associated with medical care, public health insurance can play a critical role in improving the financial well-being of low-income families with children. Over the past 30 years, there have been major expansions in public health insurance for low-income children in the United States under Medicaid and the

Children's Health Insurance Program (CHIP). In addition, millions of low-income parents have gained coverage through the Medicaid expansion and subsidies available for marketplace coverage under the Affordable Care Act (ACA). In this article, we provide an overview of the public health insurance options available for poor and low-income families with children, and then review the evidence connecting public health insurance to financial and economic outcomes for families. We also discuss the role of public health insurance in reducing poverty in the United States. We conclude with a review of emerging evidence indicating that health insurance coverage during childhood might help mitigate the harmful effects of childhood poverty later in life. In the [Table](#), a summary of the main themes discussed in this article are presented.

## HEALTH INSURANCE OPTIONS FOR LOW-INCOME FAMILIES

To address disparities in child health care, US policy has primarily focused on increasing access to medical care for

**Table.** The Role of Public Health Insurance in Improving Family Financial Well-Being

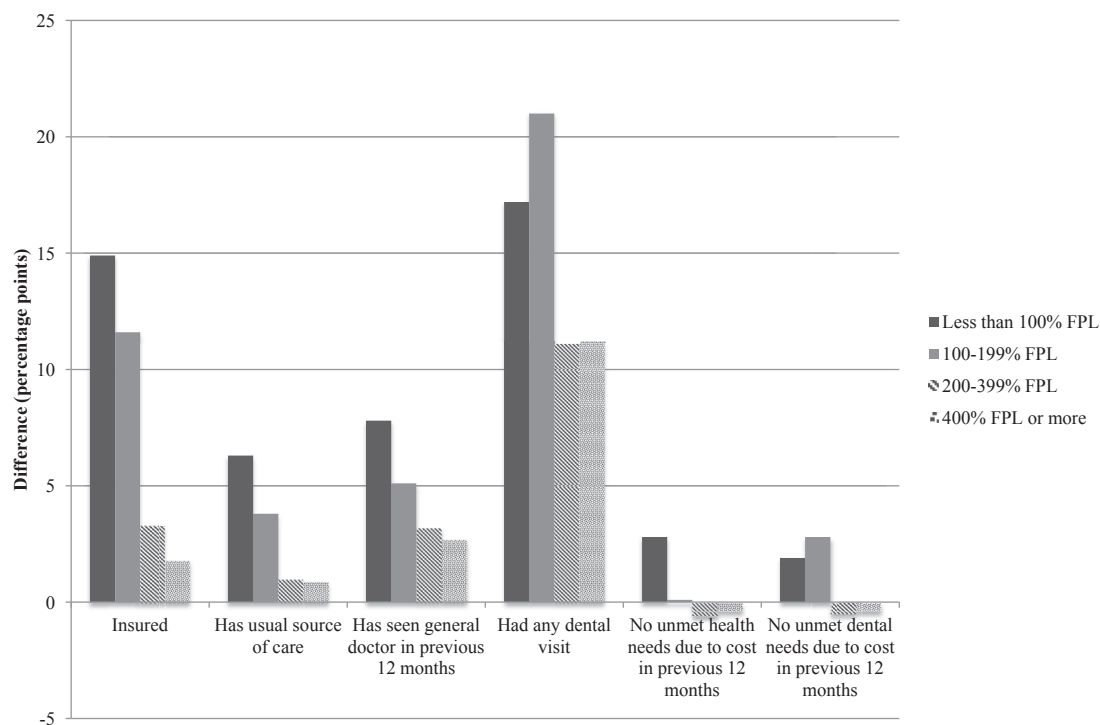
Key Lesson	Research Findings	Sources
Public health insurance provides financial protection to families	<ul style="list-style-type: none"> <li>• Less out-of-pocket medical spending and decreased household bankruptcy are associated with expansions in public health insurance for children.</li> <li>• Families with children who switch to public health insurance from either private insurance or being uninsured experience lower out-of-pocket costs, fewer difficulties paying medical bills, and less difficulty meeting their child's health care needs.</li> <li>• Expansions in public health insurance for low-income parents and adults decrease out-of-pocket medical expenses, difficulties paying medical bills, catastrophic expenditures, and the frequency of unpaid medical bills sent to collection agencies for recovery.</li> </ul>	Finkelstein et al <sup>3</sup> McMorrow et al <sup>4</sup> Baicker et al <sup>5</sup> Banthin and Selden <sup>6</sup> Davidoff et al <sup>7</sup> Leininger et al <sup>8</sup> Clemans-Cope et al <sup>9</sup> Zickafoose et al <sup>10</sup> Shaefer et al <sup>11</sup> Gross and Notowidigjo <sup>12</sup> Gruber and Yelowitz <sup>13</sup>
Fewer families live in poverty as a result of decreased out-of-pocket medical spending under public health insurance	<ul style="list-style-type: none"> <li>• More children and families meet the Supplemental Poverty Measure definition of poverty in the absence of Medicaid.</li> </ul>	Sommers and Oellerich <sup>14</sup>
Public health insurance connects families to other social support programs	<ul style="list-style-type: none"> <li>• Increased participation in food assistance programs is associated with expanded eligibility for public health insurance.</li> </ul>	Baicker et al <sup>15</sup> Yelowitz <sup>16</sup>
Public health insurance for children influences long-term health and economic outcomes	<ul style="list-style-type: none"> <li>• Improved teenage and adult health including better self-reported health, lower mortality, fewer chronic conditions, and less frequent hospitalizations associated with increased exposure to public health insurance during childhood.</li> <li>• Improved educational attainment including higher reading test scores and increased rates of high school and college completion also associated with exposure to public health insurance during childhood.</li> </ul>	Boudreaux et al <sup>17</sup> Wherry and Meyer <sup>18</sup> Wherry et al <sup>19</sup> Currie et al <sup>20</sup> Brown et al <sup>21</sup> Miller and Wherry <sup>22</sup> Levine and Schanzenbach <sup>23</sup> Cohodes et al <sup>24</sup>

