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# The Impact of the Children's Health Insurance Program (CHIP): What Does the Research Tell Us?

Julia Paradise

## Executive Summary

The Children's Health Insurance Program (CHIP) was established in 1997 to provide coverage for uninsured children who are low-income but above the cut-off for Medicaid eligibility. In 2009, Congress reauthorized and extended federal funding for CHIP, and the Affordable Care Act (ACA) extended CHIP funding further, through FY 2015. If Congress does not act, federal funding for CHIP will expire a little over a year from now. Decisions about CHIP's future will be consequential as more than 8 million low-income children were covered by CHIP at some point during 2012. CHIP and Medicaid combined cover more than 1 in every 3 children in the U.S. To help inform the debate about CHIP's future, this brief reviews data and a large body of research about the impact of Medicaid and CHIP on low-income children. The evidence can be summarized as follows:

- **Coverage:** Medicaid and CHIP have significantly expanded health coverage among U.S. children and provided a coverage safety-net for children in working families during economic downturns. From 1997, when CHIP was enacted, to 2012, the uninsured rate for children fell by half, from 14% to 7%. Medicaid and CHIP have helped to reduce disparities in coverage that affect low-income children and children of color.
- **Benefits and out-of-pocket protection:** Medicaid and CHIP cover expansive benefits for children, including dental care, which is often excluded from private health insurance. Of key importance for children with special health care needs, all CHIP programs cover physical, occupational, and speech and language therapies, often without limits. Both Medicaid and CHIP provide strong financial protection for low-income children and families. Out-of-pocket exposure is greater in subsidized Marketplace coverage.
- **Access to care:** Children with Medicaid and CHIP have much better access to primary and preventive care and fewer unmet health needs than uninsured children. They also have much better access to specialist and dental care. Further, children covered by Medicaid and CHIP fare as well as privately insured children on measures of primary and preventive care access. However, some research finds disparities between publicly and privately insured children in their access to specialist and dental care. Also, Medicaid and CHIP children visit the emergency department more than other children, which may be due, in part, to barriers to access to timely primary care, such as lack of available after-hours care. Most physicians who care for children participate in Medicaid and CHIP, but dentist participation is low.
- **Outcomes:** Evidence from some studies shows that Medicaid and CHIP expansions have a positive impact on health outcomes, including reductions in avoidable hospitalizations and child mortality, while other studies show no impact on health. In addition, there is evidence that improved health among children with

Medicaid and CHIP translates into educational gains, with potentially positive implications for both individual economic well-being and overall economic productivity.

- **Parents' views:** Most low-income parents have positive impressions of Medicaid and CHIP. The parents of children enrolled in Medicaid or CHIP are more likely than low-income parents of children with job-based coverage to say they are very satisfied with the quality of care, the scope of benefits, and affordability.

Taken together, the evidence is strong that improving coverage through CHIP and Medicaid has contributed to meaningful gains in access to care and the quality of care for low-income children. Further, studies that find an impact of CHIP and Medicaid on children's health show a positive impact, suggesting that the programs advance the end goal of coverage, better health.

# Introduction

The Children's Health Insurance Program (CHIP) was established with bipartisan Congressional support in 1997 to provide coverage for uninsured children who are low-income, but above the cut-off for Medicaid eligibility. The law gave states considerable flexibility to design their CHIP programs, and states' use of this flexibility to build streamlined eligibility and enrollment systems, brand their programs, and invest in outreach, has also generated improvements in Medicaid in many states.

In 2009, Congress reauthorized CHIP and extended federal funding for the program. The Affordable Care Act (ACA) extended CHIP funding through FY 2015, and provided for a 23 percentage point increase in CHIP matching rates in FY2016-2019 if funding for the program is again extended. Absent Congressional action, federal funding for CHIP will expire a little over a year from now. Decisions about CHIP's future funding will be consequential as more than 8 million low-income children were covered by CHIP at some point during 2012.<sup>1</sup> Altogether, CHIP and Medicaid combined now cover more than 1 in every 3 children in the U.S.<sup>2</sup>

Data and a large body of research provide strong evidence that Medicaid and CHIP have increased health coverage among low-income children, and that children enrolled in the programs experience improved access to care, utilization, and financial protection. Medicaid and CHIP are also positively associated with the quality of care children receive, and parents value the programs. At the same time, gaps in access to dental care and specialty care point to needs to strengthen the programs. Finally, there is evidence that improved health among children with Medicaid and CHIP translates into gains in school performance and educational attainment over the longer term, with potentially positive implications for both individual economic well-being and productivity in the overall economy.

