



# Poverty and Child Health in the United States

COUNCIL ON COMMUNITY PEDIATRICS

Almost half of young children in the United States live in poverty or near poverty. The American Academy of Pediatrics is committed to reducing and ultimately eliminating child poverty in the United States. Poverty and related social determinants of health can lead to adverse health outcomes in childhood and across the life course, negatively affecting physical health, socioemotional development, and educational achievement. The American Academy of Pediatrics advocates for programs and policies that have been shown to improve the quality of life and health outcomes for children and families living in poverty. With an awareness and understanding of the effects of poverty on children, pediatricians and other pediatric health practitioners in a family-centered medical home can assess the financial stability of families, link families to resources, and coordinate care with community partners. Further research, advocacy, and continuing education will improve the ability of pediatricians to address the social determinants of health when caring for children who live in poverty. Accompanying this policy statement is a technical report that describes current knowledge on child poverty and the mechanisms by which poverty influences the health and well-being of children.

## STATEMENT OF THE PROBLEM

Poverty is an important social determinant of health and contributes to child health disparities. Children who experience poverty, particularly during early life or for an extended period, are at risk of a host of adverse health and developmental outcomes through their life course.<sup>1</sup> Poverty has a profound effect on specific circumstances, such as birth weight, infant mortality, language development, chronic illness, environmental exposure, nutrition, and injury. Child poverty also influences genomic function and brain development by exposure to toxic stress,<sup>2</sup> a condition characterized by “excessive or prolonged activation of the physiologic stress response systems in the absence of the buffering protection afforded by stable, responsive relationships.”<sup>3</sup> Children living in poverty

## abstract

FREE

*This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.*

*Policy statements from the American Academy of Pediatrics benefit from expertise and resources of liaisons and internal (AAP) and external reviewers. However, policy statements from the American Academy of Pediatrics may not reflect the views of the liaisons or the organizations or government agencies that they represent.*

*The guidance in this statement does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.*

*All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.*

**DOI:** 10.1542/peds.2016-0339

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2016 by the American Academy of Pediatrics

**To cite:** AAP COUNCIL ON COMMUNITY PEDIATRICS. Poverty and Child Health in the United States. *Pediatrics*. 2016; 137(4):e20160339

are at increased risk of difficulties with self-regulation and executive function, such as inattention, impulsivity, defiance, and poor peer relationships.<sup>4</sup> Poverty can make parenting difficult, especially in the context of concerns about inadequate food, energy, transportation, and housing.

Child poverty is associated with lifelong hardship. Poor developmental and psychosocial outcomes are accompanied by a significant financial burden, not just for the children and families who experience them but also for the rest of society. Children who do not complete high school, for example, are more likely to become teenage parents, to be unemployed, and to be incarcerated, all of which exact heavy social and economic costs.<sup>5</sup> A growing body of research shows that child poverty is associated with neuroendocrine dysregulation that may alter brain function and may contribute to the development of chronic cardiovascular, immune, and psychiatric disorders.<sup>6</sup> The economic cost of child poverty to society can be estimated by anticipating future lost productivity and increased social expenditure. A study compiled before 2008 projected a total cost of approximately \$500 billion each year through decreased productivity and increased costs of crime and health care,<sup>7</sup> nearly 4% of the gross domestic product. Other studies of “opportunity youth,” young people 16 to 24 years of age who are neither employed nor in school, derived similar results, generating cohort aggregate lifetime costs in the trillions.<sup>8</sup>

Child poverty is greater in the United States than in most countries with comparable resources. In a 2012 report from the United Nations Children’s Fund,<sup>9</sup> the United States ranked 34th of 35 member nations of the Organization for Economic Cooperation and Development, a reflection of the rate of child

poverty during and immediately after the Great Recession of 2007–2009. A later 2014 report from the Organization for Economic Cooperation and Development<sup>10</sup> ranked the United States 35th of 40 nations, only above Chile, Mexico, Romania, Turkey, and Israel. This policy statement specifically addresses child poverty in the United States but reflects the 2015 United Nations’ Sustainability Goal to end poverty in all its forms everywhere.<sup>11</sup>