children through expansions in eligibility for public health insurance. From the onset of the program in 1965, Medicaid coverage for nondisabled children was tied to family participation in the nation's cash assistance program. Beginning in 1984, Congress took steps to delink the Medicaid and cash assistance programs and expand Medicaid eligibility to children with family incomes at or below the federal poverty level (FPL) and to 133% of the FPL for infants and children younger than the age of 6 years.

In 1997, CHIP was created to address coverage gaps for children whose families had incomes that were too high to qualify for Medicaid but too little to afford private health insurance coverage.<sup>25</sup> Under CHIP, states could expand coverage to higher-income children through Medicaid, a separate non-Medicaid program, or a combination of both. Although CHIP was funded as a block grant and not as an entitlement like Medicaid, states received higher federal matching funds under CHIP and had more latitude over programmatic design features. CHIP also included policies designed to increase take up of Medicaid and CHIP coverage among uninsured children who were eligible but not enrolled, allowing states to disregard asset tests, eliminate face to face interview requirements, and grant children presumptive eligibility. The Children's Health Insurance Program Reauthorization Act of 2009

provided states with additional options for increasing uptake of Medicaid and CHIP. Under Medicaid and CHIP, 28 states currently cover children in families with incomes at or above 250% of the FPL, and 18 states and the District of Columbia cover children with family incomes at or above 300% of the FPL, with a national median of 255% of the FPL.<sup>26</sup>

As a result of these eligibility expansions and related policy changes, the Medicaid and CHIP programs play a major role in the health insurance coverage of children in the United States. In 2011, 38% of all children were enrolled in Medicaid or CHIP.<sup>27</sup> Furthermore, the proportion of children without health insurance coverage declined substantially over this period from 15% in 1984 to 6.6% in 2012, even as the uninsured rate for nonelderly adults increased.<sup>27</sup> The [Figure](#) shows drastic changes in rates of insurance and access to care for children from 1997 to 2012 according to household income level. A large literature has shown that expansions in Medicaid and CHIP eligibility have resulted in improved access and utilization of health care services for children, with a smaller number of studies on the effect on child health and mortality.<sup>28</sup> Most uninsured children are eligible for but not participating in either Medicaid or CHIP.<sup>29</sup> However, eligibility for Medicaid and CHIP is not universal among low-income children.