The evidence from most studies of public coverage for children reflects the effect of Medicaid and CHIP collectively. This is so because most state CHIP programs are either Medicaid expansions or combine a Medicaid expansion and a separate CHIP program, and children migrate between the two programs due to changes in family income; these factors make it difficult to isolate the impact of CHIP alone. However, studies of separate CHIP programs in selected states and the Congressionally-mandated CHIP evaluation issued in 2007 add evidence specific to the experience of children covered by CHIP.

As policy discussions concerning the future of CHIP gather momentum in the coming months, this brief reviews key data and findings about children's coverage that can help inform the debate about CHIP's future.

## Key data and evidence

### IMPACT ON HEALTH COVERAGE OF CHILDREN

**Medicaid and CHIP have significantly expanded health coverage among U.S. children and provided a coverage safety-net for children in working families during economic downturns. The programs now cover more than one-third of all children (37%) in the U.S.**

- Together, the two programs have significantly reduced the uninsured rate among children. From 1997, when CHIP was enacted, to 2012, millions of uninsured children gained coverage, and the uninsured rate for children fell by half, from 14% to an historic low of 7%. The decline was concentrated among children below 200% of the federal poverty level – the group targeted by Medicaid and CHIP – whose uninsured rate

dropped from 25% to 15% over this period.<sup>3</sup> The decline was also sharper for Hispanic children, who are the most likely to be uninsured.

- Medicaid and CHIP have provided a coverage safety-net for children during economic recessions and slowdowns when families have lost employer-sponsored insurance. During the downturn in the early 2000's, the uninsured rate fell for children while it rose significantly for nonelderly.<sup>4</sup> During the more recent recession, too, gains in health coverage for children continued while nonelderly adults lost ground.<sup>5</sup>
- Participation in Medicaid and CHIP among eligible children averaged 87% nationwide in 2011, although the rate varied by state and by subgroups of children.<sup>6</sup> Although retention rates vary by state as well, nationally, three-quarters of low-income children who remain eligible for CHIP stay enrolled in the program, similar to retention rates in the individual insurance market and Medicaid.<sup>7</sup>

### **Medicaid and CHIP play an especially large role for certain populations, including children of color and children with special health care needs.**

- Medicaid and CHIP play an especially important coverage role for children of color, whose families are more likely to be low-income compared to Whites. As such, the two programs have reduced racial/ethnic disparities in children's coverage. CHIP and Medicaid cover more than half of Hispanic children (52%) and Black children (56%), compared to about one-quarter of White (26%) and Asian (25%) children.<sup>8</sup>
- Children with special health care needs are particularly reliant on Medicaid and CHIP. They are more likely than other children to be eligible for these programs, and Medicaid and CHIP cover services and supports often needed by these children that private insurance, which is designed for children with more routine needs, typically does not cover.<sup>9</sup>

## **SCOPE OF BENEFITS AND FINANCIAL PROTECTION**

### **Medicaid and CHIP programs cover expansive benefits for children.**

- CHIP programs that are Medicaid expansions cover “Early and Periodic Screening, Diagnosis, and Treatment” (EPSDT) for children, a comprehensive benefit package that covers not only health services, but also developmental services, such as habilitation services that help children attain, maintain, or improve skills to maximize their function.
- A substantial number of separate CHIP programs cover EPSDT or EPSDT-like benefits. The other separate CHIP programs are modeled on mainstream, “benchmark” private insurance products, but include important additional benefits.<sup>10</sup>
  - All CHIP programs cover dental care, which is often excluded from private health insurance or must be purchased separately. Dental coverage matters because dental disease, which is the most common childhood disease, is preventable and untreated dental problems cause pain, school absence, and missed work among parents.<sup>11</sup>
  - Nearly all separate CHIP programs cover annual eye exams and all cover glasses. Most cover annual hearing exams.
  - All separate CHIP programs cover outpatient and inpatient mental health services, without limits in most states.<sup>12</sup> All also provide some level of outpatient substance abuse treatment services, and almost all cover inpatient substance abuse treatment.

- Of special importance for children with special health care needs, all CHIP programs cover physical, occupational, and speech and language therapies, without limits in many states.