According to 2014 Census data, an estimated 21.1% of all US children younger than 18 years (15.5 million) lived in households designated as “poor” (ie, in 2014, incomes below 100% of the federal poverty level [FPL] of \$24 230 for a family of 4\*) and 42.9% (over 31.5 million) lived in households designated as “poor, near poor, or low income” (ie, incomes up to 200% of the FPL). Nearly 9.3% (6.8 million) lived in households of deep poverty (ie, incomes below 50% of the FPL).<sup>12</sup> In 2014, an estimated 16 million children lived in families who received Supplemental Nutrition Assistance Program (SNAP) benefits.<sup>13</sup> Between 2007 and 2010, foreclosures affected 5.3 million children.<sup>14</sup>

Demographics have a profound influence on the likelihood that a family or community will experience poverty or low income. For example, African American, Hispanic, and

\* The FPL is determined by comparing a family’s pretax cash income to an income poverty threshold that is 3 times the cost of a minimum food diet. This measure does not take into account government benefits (eg, SNAP), income tax credits, or family expenses (eg, child care, income taxes) and has not fundamentally changed since 1969 except for annual adjustments for food price inflation. In 2010, the SPM was instituted to provide a more comprehensive measure of a family’s financial circumstances. The SPM includes the value of certain federal in-kind benefits, federal tax benefits, and family expenses. For additional details on these measures, see the accompanying technical report, “Mediators and Adverse Effects of Child Poverty in the United States.”

American Indian/Alaska Native children are 3 times more likely to live in poverty than are white and Asian children.<sup>15</sup> Infants and toddlers more commonly live in poverty than do older children.

Children may be born into poverty, remain in a poor household throughout childhood, or, most commonly, rotate in and out of poverty over time. Approximately 37% of all children live in poverty for some period during their childhood.<sup>16</sup> Children who are born into poverty and live persistently in poor conditions are at greatest risk of adverse outcomes. However, even short-term spells of poverty can expose children to hardships, such as food insecurity, housing insecurity/homelessness, loss of health care, and school disruptions.

Equality of opportunity is central to the American dream and is reflected by social mobility or the potential of intergenerational economic betterment. However, social mobility is difficult to measure, because the usual method compares incomes of 30-year-old persons against the incomes of their parents. Despite the difficulties, most researchers agree that social mobility in the United States has faltered as the wealth and opportunity gaps between rich and poor have widened in the past decade. In comparison with European and other wealthy industrialized countries, social mobility in the United States ranks among the lowest.<sup>17</sup> A 2015 Pew Charitable Trusts report documented that the effect of parental income advantage is persistent over all levels of parental income but is especially strong for children born to wealthy families. Persistent parental economic advantage means that a son’s income is strongly influenced by his father’s, indicating low social mobility. The result is a dramatic decline of the possibility of economic improvement for the poor.<sup>18</sup> Poor children tend to remain poor and live

in neighborhoods of low opportunity. Wealthy children continue to be wealthy as adults and enjoy academic and employment advantages.

The drag on social mobility resulting from income and opportunity inequality is even more striking for people of color. During the recovery of the Great Recession, income inequality in the United States accelerated, with 91% of the gains going to the top 1% of families.<sup>19</sup> Left out of the recovery were African American families who, during the downturn, lost an average of 35% of their accumulated wealth.<sup>20</sup> African American unemployment increased, home ownership decreased, and child poverty deepened to approximately 46% of children younger than 6 years.<sup>21</sup> Because social mobility is lowest for people in the lowest income quartile, half of African American children who are poor as young children will remain poor as adults, approximately twice as many as white adults similarly exposed to poverty as children.<sup>22</sup>

Although legacy residential segregation and environmental racism persist as regions of deep poverty in mostly urban areas,<sup>23</sup> the epidemiology of poverty has shifted over the past decade, in part because of the housing crisis and the Great Recession. Since 2008, suburbs have experienced larger and faster increases in poverty than either urban or rural areas.<sup>24</sup> This significant shift in the location and demographics of children and families dealing with financial stress makes necessary a reevaluation of the current engagement and service delivery systems that may not meet this emerging need.<sup>25</sup>