**Figure.** Change in rates of insurance and access to care for children from 1997 to 2012, according to household income (percent of poverty). From Rosenbaum and Kenney<sup>27</sup>; authors' analysis of data from the 1997 and 2012 National Health Interview surveys.

Most children who are undocumented immigrants remain ineligible for these programs, and only certain groups of immigrants qualify for public coverage depending on their state of residence. In addition, there is uncertainty about children's coverage going forward because federal funding for the CHIP program is set to expire in 2017 and the ACA maintenance of effort requirement that states maintain the level of generosity of Medicaid and CHIP eligibility thresholds for children expires in 2019. Because the ACA prevents families from receiving subsidized coverage through state marketplaces if their employer offers "affordable" coverage for the worker but not necessarily the family (ie, the "family glitch"), some families who stand to lose Medicaid and CHIP eligibility could find themselves facing large financial burdens to maintain coverage for their children.<sup>27</sup> In addition, coverage for children available under marketplace plans is typically less generous than coverage under CHIP.<sup>30</sup>

In contrast to children, public health insurance eligibility for low-income adults has historically been much more limited. Although all state Medicaid programs covered some low-income parents before the ACA, income-related eligibility thresholds were quite low in many states. As of January 2013, only 33 states covered parents with family incomes up to 100% of the FPL and 16 states limited eligibility to parents with incomes <50% of the FPL.<sup>31</sup> Under the ACA's Medicaid expansion—originally intended to occur in all states, before the Supreme Court rendered it a state option de facto in 2012—30 states and the District of Columbia have chosen to expand Medicaid to adults with family incomes at or below 138% of the FPL as of December 2015. In states expanding Medicaid, there

was a sizeable increase in parental coverage immediately after the expansions with the uninsured rate decreasing by 33%.<sup>32</sup> Parental coverage is expected to continue to increase as more parents obtain Medicaid and subsidized coverage through the new ACA marketplaces.

Optional state expansions in Medicaid eligibility before the ACA, using existing flexibility in federal statute or via demonstration waivers from the federal government, provided researchers with opportunities to study the effect of expanded coverage for low-income adults. The landmark Oregon Health Insurance Experiment (OHIE) studied a randomized Medicaid expansion for low-income adults in Oregon conducted through a lottery. The OHIE and a number of quasiexperimental studies that examined expansions for low-income adults have found evidence of increased insurance coverage and health care utilization,<sup>3,4,33–35</sup> improved general health status,<sup>3,5,35</sup> better mental health,<sup>3–5</sup> and reduced mortality.<sup>35</sup> In addition, there is significant evidence that predates the ACA that parental Medicaid coverage is an important determinant of whether eligible children enroll in coverage.<sup>32,36–38</sup>

## FINANCIAL BENEFITS OF EXPANDED HEALTH INSURANCE COVERAGE

To date, most of the research on health insurance coverage among low-income populations has focused on its effect on health care utilization and health outcomes, with much less attention to the financial protection it offers families. Yet, the primary economic purpose of insurance, in general, is to protect those covered from financial risk. In the case of health insurance, these risks take the form of

becoming sick or injured and needing expensive medical care. Health insurance—particularly generous coverage with little cost-sharing, as in Medicaid and CHIP—might also help with the affordability of noncatastrophic medical care, such as routine preventive care and chronic disease management. A small but growing number of quasiexperimental and experimental studies indicate that expanded health insurance coverage provides important financial benefits to the low-income or uninsured families who gain coverage.