**CHIP and Medicaid both provide strong financial protection for low-income children and families. Low-income children are more exposed to out-of-pocket costs in the subsidized plans offered through the Marketplaces.**

- A study that modeled the effect on out-of-pocket and total medical spending for low-income children with Medicaid or CHIP if they were privately insured instead showed that their out-of-pocket costs over a full year (2005) would have risen from \$42 to \$314, and that total medical spending on their behalf would have risen 37%, from \$909 to \$1,247 per person.<sup>13</sup>
- A five-state GAO study comparing separate CHIP programs to the coverage that Qualified Health Plans were expected to offer in 2014 found that the benefits for children were generally comparable, but premiums, deductibles, cost-sharing were almost always lower in CHIP. Further, although the QHP benchmark plans capped out-of-pocket costs, the caps ranged widely and did not include premiums or, in some plans, deductibles or certain copays.<sup>14</sup> In CHIP, total family out-of-pocket costs, including premiums, are limited to 5% of family income.
- A study that analyzed the differences between CHIP and QHPs in Arizona, where 14,000 children lost CHIP coverage on January 1, 2014, reached findings similar to the GAO's and indicated that tighter benefit limits in QHPs compared to CHIP could leave low-income children with chronic health care needs particularly exposed to out-of-pocket costs that their families might be unable to afford.<sup>15</sup>

**IMPACT ON CHILDREN'S ACCESS TO CARE AND USE OF SERVICES**

**Children with Medicaid and CHIP have much better access to primary and preventive care and fewer unmet health needs than uninsured children. Moreover, they fare as well as privately insured children on these measures.**

- A vast literature documents much greater access to care among children covered by Medicaid and CHIP relative to uninsured children.<sup>16 17 18 19</sup>
- A large and consistent body of evidence shows that, following enrollment in Medicaid or CHIP, children are more likely to have a usual source of care, visits to physicians and dentists, and use of preventive care, and less likely to have unmet needs for physician services, prescription drugs, and dental, specialty, and hospital care. In nine of ten studies cited in the Congressionally-mandated evaluation of CHIP, rates of unmet need were reduced by 50% or more. Evidence from some states indicates that increased access was accompanied by reduced emergency department use.<sup>20 21 22 23</sup>
- A study of the impact of CHIP in New York showed that pre-existing racial/ethnic disparities in access, unmet need, and continuity of care among children were virtually eliminated during the year following their enrollment in CHIP.<sup>24</sup>
- Federal data show high performance in Medicaid and CHIP with respect to access to primary care. Across 43 states reporting in FY 2012, the median percentage of Medicaid/CHIP children with a visit to a primary care provider was 97%. Much smaller shares of children received all recommended well-child care and immunizations, however.<sup>25</sup> Notably, the data from FY 2011, which include comparative results for Medicaid/CHIP and privately insured children, show fairly comparable rates between the two groups on five of eight primary and preventive care measures, despite pronounced differences between the two groups' demographic and socio-economic profiles.<sup>26</sup>

- An analysis prepared for the Medicaid and CHIP Payment and Access Commission (MACPAC) likewise found that rates of access to and use of primary and preventive care among children with Medicaid/CHIP are comparable to the rates for privately insured children. About 95% of both groups have a usual source of care, although Medicaid/CHIP children are less likely than privately insured children to have a usual source with after-hours access. The vast majority of children in both insurance groups are usually or always able to get care that is needed right away and routine appointments, but somewhat fewer are usually or always able to see a specialist when needed. When health and socio-demographic differences between Medicaid/CHIP and privately insured children are controlled, Medicaid/CHIP children are more likely to receive a well-child check-up.<sup>27</sup>

**Children with Medicaid and CHIP have much better access to specialist and dental care than uninsured children, but some research finds gaps in their access compared with privately insured children.**