Because pediatricians work to prevent childhood diseases during health supervision visits and with anticipatory guidance, the early detection and management of poverty-related disorders is an important, emerging component of pediatric scope of practice. With

improved understanding of the root causes and distal effects of poverty, pediatricians can apply interventions in practice to help address the toxic effects of poverty on children and families. They also can advocate for programs and policies to ameliorate early childhood adverse events related to poverty. Pediatricians have the opportunity to screen for risk factors for adversity, to identify family strengths that are protective against toxic stress, and to provide referrals to community organizations that support and assist families in economic stress. This policy statement builds on previous policies related to child health equity,<sup>26</sup> housing insecurity,<sup>27</sup> and early childhood adversity.<sup>3</sup> The accompanying technical report from the American Academy of Pediatrics (AAP), “Mediators and Adverse Effects of Child Poverty in the United States,”<sup>28</sup> supports this statement by describing current knowledge on childhood poverty and the mechanisms by which poverty influences the health and well-being of children.

### **WHAT WORKS TO AMELIORATE THE EFFECTS OF CHILD POVERTY**

Programs that help poor families and children take many forms and often involve stakeholders from multiple communities, including governmental, private nonprofit, faith-based, business, and other philanthropic organizations. The following paragraphs describe several antipoverty and safety net programs that are particularly important for child health and well-being. These programs help families by increasing access to cash, providing “near-cash” benefits, and investing in child development.

Individual program outcomes, including financial cost-benefit estimates, are documented where possible. However, the cumulative

effect of safety net programs has been demonstrably positive. Longitudinal studies from 1967 to 2012 that used the Supplemental Poverty Measure (SPM) revealed that government programs have had a significant effect on family poverty. Without these programs, the rate of child poverty would have increased to 31% in 2012, 13 percentage points more than the actual SPM child poverty rate of 18%. Therefore, the income supports and direct benefits provided by these government programs have cut family poverty almost in half, from an estimated 31% to approximately 16%.<sup>29</sup>

### **Tax Policies and Direct Financial Aid**

The earned income tax credit (EITC) is a refundable federal tax credit that helps low-income families. The EITC helps reduce poverty by incentivizing employment and supplementing income for low-wage workers. In 2012, 25 states had established their own state-level credits to supplement the federal credit.<sup>30</sup> The Center on Budget and Policy Priorities estimates that the federal EITC lifted 3.1 million children out of poverty in 2011.<sup>31</sup> The EITC has been shown to increase workforce participation among single women with children and help families pay for basic essentials.<sup>32</sup> Additional research also has connected the EITC to improvements in infant health. An analysis of families who received the largest EITC under the 1990s expansions of the credit showed lower rates of low birth weight children, fewer preterm births, and increased prenatal care among these families.<sup>33</sup>

The child tax credit provides tax refunds to low-income working families who pay payroll taxes but who might not owe federal income tax. Although only partially refundable, this direct cash benefit in 2012 helped approximately 1.6 million children and their families maintain an income above the FPL.<sup>34</sup>

Taken together, the EITC and child tax credit represent tax policies that reduce childhood poverty and its effects.

Temporary Assistance for Needy Families (TANF) is a block grant program by which the federal government provides money for states to fund work and family support programs with specific goals and time limits. The Personal Responsibility and Work Reconciliation Act of 1996 (often referred to as welfare reform) created TANF to replace Aid to Families with Dependent Children, thereby creating block grants for state administration, work requirements for eligibility, and lifetime limits on receipt of federal support. Because of unchanging federal funding levels and limits of the amount of time individuals can access benefits, the number of families receiving TANF has decreased, despite the increased need since the Great Recession. National TANF caseloads, especially those receiving cash benefits, have declined by 50% since 1996, with state caseload reductions varying from 25% to 80% despite the steadily increasing numbers of families in poverty and deep poverty.<sup>35</sup> The latitude that states have to designate how the funds are used adds to the limitation of TANF as a national safety net program.

Income stagnation in recent decades and the erosion of purchasing power have contributed to the financial instability of working poor families.<sup>36</sup> Raising the minimum wage has been shown to help some low-income families reach 200% of the FPL and to be considered out of poverty.<sup>37</sup> The benefit to children of improved family income stability is both general and specific. Financial stability means that basic needs, such as housing and transportation, are more dependable and family stress may be reduced. School readiness and academic performance

of children are sensitive to family income. In a 1999 analysis by the Brookings Institute, statistically significant increases in math and reading performance were associated with only a \$1000 increase in family annual income.<sup>38</sup> A retrospective review of population data drawn from the Panel Study of Economic Dynamics and covering the years 1968 to 2005 correlated the date of birth and family income during early childhood with eventual adult educational and economic attainment. The results suggest that an increase in annual family income of only \$3000 during early childhood may result in significant improvements on both SAT scores and adult labor market success measured by an earnings increase of almost 20%. The association is strongest at the low end of the family income scale and becomes statistically nonsignificant for wealthy families.<sup>39</sup>