Three reports have used quasiexperimental methods to show reduced family financial burdens associated with expanded child eligibility for public health insurance. Using a difference-in-differences design, Banthin and Selden<sup>6</sup> reported that child Medicaid expansions in the 1990s decreased the share of Medicaid-eligible children in families spending 10% or more of their income on medical care and premiums by 7.4 percentage points (a relative reduction of 25%) compared with higher-income children. Davidoff et al<sup>7</sup> used a similar research design and reported that eligibility expansions that occurred under CHIP between 1997 and 2001 were associated with lower out of pocket spending levels on health care. Finally, Leininger et al<sup>8</sup> examined the effect of later expansions under CHIP with a natural experiment design that used variation across states and time in CHIP-related eligibility expansions. The authors reported that child eligibility for CHIP was associated with a dramatic decline in family spending on insurance and medical care of approximately \$300–\$400 per quarter, compared with a baseline spending amount of \$457.

Several additional studies have focused on children who switch to public health insurance from either private insurance coverage or being uninsured and showed decreased financial strain for families. Clemans-Cope et al<sup>39</sup> used a survey of parents of children participating in CHIP to compare the experiences of families of established CHIP enrollees and the newly enrolled. Parents of established CHIP enrollees reported lower out of pocket costs and fewer difficulties paying their child's medical bills compared to the experiences of parents with recently uninsured and privately-insured children. This reduced financial burden was accompanied by higher confidence and less worry associated with meeting their child's health care needs. In addition, parents of CHIP enrollees were more likely to report adequate insurance benefits and financial protection compared with the parents of privately insured children. In a similar study, Zickafoose et al<sup>10</sup> reported that parents of CHIP enrollees with special health care needs reported less difficulty in meeting these needs than parents of uninsured and privately insured children.

Shaefer et al<sup>11</sup> also reported evidence of reduced family medical spending when children transitioned from private to public health insurance coverage. Using variation in Medicaid and CHIP eligibility rules across states to examine these transitions in panel data, the authors estimated that families with children who switched to public coverage saved \$1500 in annual premiums and out of pocket costs, compared with children who continued

with private health insurance throughout the year. These findings are consistent with fewer cost-sharing requirements and more comprehensive coverage under public health insurance compared with some private plans. However, it is important to bear in mind that the families who are motivated to switch to public from private coverage are also the families most likely to benefit in terms of financial or other benefits.

The available evidence also indicates reduced financial burden associated with public coverage for low-income parents and adults. Using variation within states over time in the Medicaid income eligibility criteria for parents before 2010, McMorro et al<sup>4</sup> estimated a significant association between expanded Medicaid eligibility for low-income parents and reduced family out of pocket spending for medical care. They reported that low-income parents were less likely to spend \$500 or more or \$2000 or more over a 12-month period in states with more generous Medicaid eligibility for parents. In a study on expanded Medicaid for low-income adults (including parents), the OHIE reported decreased financial strain on a number of self-reported measures among adults who gained Medicaid. Adults enrolled in Medicaid were 35% less likely to have any out of pocket medical expenses and 40% less likely to borrow money or skip bills to pay for medical expenses.<sup>3</sup> In addition, the incidence of catastrophic expenditures, defined as out of pocket medical expenses exceeding 40% of household income, decreased by more than 80% among the new Medicaid enrollees.<sup>5</sup>

Protection against catastrophic medical costs is an important benefit of health insurance and might improve the financial stability of low-income households. Recent studies have examined the effect of health insurance on the financial security of households using previously unexplored data sets on consumer bankruptcies and credit. Using a quasiexperimental approach that relied on variation within states over time in Medicaid eligibility for pregnant women and children, Gross and Notowidigio<sup>12</sup> reported that a 10-percentage point increase in Medicaid eligibility was associated with an 8% decrease in household bankruptcy. Their estimates implied that 26% of bankruptcies among low-income households could be attributed to a lack of health insurance. Additional analyses of the OHIE that relied on administrative credit report data reported a 25% decrease in the probability of having unpaid medical bills sent to collection agencies for recovery attempts among low-income adults who gained Medicaid. The study found no effect, however, on more severe (and infrequent) measures of financial distress including personal bankruptcy, tax liens, and judgments for unpaid bills.<sup>3</sup>