- Research on access to specialist care among children with Medicaid/CHIP has produced mixed findings.
  - The analysis for MACPAC just mentioned also shows that differences between Medicaid/CHIP and privately insured children in the receipt of specialist visits disappear when health and socio-demographic differences between the two groups are controlled.<sup>28</sup> Other research also shows that publicly insured children with needs for specialty care fare as well as privately insured children.<sup>29</sup>
  - At the same time, evidence from “secret shopper” studies indicates that children with Medicaid/CHIP are much more likely than privately insured children to be denied appointments with specialists, and that they face longer waits when they do get appointments.<sup>30 31</sup>
  - A national survey of physicians conducted by the Government Accountability Office (GAO) indicates that physicians participating in Medicaid and CHIP are three times more likely to have difficulty referring Medicaid/CHIP children for specialty care, compared with privately insured children (84% vs 26%). For all children, physicians most often cited difficulty with referrals for mental health, dermatology, and neurology.<sup>32</sup>
- Children covered by Medicaid/CHIP have much higher rates of access to and use of dental care than uninsured children. Still, low rates of dentist participation in Medicaid/CHIP and low utilization of dental care among Medicaid/CHIP children are serious and persistent problems; notably, dental care rates among low-income privately insured children are comparably low.<sup>33 34 35</sup>
  - In 2011, the median rate of receipt of any preventive dental service among Medicaid/CHIP children was 44% across the 50 states and DC, and the median rate for receipt of at least one dental treatment service was 24%.<sup>36</sup> Dental care is the most frequently cited unmet need due to cost for all children. About 5% of Medicaid/CHIP children report an unmet dental need due to cost, compared to about 3% for children with ESI and 29% for uninsured children.<sup>37</sup>
  - An analysis of 2009 data showed that per-user out-of-pocket dental costs were much higher for children with private dental coverage than for children with Medicaid/CHIP (\$327 versus \$53).<sup>38</sup>
  - All state CHIP programs now report on the HHS core measure for preventive dental services, and CMS launched an Oral Health Initiative in 2010, setting goals for improvement and offering states technical assistance.

## **Medicaid and CHIP promote access to care for children with chronic and special health care needs.**

- Access to care for children with special health care needs who are enrolled in CHIP is comparable to access for low-income children who are privately insured.<sup>39</sup>
- Asthma, one of the most prevalent chronic conditions in children, has disproportionately adverse impacts on low-income and minority children. A before-after study of children with asthma who were newly enrolled in New York's CHIP program found improvements in their access to asthma care and the quality of their asthma care. Asthma attacks and asthma-related emergency department visits and hospitalizations among the children fell markedly and three-quarters of parents reported that their child's asthma was better or much better after one year in CHIP.<sup>40</sup> An Alabama study found similar effects, as well as cost savings, for children with asthma who were continuously enrolled in CHIP for three years.<sup>41</sup>
- Another New York study looking at the impact of CHIP enrollment on children with a broader set of physical and behavioral health conditions found improvements in access to care, continuity of care, and use of prescription drugs, as well as reduced unmet health care needs.<sup>42</sup>

## **Medicaid/CHIP children visit the emergency department more than other children, which may be due, in part, to barriers to access to timely primary care, such as lack of available after-hours care.**

- Children with Medicaid/CHIP are more likely than both uninsured and privately insured children to make emergency department (ED) visits even when health and socio-demographic differences between the groups are controlled. In 2008, 28% of Medicaid/CHIP children had at least one ED visit, compared to 15% of uninsured children and 18% of children with private coverage, and Medicaid/CHIP children were also significantly more likely to have had multiple ED visits. Preliminary analysis suggested that barriers to access to primary care might have contributed to the higher ED use.<sup>43</sup>

## **Most physicians who serve children participate in Medicaid and CHIP, but dentist participation in Medicaid/CHIP is low.**

- The results from a GAO survey of physicians who serve children show that more than 80% of primary care physicians and about 70% of specialists participate in and provide care to children covered by Medicaid and CHIP. These physicians are generally more willing to accept new privately insured children than new publicly insured children, but they appear not to schedule appointments preferentially, as wait times for new appointments are generally the same for both groups of children. A large majority of physicians not participating in Medicaid and CHIP cite payment and billing issues, bureaucratic barriers, and referral difficulties as reasons.<sup>44</sup>
- A 2010 GAO report on children's oral health indicates that dentist participation in Medicaid and CHIP is low and that many dentists who do participate may limit the number of Medicaid or CHIP patients they will treat.<sup>45</sup>

## IMPACT ON CHILDREN'S OUTCOMES

**Evidence about the impact of Medicaid and CHIP expansions on health status is mixed – some studies show a positive impact and some show no impact.**