Work requirements for cash and other benefits have been advanced, especially since welfare reform in the 1990s, as a way to promote self-sufficiency and reduce welfare rolls. However, as a consequence of young mothers being required to work, infants may be placed in child care at a very early age, and mothers often require a patchwork of solutions, some of which may be substandard.<sup>40</sup> Quality child care and early childhood education are extremely important for the promotion of cognitive and socioemotional development of infants and toddlers.<sup>41</sup> Yet, child care may cost as much as housing in most areas of the United States, 25% of the budget of a family with 2 children, and infant care can cost as much as college.<sup>42</sup> Many working families benefit from the dependent care tax credit for the cost of child care, allowing those families to place their children in a certified or higher-quality environment.<sup>43</sup> However, working families who do not have sufficient income to pay taxes are

not able to realize this support for their children, because the credit is not refundable or paid to families before taxation.<sup>44</sup> Therefore, some of the most at-risk children who might benefit from high-quality early childhood education are not eligible for financial support.

### **Access to Comprehensive Health Care**

Children in poverty who otherwise would not have access to health care have greatly benefited from Medicaid and the Children's Health Insurance Program (CHIP) and many provisions and protections of the Patient Protection and Affordable Care Act. From 1984 through 2013, the rate of uninsured poor children decreased by 70%, from approximately 29% to just over 8%. During the first 3 months of 2014, the uninsured rate for poor children dropped further to 6.6%.<sup>45</sup> As a measure of benefit from expanded coverage, children enrolled in Medicaid or CHIP are more likely to access preventive care than are uninsured children.<sup>46,47</sup> In addition, CHIP has resulted in a 9.8% increase in the coverage of children with chronic illness and a 6.4% decrease in uninsured children in the general population.<sup>48</sup> In 2009, CHIP programs expanded access to comprehensive care by covering dental, mental health, and substance abuse services in addition to medical and surgical care for all eligible near-poor children.<sup>49</sup>

### **Early Childhood Education**

Early Head Start and Head Start are federally funded, community-based programs for low-income families with young children. Early Head Start serves pregnant women and families with infants and toddlers up to 3 years of age; Head Start serves families with preschool-aged children 3 to 5 years of age. In fiscal year 2011, the programs served more than 900 000 children nationally, with a budget of \$7

billion. These programs provide educational, nutritional, health, and social services. In addition to child care and preschool services, Early Head Start and Head Start offer prenatal education, job-training and adult education, and assistance in accessing housing and insurance.<sup>50</sup> However, Early Head Start presently serves only approximately 3% of low-income families.<sup>51</sup> The Child Care Development Block Grants Act of 2014 and subsequent appropriations also provide child care subsidies for low-income working families and funds to improve child care quality, in addition to new and needed protections to keep children safe and healthy when they are being cared for outside the home.<sup>52</sup>

Early childhood interventions have been found to have a high rate of return in both human and financial terms. Early interventions in high-risk situations have the highest return, presumably through mitigating the effects of toxic stress by providing nurturance, stimulation, and nutrition. Child benefits include improved cognitive functioning, improved self-regulation, and advancement of development in all domains. Research as early as 2005 by the Rand Corporation found a range of return on investment from \$1.80 to \$17 for each dollar spent on early childhood interventions.<sup>53</sup> More recent studies of preschool (birth to age 5 years) education estimate a return on investment as high as 14% per year on the basis of improved academic and occupation outcomes, in addition to lowered costs of remedial education and juvenile justice involvement.<sup>54</sup>

### **Nutrition Support**

The Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a federal assistance program of the US Department of Agriculture that was first established in 1974 with the aim of improving the health of low-income women, infants, and

children. WIC provides nutrition education, growth monitoring, and breastfeeding promotion and support in addition to food for pregnant and postpartum women, infants, and children younger than 5 years with incomes less than 185% of the FPL.<sup>55</sup>