Finally, public health insurance programs might also improve family economic well-being in other ways. By subsidizing medical care for family members, public health insurance programs might increase the availability of household resources for nonhealth spending. In addition, the protection from financial risk might reduce the need for precautionary saving, in the form of asset holdings, in response to uncertainty about future needs. However,

only a small number of studies have examined changes in household savings and nonmedical expenditures under the Medicaid and CHIP programs. Using variation in state Medicaid eligibility for pregnant women and children, Gruber and Yelowitz<sup>13</sup> examined the effect of Medicaid expansions on changes in family saving and spending behavior. The authors reported evidence that expanded Medicaid decreased asset holdings and increased nonmedical spending among low-income families. Leininger et al<sup>8</sup> used a similar approach to analyze later expansions in public insurance for children under CHIP and also reported evidence that low-income households increased their expenditures on nonmedical goods. In particular, households tended to shift their spending toward transportation and retirement savings. Saloner<sup>9</sup> also examined the effect of CHIP expansions on the well-being of families but relied on measures of material hardships such as food and housing insecurity. Similar to other studies, he used a quasiexperimental design that relied on variation in income eligibility cutoffs within states over time. He reported no effect on these more severe measures of financial strain.

### POVERTY-REDUCING EFFECTS OF PUBLIC HEALTH INSURANCE

By reducing the financial burden and risk of medical spending, public health insurance has the potential to reduce the extent to which families live in poverty, defined using the Supplemental Poverty Measure (SPM). Official poverty rates in the United States are determined by comparing pretax income to a standard threshold historically based on the cost of food. In response to longstanding criticisms that this measure does not accurately represent the needed resources or expenses of the most disadvantaged, the US Census Bureau introduced the SPM in 2011. Notable differences between the 2 measures are that 1) the SPM calculates family resources as the total of pretax income and the cash value of transfers under government assistance programs (although not public health insurance), and 2) the SPM subtracts family out of pocket medical spending from each family's resources.

Sommers and Oellerich<sup>14</sup> assessed the poverty-reducing effect of Medicaid before the ACA using the SPM measure. The authors modeled the counterfactual of what the medical out of pocket costs and poverty status would be for individuals covered by Medicaid as of 2011 if the program did not exist. Their methodology relied on propensity score matching to compare Medicaid enrollees with those without Medicaid and randomly assigned out of pocket medical spending under this counterfactual scenario on the basis of the distribution of spending among matched controls. The authors reported that eliminating Medicaid would have increased the supplemental poverty rate by 0.7 percentage points from 16.1% to 16.8% in 2010. This corresponded to an additional 2.12 million people living in poverty of whom 810,000 were children. The authors calculated that, on the basis of the SPM measure, Medicaid is the third largest poverty-reducing program in the country after the Earned Income Tax Credit and the Supplemental

Nutrition Assistance Program. The ACA Medicaid expansions for low-income adults that have occurred since this report was published almost certainly have further increased the program's poverty-reducing effects.

In addition to decreasing out of pocket medical expenses, Medicaid and CHIP might also reduce poverty by connecting families to other social support programs. Expanded enrollment in public health insurance has been shown to increase awareness of and family participation in other means-tested public programs. The OHIE reported that enrolling in Medicaid under the lottery led to a 15% increase in participation in the Supplemental Nutrition Assistance Program among low-income adults.<sup>15</sup> This is consistent with an earlier quasiexperimental study by Yelowitz<sup>16</sup> who reported an increase in household food stamp receipt under Medicaid eligibility expansions for children in the 1980s.