- One synthesis of the evidence on Medicaid and CHIP reviewed 12 studies that examined impacts on any of four outcome measures: perceived health status, restricted activity days, avoidable hospitalization, and child mortality.<sup>46</sup> Only one study of four showed an effect on perceived health status, and neither of two studies showed an effect on restricted activity days for children. However, of five studies looking at the impact of Medicaid or CHIP expansion on avoidable hospitalization and/or child mortality, all but one found a reduction in avoidable hospitalizations, and two of two showed a positive impact on child mortality. To illustrate:
  - A California study found reductions in hospitalizations for ambulatory care-sensitive conditions among children following CHIP implementation, suggesting that primary care access and quality for low-income children improved.<sup>47</sup> However, another study found no significant decline in avoidable hospitalization nationally during the early period of the Medicaid expansions,<sup>48</sup> and a third study (also of Medicaid expansion) found reduced avoidable hospitalizations only for children age 2 to 6.<sup>49</sup>
  - A national study found that a 10 percentage point increase in Medicaid/CHIP eligibility (e.g., from 30% of children in a state in a particular age group to 40%) resulted in a roughly 3% decline in child mortality.<sup>50</sup>
- An evaluation of Oregon's Healthy Kids program found a significant increase in the share of parents who reported that their child was in good general health and in stable health after 12 months of coverage in the program, compared to the before-enrollment baseline. There were no significant changes in these measures for children covered less than 12 months, suggesting the possibility that effects of coverage on health take more time to manifest. Nor was there significant change in health for uninsured children. The share of parents reporting that their child's health was interfering with school or social activities did not change for any of the three groups.<sup>51</sup>

**There is evidence that Medicaid and CHIP confer benefits beyond improved health for children.**

- A state assessment of California's CHIP program followed newly enrolled children who were in the poorest health over a two-year period and examined physical and psycho-social aspects of their health, including social, emotional, and school functioning. The parents of these children reported significant, sustained gains in their children's ability to pay attention in class and keep up in school activities.<sup>52</sup> An evaluation of Kansas' CHIP program found that children missed fewer days of school due to illness or injury after they were enrolled in the program for one year.<sup>53</sup>
- A new study suggests that Medicaid expansions for young and school-age children in the 1980s and 1990s resulted in improvements in their long-run educational attainment. By extension, similar effects might be expected from CHIP.<sup>54</sup>
  - A 10 percentage point increase in Medicaid eligibility for children reduced the high-school drop-out rate by about 5%, increased college enrollment by 1.1% to 1.5%, and increased the four-year college completion rate by 3% to 3.5%.
  - Showing that Medicaid eligibility during childhood translated into better health among teens, the researchers suggested that this effect is an important mechanism by which coverage affects children's educational attainment.



## PARENTS' VIEWS

### Most low-income parents have positive impressions of Medicaid and CHIP.

- More than 8 in 10 low-income parents who do not currently have a child enrolled in Medicaid or CHIP say they would be interested in enrolling their child in the program if their child needed coverage.<sup>55</sup>
- More than 90% of low-income parents with children enrolled in Medicaid or CHIP are somewhat (27%) or very (66%) satisfied with the coverage. The parents of Medicaid/CHIP-enrolled children are more likely than low-income parents of children with job-based coverage to say they are very satisfied with the quality of care, the range of covered services, and affordability.<sup>56</sup>
- Parents of children enrolled in Medicaid and CHIP report that they are thankful for the programs and have peace of mind knowing their children are covered.<sup>57</sup>

## Conclusion

CHIP has been an effective program, providing comprehensive coverage and financial protection to millions of American children and increasing their access to and use of recommended care. It has also helped to reduce disparities in health coverage and care that affect low-income children and children of color. These improvements in access and care appear to lay the foundation for gains in school performance and educational attainment, which, in turn, hold promise for children's long-term health and economic well-being, and for economic productivity at the societal level. The evidence is strong that improving coverage through CHIP and Medicaid has contributed to meaningful gains in access to care and the quality of care for low-income children. Further, studies that find an impact of CHIP and Medicaid on children's health show a positive impact, suggesting that the programs advance the end goal of coverage, better health.

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<sup>1</sup> <http://kff.org/other/state-indicator/annual-chip-enrollment/>

<sup>2</sup> Laura Snyder et al., *Medicaid Enrollment Snapshot: December 2013*, and Vernon Smith, Laura Snyder, and Robin Rudowitz, *CHIP Enrollment Snapshot: December 2013* (Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation, June 2014), <http://kff.org/medicaid/issue-brief/medicaid-enrollment-snapshot-december-2013/> and <http://kff.org/medicaid/issue-brief/chip-enrollment-snapshot-december-2013/>

<sup>3</sup> Robin Rudowitz, Samantha Artiga, and Rachel Arguello, *Children's Health Coverage: Medicaid, CHIP and the ACA* (Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation, March 2014), <http://kff.org/health-reform/issue-brief/childrens-health-coverage-medicaid-chip-and-the-aca/>