WIC is associated with improved outcomes in pregnancy and early childhood development. A series of reports from the US Department of Agriculture has shown that WIC participation for low-income women decreased the rates of prematurity and infant mortality and increased involvement in prenatal care.<sup>56</sup> The promotion of breastfeeding has resulted in significant improvements in the rate and duration of exclusive breastfeeding among WIC participants.<sup>57</sup> Studies of the postinfancy period also have shown that WIC increases the quality of children's diets, with increases in micronutrient intake and resulting decreases in iron-deficiency anemia. Children participating in WIC have scored higher on assessments of mental development at 2 years of age than similar children who were not participating in the program. In addition, children whose mothers participated in WIC when they were in utero have also been shown to perform better on reading assessments than similar children of mothers who did not use the program.<sup>58</sup>

SNAP, formerly referred to as "food stamps," uses an electronic benefits card to provide nutrition assistance to low-income individuals and families. As with other federal programs, eligibility depends on income, age, family size, and citizenship. More than 45 million Americans currently receive SNAP benefits each month, including approximately 20 million children.<sup>59</sup> Using the SPM, SNAP benefits reduce both the rate (decrease of 4.4% attributable to SNAP from 2000 to 2009) and, more importantly, the

depth of poverty for children in the poorest of poor families.<sup>60</sup>

The National School Lunch Program is a federally funded program that provides low-cost and free breakfasts, lunches, and, on a limited basis, summer food to school-aged children. The federal program supplies both public and private nonprofit schools with food and cash incentives. The meals are produced in accordance with the Dietary Guidelines for Americans. In 2012, 31.6 million children each day were served low-cost and free lunches at a total cost of \$11.6 billion.<sup>61</sup> Students from families with an income less than 130% of the FPL are eligible to receive free meals, and those from families with an income less than 185% of the FPL are eligible for reduced-price meals. A recent analysis estimated that, using these guidelines, more than half of all US public school students are eligible to receive free or reduced-price meals.<sup>62</sup>

Nutrition support, such as WIC and SNAP, address undernutrition, but other forms of malnutrition, such as obesity, also may be responsive to supplemental programs. For instance, a recent study in preschool-aged children found that those who participated in Head Start had a healthier BMI at school entry than did children who did not have the benefit of food provided by federal subsidy.<sup>63</sup>

### **Home Visiting**

The Maternal, Infant, and Early Child Home Visiting (MIECHV) Program was established as part of the Affordable Care Act in 2010. It provides support for federal, state, and community governments to implement established and proven home visiting programs for at-risk children. The stated goals of MIECHV are to improve maternal and newborn health; prevent child injuries, abuse, neglect, or maltreatment; reduce emergency department visits; improve school

readiness and achievement; reduce crime or domestic violence; improve family economic self-sufficiency; and improve coordination and referrals for other community resources and supports.<sup>64</sup>

MIECHV has identified 19 evidence-based interventions that target families with pregnant mothers and children younger than 5 years.<sup>65,66</sup> One example of an MIECHV program with evidence of success is the Nurse-Family Partnership. First-time, low-income mothers are enrolled during the prenatal period and visited weekly by nurses trained in a validated curriculum beginning in the second trimester. The benefit-cost ratio for high-risk mothers has been calculated at 5.68 to 1.<sup>67</sup>

### **Family and Parenting Support in the Medical Home**

Programs designed for the pediatric medical home provide opportunities for low-cost, population-based preventive intervention with low-income families. An awareness of the protective factors that are present in children and families can help pediatricians to build on their strengths during health promotion conversations. A commonly used instrument to assess protective factors in high-risk families is available through the FRIENDS National Resource Center.<sup>68</sup> The Protective Factor Survey is used to assess current status as well as change over time in family resiliency, social connectedness, quality of attachment, and knowledge of child development.