### ATTENUATING THE LONG-TERM EFFECTS OF POVERTY

Public health insurance for low-income children could influence their long-term outcomes by improving access to care related to chronic conditions associated with poverty. In addition, the financial benefits of Medicaid and CHIP in the form of reduced medical spending and risk protection might free up resources in the household to be directed toward other investments in children. Relying on quasiexperimental methods, recent reports provide new evidence that access to public health insurance during childhood leads to improvements in later life health and economic outcomes.

Boudreaux et al<sup>17</sup> took advantage of the staggered timing of Medicaid's adoption across states in the 1960s to estimate the effect of exposure to Medicaid during early childhood on adult health and economic status at ages 25-54 years. They reported that cohorts who gained exposure to Medicaid between conception and age 6 years had significantly better adult health, measured as a 0.35-SD change in a composite index measure of high blood pressure, diabetes, heart disease/heart attack, and obesity. They did not observe significant changes in an economic index combining data on years of educational attainment, family income, and wealth, but their estimates were imprecise and did not rule out reasonable effect sizes.

Other studies examined the long-term effect of later expansions in public health insurance for children in the 1980s and 1990s under Medicaid and CHIP. Although the cohorts affected by these expansions are still relatively young, this strand of research shows evidence of promising changes in the trajectories of health and economic status in early adulthood for those gaining expanded access to Medicaid. In a series of articles, Wherry and colleagues<sup>18,19</sup> examined the long-term health effects of additional Medicaid coverage in childhood using a natural experiment design that exploited a feature of the Medicaid expansions that extended eligibility only to children who were born after September 30, 1983. This resulted in a large discontinuity in the lifetime years of Medicaid



eligibility for children born before and after this birthdate cutoff. They compared later life mortality, hospitalizations, and emergency department use among cohorts born just before and after this date to determine how additional Medicaid eligibility was related to health in early adulthood. The authors reported evidence of a decrease in teenage mortality and reduced health care utilization in early adulthood among African American cohorts who gained childhood Medicaid eligibility.

The remaining studies in this area rely on within-state variation over time in the generosity of income eligibility thresholds for Medicaid and CHIP to estimate the association between childhood exposure to these programs and later life outcomes. Using a variant of a difference-in-differences design, this research reported evidence of better teenage health,<sup>20</sup> reduced mortality,<sup>21</sup> lower rates of obesity, and fewer hospitalizations and emergency department visits related to chronic conditions in early adulthood associated with exposure to expanded public health insurance in childhood.<sup>22</sup> There was also evidence of improved educational attainment for those who gained eligibility with higher reading test scores later in childhood and increased rates of high school and college completion.<sup>22–24</sup> Finally, one study reported that the US government might recover some of the original cost of providing expanded Medicaid coverage. Using longitudinal Internal Revenue Service data, Brown et al<sup>21</sup> reported that children who gained additional years of eligibility under the expansions paid more in cumulative taxes by age 28 and were less likely to collect the Earned Income Tax Credit payments than children who did not gain additional eligibility.

## SUMMARY

Over the past 2 decades, a growing body of literature has documented the significant and wide-ranging benefits of public health insurance. Expansions in Medicaid and CHIP for low-income children and adults are associated with reduced out of pocket medical spending, increased financial stability, and improved material well-being for families. When out of pocket medical expenses are taken into account in defining the poverty rate, Medicaid plays a significant role in decreasing poverty for many children and families and is one of the country's largest antipoverty programs. Public health insurance also connects families to other social supports including food assistance programs. Finally, access to public health insurance in childhood appears to have positive long-term effects for health and economic outcomes in adulthood. As the nation embarks on a new major chapter of coverage expansion under the ACA and debate continues over the future of CHIP, this body of research provides important evidence to inform policymakers as they weigh the multifaceted effects of public health insurance programs.