<sup>4</sup> Margo Rosenbach et al., *National Evaluation of the State Children's Health Insurance Program: A Decade of Expanding Coverage and Improving Access – Final Report* (Mathematica Policy Research, Inc., for Centers for Medicare and Medicaid Services, September 2007), <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Reports/downloads/rosenbach9-19-07.pdf>

<sup>5</sup> Rudowitz et al., op.cit. and "Children's Health Insurance Program (CHIP): Accomplishments, Challenges, and Policy Recommendations," *Pediatrics* 133(3), January 2014, <http://pediatrics.aappublications.org/content/133/3/e784.full.pdf+html?sid=a7870594-5581-44a9-a69a-fc79e724e8e0>

<sup>6</sup> Genevieve M. Kenney, Nathaniel Anderson, and Victoria Lynch, *Medicaid/CHIP Participation Rates among Children: An Update* (Urban Institute, September 2013), <http://www.urban.org/uploadedpdf/412901-%20Medicaid-CHIP-Participation-Rates-Among-Children-An-Update.pdf>

<sup>7</sup> Rosenbach et al., op.cit.

<sup>8</sup> See Rudowitz et al., op.cit. (KCMU/Urban Institute analysis of 2013 ASEC Supplement to the CPS)

<sup>9</sup> Amy Davidoff, Alshadye Yemane, and Ian Hill, "Public Insurance Eligibility and Enrollment for Special Health Care Needs Children," *Health Care Financing Review* 26(1), Fall 2004, <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/downloads/04fallpg119.pdf>

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- <sup>10</sup> *Benefits and Cost Sharing in Separate CHIP Programs* (Georgetown University Institute for Health Policy, Center for Children and Families, May 2014), [http://www.nashp.org/sites/default/files/Benefits.Cost\\_Sharing.Separate.CHIP\\_Programs.pdf](http://www.nashp.org/sites/default/files/Benefits.Cost_Sharing.Separate.CHIP_Programs.pdf)
- <sup>11</sup> Julia Paradise, *Children and Oral Health: Assessing Needs, Coverage, and Access* (Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation, June 2012), <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/7681-04.pdf>
- <sup>12</sup> Federal law now requires parity between mental and physical health benefits in CHIP programs that cover any mental health services.
- <sup>13</sup> Leighton Ku and Matthew Broaddus, “Public and Private Health Insurance: Stacking up the Costs,” *Health Affairs* 27(4), 2008, <http://content.healthaffairs.org/content/27/4/w318.full.pdf+html?sid=5e816db3-7247-4774-88b8-cfffb7fb814>
- <sup>14</sup> *Children’s Health Insurance: Information on Coverage of Services, Costs to Consumers, and Access to Care in CHIP and Other Sources of Insurance* (Government Accountability Office, November 2013), <http://www.gao.gov/products/gao-14-40>
- <sup>15</sup> Tricia Brooks, Martha Heberlein, and Joseph Fu, *Dismantling CHIP in Arizona: How Losing KidsCare Impacts a Child’s Health Care Costs*, (Center for Children and Families, Georgetown University Health Policy Institute, May 2014), <http://ccf.georgetown.edu/ccf-resources/dismantling-chip-in-arizona-how-losing-kidscare-impacts-a-childs-health-care-costs/>
- <sup>16</sup> Lisa Dubay and Genevieve Kenney, “Health Care Access and Use among Low-Income Children: Who Fares Best?” *Health Affairs* 20(1), January 2001, <http://content.healthaffairs.org/content/20/1/112.full>