In a medical home adapted to the needs of families in poverty, parents have the opportunities and resources to promote resilience in their young children, giving them the capacity to adapt to adversity and buffering the effects of stress. Healthy Steps for Young Children, a manual-based primary care strategy, and programs such as Incredible Years and Triple P, which integrate behavioral health

into primary care, have been shown to promote responsive parenting and address common behavioral and developmental concerns.<sup>69–73</sup> Early literacy promotion in the medical home with programs such as Reach Out and Read advances reading readiness by approximately 6 months when compared with controls.<sup>74</sup> In addition, parents in Reach Out and Read practices are 4 times as likely to read to their children and more likely to spend time with their children in interactive play<sup>75</sup> than are families who are not in Reach Out and Read. Another program, the Video Interaction Project (VIP), combines early literacy with guided parent-child interactions that support family relationships and social development of children.<sup>70</sup>

The AAP has promoted the National Center for Medical-Legal Partnerships model, which provides legal aid collocated with health services, especially to families in poverty. A pilot study of medical-legal partnerships found that addressing the social determinants of health by providing legal services and helping families negotiate safety net organizations improves child health outcomes, reduces unnecessary urgent visits, and raises overall child well-being.<sup>76</sup>

Care coordination, a fundamental service of the medical home model, can link families with community resources and support interagency coordination to address basic concerns such as food and energy insecurity. An example of a robust case management initiative is Health Leads,<sup>77</sup> an enhanced primary care strategy that uses college volunteers as advocates and advanced resource management techniques, which has improved coordination of care and utilization of collocated social services by low-income families with the intent of reducing the social barriers to good health.

### **Early Identification of Families in Need of Services**

To link families to services as early as possible, pediatricians can use screening tools that have high sensitivity and specificity. The WE CARE survey<sup>78</sup> is a brief set of questions that alerts the pediatrician to families experiencing stress related to poverty. In the policy statement “Promoting Food Security for All Children,” the AAP recommends the use of a 2-question survey that has a high sensitivity to detect food insecurity.<sup>79,80</sup> A single question, “Do you have difficulty making ends meet at the end of the month?” may be enough to alert the pediatrician with 98% sensitivity to a need for linking families to community resources.<sup>81</sup> Inquiring whether families have moved frequently in the past year or have lived with another family for financial reasons will reveal housing insecurity.<sup>82</sup>

Effective early identification of families in need may facilitate prevention services, including nutritional supplements for young children, preventive health services, age-appropriate learning opportunities, and socioemotional support of parents. Program evaluation has supported this multifaceted approach in multiple countries and settings.<sup>83</sup> Analyses by Nobel Prize-winning economist James Heckman reveal that early prevention activities targeted toward disadvantaged children have high rates of economic returns, much higher than remediation efforts later in childhood or adult life.<sup>84</sup> For example, the Perry Preschool Program showed an average rate of return of \$8.74 for every dollar invested in early childhood education.<sup>85</sup> Targeted interventions foster protective factors, including responsive, nurturing, cognitively stimulating, consistent, and stable parenting by either birth parents or other consistent adults. Early

childhood experiences that promote relational health lead to secure attachment, effective self-regulation and sleep, normal development of the neuroendocrine system, healthy stress-response systems, and positive changes in the architecture of the developing brain.<sup>86,87</sup> Perhaps the most important protective factors are those that attenuate the toxic stress effects of childhood poverty on early brain and child development.<sup>3,5,88</sup>

### **Interventions for Adolescents and Parents of Young Children**

In recent years, there has been a growing focus on “2-generation” strategies to reduce poverty and improve outcomes for low-income families. Two-generation strategies focus on helping low-income children and their parents simultaneously through high-quality interventions.<sup>89</sup> For example, a 2-generation program may enroll parents into job training at the same time as children are enrolled into quality child care. This type of approach aims to improve a family’s earning potential as well as the child’s developmental outcomes. Improved coordination of programs and services for low-income families is essential to a 2-generation strategy.

Recent research suggests that noncognitive skills, such as perseverance, empathy, and self-efficacy, remain malleable during adolescence<sup>90</sup> and build on the cognitive skills developed during early childhood. Interventions such as adolescent mentoring, residential training (eg, Job Corps), and workplace-based apprenticeship programs can increase academic achievement, employment success, and other nonacademic accomplishments over the life span.<sup>90</sup>

### **RECOMMENDATIONS**

As the health care system increasingly focuses on efforts to improve quality and contain costs,

there may be new opportunities to restructure the health care delivery system in ways that can improve care for children in low-income families. Policy decisions in other countries, such as the United Kingdom,<sup>91</sup> also may inform these efforts. Incentivizing care coordination and team-based care may help more children access quality health care through patient- and family-centered medical homes (FCMHs). Medical homes also can help families address unmet social and economic needs by using partners, such as community health workers, within the health care team.<sup>92,93</sup> As previously noted, home visiting is supported through the MIECHV.