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## REFERENCES

- Galbraith AA, Wong ST, Kim SE, et al. Out-of-pocket financial burden for low-income families with children: socioeconomic disparities and effects of insurance. *Health Serv Res.* 2005;40:1722–1736.
- Agency for Healthcare Research and Quality. *Utilization and expenditures for children with special health care needs. Research findings #24.* Available at: [http://meps.ahrq.gov/mepsweb/data\\_files/publications/rf24/rf24.pdf](http://meps.ahrq.gov/mepsweb/data_files/publications/rf24/rf24.pdf). Accessed December 22, 2015.
- Finkelstein A, Taubman S, Wright B, et al. The Oregon Health Insurance Experiment: evidence from the first year. *Q J Econ.* 2012;127:1057–1106.
- McMorrow S, Kenney GM, Long SK, et al. Medicaid expansions from 1997 to 2009 increased coverage and improved access and mental health outcomes for low-income parents. *Health Serv Res.* 2016 Jan 14. <http://10.1111/1475-6773.12432>. [Epub ahead of print].
- Baicker K, Taubman SL, Allen HL, et al. The Oregon Experiment – effects of Medicaid on clinical outcomes. *N Engl J Med.* 2013;368:1713–1722.
- Banthin JS, Selden TM. The ABCs of children's health care: how the Medicaid expansions affected access, burdens, and coverage between 1987 and 1996. *Inquiry.* 2003;40:133–145.
- Davidoff A, Kenney G, Dubay L. Effects of the State Children's Health Insurance Program expansions on children with chronic health conditions. *Pediatrics.* 2005;116:e34–e42.
- Leininger L, Levy H, Schanzenbach D. Consequences of SCHIP expansions for household well-being. *Forum Health Econ Policy.* 2010; 13:1–30.
- Saloner B. Does expanding public insurance prevent material hardship for families with children? *Med Care Res Rev.* 2013;70:267–286.
- Zickafoose JS, Smith KV, Dye C. Children with special health care needs in CHIP: access, use, and child and family outcomes. *Acad Pediatr.* 2015;15(suppl 3):S85–S92.
- Shaefer HL, Grogan CM, Pollack HA. Transitions from private to public health coverage among children: estimating effects on out-of-pocket medical costs and health insurance premium costs. *Health Serv Res.* 2011;46:840–858.
- Gross T, Notowidigdo MJ. Health insurance and the consumer bankruptcy decision: evidence from expansions of Medicaid. *J Publ Econ.* 2011;95:767–778.
- Gruber J, Yelowitz A. Public health insurance and private savings. *J Pol Econ.* 1999;107:1249–1274.
- Sommers BD, Oellerich D. The poverty-reducing effect of Medicaid. *J Health Econ.* 2013;32:816–832.
- Baicker K, Finkelstein A, Song J, et al. *The Impact of Medicaid on Labor Force Activity and Program Participation: Evidence from the Oregon Health Insurance Experiment.* National Bureau of Economic Research Working Paper No. 19547. Cambridge, MA: National Bureau of Economic Research; 2013.
- Yelowitz AS. *Did Recent Medicaid Reforms Cause the Caseload Explosion in the Food Stamp Program? UCLA Working Paper.* Los Angeles: UCLA; 1996.
- Boudreaux MH, Golberstein E, McAlpine D. The long-term impacts of Medicaid exposure in early childhood: evidence from the program's origin. *J Health Econ.* 2016 Jan; 45:161–75. <http://10.1016/j.jhealeco.2015.11.001>. Epub 2015 Nov 19.
- Wherry L, Meyer BD. Saving teens: using a policy discontinuity to estimate the effects of Medicaid eligibility. *J Hum Res.* In press.
- Wherry L, Miller S, Kaestner R, et al. *Childhood Medicaid Coverage and Later Life Health Care Utilization.* National Bureau of Economic Research Working Paper No. 20929. Cambridge, MA: National Bureau of Economic Research; 2015.