- <sup>17</sup> Embry Howell and Genevieve Kenney, “The Impact of the Medicaid/CHIP Expansions on Children: A Synthesis of the Evidence,” *Medical Care Research and Review* 69(4), August 2012, <http://www.ncbi.nlm.nih.gov/pubmed/22451618>
- <sup>18</sup> Thomas Selden and Julie Hudson, “Access to Care and Utilization among Children: Estimating the Effects of Public and Private Coverage,” *Medical Care* 44(5), May 2006, <http://www.jstor.org/discover/10.2307/3768354?uid=3739584&uid=2&uid=4&uid=3739256&sid=21104273043357>
- <sup>19</sup> Genevieve Kenney and Christine Coyer, *National Findings on Access to Health Care and Service Use for Children Enrolled in Medicaid or CHIP* (MACPAC Contractor Report No. 1, March 2012), [file:///C:/Users/JuliaP/Downloads/Contractor%20Report%20No\\_1%20\(2\).pdf](file:///C:/Users/JuliaP/Downloads/Contractor%20Report%20No_1%20(2).pdf)
- <sup>20</sup> Howell and Kenney, op. cit.
- <sup>21</sup> “CHIP Accomplishments, Challenges, and Policy Recommendations,” op.cit.
- <sup>22</sup> Rosenbach et al., op. cit.
- <sup>23</sup> Andrew Dick et al., “SCHIP’s Impact in Three States: How Do the Most Vulnerable Children Fare?” *Health Affairs* 23(5) Sept-Oct 2004, <http://content.healthaffairs.org/content/23/5/63.full>
- <sup>24</sup> Laura Shone et al., “Reduction in Racial and Ethnic Disparities After Enrollment in the State Children’s Health Insurance Program,” *Pediatrics* 115(6), June 2005, <http://pediatrics.aappublications.org/content/115/6/e697.long>
- <sup>25</sup> *2013 Annual Report on the Quality of Care for Children in Medicaid and CHIP* (U.S. Department of Health and Human Services, September 2013), <http://www.medicare.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2013-Ann-Sec-Rept.pdf>
- <sup>26</sup> *2012 Annual Report on the Quality of Care for Children in Medicaid and CHIP* (U.S. Department of Health and Human Services, December 2012), <http://www.medicare.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2012-Ann-Sec-Rept-ES.pdf>
- <sup>27</sup> Kenney and Coyer, op. cit.
- <sup>28</sup> Ibid.
- <sup>29</sup> Asheley Cockrell Skinner and Michelle Mayer, “Effects of Insurance Status on Children’s Access to Specialty Care: A Systematic Review of the Evidence,” *BMC Health Services Research* (7), 2007, <http://www.biomedcentral.com/1472-6963/7/194?iframe=true&width=100%&height=100%>
- <sup>30</sup> Joanna Bisgaier and Karin Rhodes, “Auditing Access to Specialty Care for Children with Public Insurance,” *New England Journal of Medicine* 364(24), June 6, 2011, <http://www.nejm.org/doi/full/10.1056/NEJMsa1013285>
- <sup>31</sup> Joanna Bisgaier et al., “Disparities in Child Access to Emergency Care for Acute Oral Injury,” *Pediatrics* 127(6), June 2011, <http://www.ncbi.nlm.nih.gov/pubmed/21606154>
- <sup>32</sup> *MEDICAID AND CHIP: Most Physicians Serve Covered Children but Have Difficulty Referring Them for Specialty Care* (Government Accountability Office, June 2011), <http://www.gao.gov/products/GAO-11-624>
- <sup>33</sup> Hua Wang, Edward Norton, and R. Gary Rozier, “Effects of the State Children’s Health Insurance Program on Access to Dental Care and Use of Dental Services,” *Health Services Research* 42 (4), August 2007, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955282/>