State reforms and integrated health delivery systems in some regions are providing incentives for population health approaches, facilitating collaboration in healthy neighborhood initiatives.<sup>94</sup> Collaborators with health care organizations may include education systems, social services, faith-based groups, and community development organizations. Although all children may benefit from greater collaboration between health care organizations and community resources, children in poor and low-income families may experience even greater gains.

### **Opportunities for Public Policy Advocacy**

Public policy efforts are needed to protect the health of children affected by poverty and to help families become economically secure. The specific recommendations made in this and the following section are based on positive outcomes in peer-reviewed literature or preliminary studies that show sufficient promise that rigorous long-term evaluations are underway.

- Invest in young children. Funding quality early childhood programs can have a significant financial return on investment, but more

importantly, making healthy development of young children a national priority while addressing social determinants of health helps families and communities build a foundation for lifelong health.

- Protect and expand funding for essential benefits programs that assist low-income and poor children. Invest in children’s health and development by appropriately funding evidence-based programs, including Early Head Start and Head Start, Medicaid, CHIP, WIC, home visiting, SNAP, school meal programs and other programs that increase access to healthy food, and Child Care Development Block Grant–funded programs. Streamline enrollment and renewal processes for public benefit programs.<sup>95</sup>
- Support 2-generation strategies that focus on helping children and parents simultaneously. Promote the coordination and alignment of adult- and child-focused programs, policies, and systems.
- Support and expand strategies that promote employment and that increase parental income. Programs that increase low-income parents’ earnings have been shown to improve child outcomes. Support policies that help parents increase family income, including higher minimum wages, education and job-training programs, and the EITC, child tax credit, and child and dependent care tax credit.
- Support policy measures that improve community infrastructure, including affordable housing and public spaces. Ensure that all children have safe outdoor play areas as well as healthy, safe, and affordable housing.
- Improve access to quality health care and create incentives to improve population health with the goal of reducing health disparities. Strategies to improve quality and reduce costs should

include care coordination and team-based care that help families address nonmedical health-related concerns, such as food, housing, and utilities. Pediatricians and health care systems should be encouraged to partner with other stakeholders to advance community-level strategies that improve health and reduce disparities among populations of varying income levels.

- Enhance health care financing to support comprehensive care for at-risk families. All benefit plans should include coverage for enhanced services in the medical home for families in poverty. Care coordination, team-delivered care, and coverage for mental health services provided by pediatricians are examples of these enhanced services.
- Make a national commitment to fully fund home visiting programs for all children living in low-income or poor households. The Bureau of Maternal and Child Health has identified 19 programs, including but not limited to Nurse-Family Partnership, Early Head Start, Healthy Families America, and Parents as Teachers, that target families with pregnant women or children younger than 5 years.
- Support integrated models of care in the medical home that promote effective parenting and school readiness, such as Healthy Steps, Reach Out and Read, VIP, Incredible Years, Medical Legal Partnerships, and Positive Parenting Program. Both Medicaid and education funding agencies should provide support in the medical home for parenting and literacy promotion.
- Improve national poverty definitions and measures. The FPL underestimates the extent and depth of poverty in the United States. The SPM is an improvement, but more research

is necessary to quantify the extent of poverty in the United States and its effects on children and families so that effective responses can be developed and promoted.

- Support a comprehensive research agenda to improve the understanding of the effects of poverty on children and to identify and refine interventions that improve child health outcomes. Research is needed to identify better ways to measure how poverty affects children, what works to help families in poverty, and how to translate the information gained into real solutions for the poor.

### **Opportunities for Community Practice**

The following recommendations address how individual pediatricians can support the health and well-being of children living in poverty. Adaptations of the medical home to acknowledge the complex challenges that confront poor families require surveillance on the part of the practitioner of both risk and protective factors that characterize each family.

- Create a medical home that acknowledges and is sensitive to the needs of families living in poverty. Although every family wants to provide the best resources and care to their children, economic barriers can stand in the way. All members of the care team and practice should become familiar with some of the common challenges faced by poor families. Recognizing problems such as transportation barriers, difficult work schedules, and competing financial issues can help practices effectively communicate and partner with families. An enhanced medical home providing integrated care for families in poverty is informed by the understanding that emotional care of the family, including recognizing

maternal depression, is within the scope of practice for community pediatricians and that the effects of toxic stress on children can be ameliorated by supportive, secure relational health during early childhood.