20. Currie J, Decker S, Lin W. Has public health insurance for older children reduced disparities in access to care and health outcomes? *J Health Econ*. 2008;27:1567–1581.
21. Brown DW, Kowalski AE, Lurie IZ. *Medicaid as an Investment in Children: What is the Long-Term Impact on Tax Receipts? National Bureau of Economic Research Working Paper No. 20835*. Cambridge, MA: National Bureau of Economic Research; 2015.
22. Miller S, Wherry LR. *The Long-Term Effects of Early Life Medicaid Coverage*. University of Michigan Working Paper. Ann Arbor: University of Michigan; 2015.
23. Levine PB, Schanzenbach D. The impact of children's public health insurance expansions on educational outcomes. *Forum Health Econ Policy*. 2009;12:1–26.
24. Cohodes SR, Grossman DS, Kleiner SA, et al. The effect of child health insurance access on schooling: evidence from public insurance expansions. *J Hum Res*. In press.
25. De Lew N, Epstein AM, Mann C. The Children's Health Insurance Program as adolescence ends: nearly 2 decades of children's coverage. *Acad Pediatr*. 2015;15(suppl 3):S7–S8.
26. The Henry J. Kaiser Family Foundation. Where are states today? Medicaid and CHIP eligibility levels for adults, children, and pregnant women. Available at: <http://kff.org/medicaid/fact-sheet/where-are-states-today-medicaid-and-chip>. Accessed September 30, 2015.
27. Rosenbaum S, Kenney GM. The search for a national child health coverage policy. *Health Aff (Millwood)*. 2014;33:2125–2135.
28. Howell EM, Kenney GM. The impact of the Medicaid/CHIP expansions on children: a synthesis of the evidence. *Med Care Res Rev*. 2012;20:1–25.
29. Kenney GM, Haley JM, Anderson N, et al. Children eligible for Medicaid or CHIP: who remains uninsured, and why? *Acad Pediatr*. 2015;15(suppl 3):S36–S43.
30. Dept of Health and Human Services. Center for Medicare and Medicaid Services. *Certification of comparability of pediatric coverage offered by qualified health plans*. Available at: <https://www.medicaid.gov/chip/downloads/certification-of-comparability-of-pediatric-coverage-offered-by-qualified-health-plans.pdf>. Accessed December 22, 2015.
31. Heberlein M, Brooks T, Alker J, et al. *Getting Into Gear for 2014: Findings From a 50-State Survey of Eligibility, Enrollment, Renewal, and Cost-Sharing Policies in Medicaid and CHIP, 2012-2013. The Kaiser Commission on Medicaid and the Uninsured*. Washington, DC: The Henry J. Kaiser Family Foundation; 2013.
32. Kenney GM, Anderson N, Long SK, et al. *Taking Stock: Health Insurance Coverage for Parents Under the ACA in 2014. Health Reform Monitoring Survey*. Washington, DC: The Urban Institute; 2014.
33. Aizer A, Grogger G. *Parental Medicaid Expansions and Health Insurance Coverage. National Bureau of Economic Research Working Paper No. 9907*. Cambridge, MA: National Bureau of Economic Research; 2003.
34. Busch SH, Duchovny N. Family coverage expansions: impact on insurance coverage and health care utilization of parents. *J Health Econ*. 2005;24:876–890.
35. Sommers BD, Baicker K, Epstein AM. Mortality and access to care among adults after state Medicaid expansions. *N Engl J Med*. 2012;367:1025–1034.
36. DeVoe JE, Marino M, Angier H, et al. Effect of expanding Medicaid for parents on children's health insurance coverage: lessons from the Oregon Experiment randomized trial. *JAMA Pediatr*. 2015;169:1–8.
37. Dubay L, Kenney G. Expanding public health insurance to parents: effects on children's coverage under Medicaid. *Health Serv Res*. 2003;38:1283–1301.
38. Sommers BD. Insuring children or insuring families: do parental and sibling coverage lead to improved retention of children in Medicaid? *J Health Econ*. 2006;25:1154–1169.
39. Clemans-Cope L, Kenney G, Waidmann T, et al. How well is CHIP addressing health care access and affordability for children? *Acad Pediatr*. 2015;15:S71–S77.