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- <sup>34</sup> Paradise, op. cit.
- <sup>35</sup> 2012 and 2013 Annual Report on Quality of Care for Children, op. cit.
- <sup>36</sup> 2013 Annual Report on Quality, op. cit.
- <sup>37</sup> Kenney and Coyer, op. cit.
- <sup>38</sup> Paradise, op.cit.
- <sup>39</sup> Hao Yu et al., “Role of SCHIP in Serving Children with Special Health Care Needs,” *Health Care Financing Review* 28(2), Winter 2006-2007, <http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/downloads/06-07Winpg53.pdf>
- <sup>40</sup> Szilagyi P et al., “Improved Asthma Care After Enrollment in the State Children’s Health Insurance Program in New York,” *Pediatrics* 117(2), February 2006, <http://pediatrics.aappublications.org/content/117/2/486.long>
- <sup>41</sup> N. Menachemi et al., “The Impact of CHIP Coverage on Children with Asthma in Alabama,” *Clinical Pediatrics* 51(3), March 2012, <http://www.ncbi.nlm.nih.gov/pubmed/21890839>
- <sup>42</sup> Peter Szilagyi et al., “Improved Health Care Among Children with Special Health Care Needs After Enrollment in the State Children’s Health Insurance Program,” *Ambulatory Pediatrics* 7(1), January-February 2007, <http://www.ncbi.nlm.nih.gov/pubmed/17261477>
- <sup>43</sup> Kenney and Coyer, op.cit.
- <sup>44</sup> *Most Physicians Serve Covered Children*, op. cit.
- <sup>45</sup> *ORAL HEALTH: Efforts Under Way to Improve Children’s Access to Dental Services, but Sustained Attention Needed to Address Ongoing Concerns* (Government Accountability Office, November 2010), <http://www.gao.gov/assets/320/312818.pdf>
- <sup>46</sup> Howell and Kenney, op.cit.
- <sup>47</sup> D. Bermudez and L. Baker, “The Relationship between SCHIP Enrollment and Hospitalizations for Ambulatory Care Sensitive Conditions in California,” *Journal of Health Care for the Poor and Underserved* 16(1), 2005, <http://www.ncbi.nlm.nih.gov/pubmed/15741712>
- <sup>48</sup> Leemore Dafny and Jonathan Gruber, “Public Insurance and Child Hospitalizations: Access and Efficiency Effects,” *Journal of Public Economics* 89, 2005, <http://economics.mit.edu/files/6435>
- <sup>49</sup> Robert Kaestner, Theodore Joyce, and Andrew Racine, “Medicaid Eligibility and the Incidence of Ambulatory Care Sensitive Hospitalizations for Children,” *Social Science & Medicine* 52, 2001, <http://www.ncbi.nlm.nih.gov/pubmed/11144786>
- <sup>50</sup> Embry Howell et al., “Declining Child Mortality and Continuing Racial Disparities in the Era of the Medicaid and SCHIP Insurance Coverage Expansions,” *American Journal of Public Health* 100(12), December 2010, <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2009.184622>
- <sup>51</sup> Bill Wright and Heidi Allen, *Healthy Kids Evaluation Study: Results from the 12-Month Follow-Up Survey* (Office for Oregon Health Policy and Research, Oregon Health Authority, September 2012), [http://www.oregon.gov/oha/OHPR/RSCH/docs/Uninsured/HealthyKids\\_EnrolleeStudy\\_Followup\\_Report.pdf](http://www.oregon.gov/oha/OHPR/RSCH/docs/Uninsured/HealthyKids_EnrolleeStudy_Followup_Report.pdf)
- <sup>52</sup> *The Healthy Families Program Health Status Assessment (PedsQLTM) - Final Report* (California Managed Risk Medical Insurance Board, September 2004), <http://www.mrmib.ca.gov/mrmib/HFP/PedsQL3.pdf>
- <sup>53</sup> Leighton Ku, Mark Lin, and Matt Broaddus, *Chartbook: Improving Children’s Health – The Roles of Medicaid and SCHIP* (Center on Budget and Policy Priorities, January 2007), <http://www.cbpp.org/cms/index.cfm?fa=view&id=1296>
- <sup>54</sup> Sarah Cohodes et al., *The Effect of Child Health Insurance Access on Schooling: Evidence from Public Insurance Expansions* (National Bureau of Economic Research, May 2014), <http://www.nber.org/papers/w20178>
- <sup>55</sup> *Informing CHIP and Medicaid Outreach and Education – Topline Report: Key Findings from a National Survey of Low-Income Parents*, (Centers for Medicare and Medicaid Services, November 2011), <http://www.insurekidsnow.gov/professionals/chip-medicaid-survey-topline.pdf>
- <sup>56</sup> *Parents’ View of CHIP and Medicaid: Snapshot of Findings from a Survey of Low-Income Parents*, presentation by Michael Perry, Lake Research Partners, National Children’s Health Summit, November 2011, [http://www.insurekidsnow.gov/professionals/events/2011\\_conference/2nd\\_national\\_children\\_s\\_health\\_insurance\\_summit\\_opening\\_plenary\\_michael\\_perry.pdf.pdf](http://www.insurekidsnow.gov/professionals/events/2011_conference/2nd_national_children_s_health_insurance_summit_opening_plenary_michael_perry.pdf.pdf)
- <sup>57</sup> Michael Perry and Julia Paradise, *Enrolling Children in Medicaid and SCHIP: Insights from Focus Groups with Low-Income Parents* (Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation, May 2007), <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/7640.pdf>

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[http://www.insurekidsnow.gov/professionals/events/2011\\_conference/2nd\\_national\\_children\\_s\\_health\\_insurance\\_summit\\_opening\\_plenary\\_michael\\_perry.pdf.pdf](http://www.insurekidsnow.gov/professionals/events/2011_conference/2nd_national_children_s_health_insurance_summit_opening_plenary_michael_perry.pdf.pdf)

<sup>57</sup> Michael Perry and Julia Paradise, *Enrolling Children in Medicaid and SCHIP: Insights from Focus Groups with Low-Income Parents* (Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation, May 2007), <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/7640.pdf>