- Screen for risk factors within social determinants of health during patient encounters. Practices can use a brief written screener or verbally ask family members questions about basic needs, such as food, housing, and heat. Screening for basic needs can help uncover not only obvious but also less apparent economic difficulties experienced by families. As patient-centered medical homes continue to develop, care coordinators will fulfill the role of community liaison for families in poverty, connecting them with needed resources.
- Consider implementing integrated medical home programs, such as Healthy Steps, Reach Out and Read, Health Leads, and VIP, in addition to primary care integration with mental health interventions such as Incredible Years and Triple P. These programs help parents develop the capacity and confidence to build resilience in their children and improve the ability of the family to cope with adversity. Bright Futures guidelines provide the most comprehensive recommendations for health supervision and are enhanced by strategies to advance behavioral health care into the pediatric medical home and to address the social determinants of health.
- Identify and build on family strengths and protective factors. Although families in poverty face many challenges, each family has strengths, capabilities, and protective factors. Pediatricians can strive to identify and build on protective factors within families, such as cohesion, humor, support networks, skills, and spiritual and



cultural beliefs.<sup>96,97</sup> By approaching families from a strengths-based perspective, pediatricians can help build trust and identify the assets on which a family can draw to effectively address problems and care for their children.

- Collaborate with community organizations to help families address unmet basic needs and assist with family stressors. When unmet basic needs and poverty-associated risks are identified, pediatricians can refer families to appropriate community services and public programs. Key partners may include local and state public health departments, legal services, social work organizations, food pantries, faith-based organizations, and community development organizations. Some communities also may have innovative financial literacy programs that are helpful.<sup>98</sup> Practices may partner with local home visiting programs, community mental health services, and parent support groups that can help families address parenting challenges and other stressors.
- Engage with early intervention programs and schools to promote learning and academic achievement. Education professionals are often very involved in efforts to help children from low-income backgrounds with academic achievement and also may participate in initiatives focused on basic needs, such as feeding programs, clothing drives, and health screenings. Pediatricians can actively participate with these efforts as well as early intervention programs, after-school programs, tutoring programs, and social services provided through the school district.
- Promote the MIECHV program. Pediatricians should be familiar with local MIECHV programs and how to connect their patients with home visiting programs on the

state and local levels. Pediatricians and the AAP should be aware that the MIECHV continually reviews home visiting programs for inclusion in the MIECHV and can submit programs for review that they have found successful. Opportunities for enhanced communication between the FCMH and home-visiting programs may be explored, including the possibility of collocation of visitors in the FCMH as an integrated service model.

- Support community programs that enhance the involvement of fathers in the lives of their children. Pediatricians can be an important support resource and advocate for community-based fatherhood initiatives. When possible, nonresidential fathers should be involved in all aspects of pediatric care.
- Advance strategies to address family and child mental health and development. Pediatricians are strongly encouraged to include routine screening for maternal depression at every health supervision visit during the first year of life and to be able to provide an appropriate referral for treatment when depression is suspected. Pediatricians can advocate for increased resources to address mental health and behavioral issues in poor communities, including separate payment for screening for parental depression and for care coordination activities.
- Advocate for public policies that support all children and help mitigate the effects of poverty on child health. Pediatricians can serve as important advocates for policies that help children and families in poverty. Pediatricians can add a unique voice to poverty-related advocacy by reframing poverty as an evidence-based health concern with lifelong health, social, and economic consequences.

## CONCLUSIONS

Poverty and other adverse social determinants have a detrimental effect on child health and are root causes of child health inequity in the United States. Knowledge is expanding rapidly, especially regarding the neurobiological effects of poverty and related environmental stressors on the developing human brain as well as the life course of chronic illness. Understanding the causative relation between early childhood poverty and adult health status should inform and influence the decisions of policy makers, researchers, and community pediatricians. The evidence strongly suggests that the FCMH with its enhanced capabilities is an essential asset in efforts to ameliorate the adverse effects of poverty on children.

The AAP considers child poverty in the United States unacceptable and detrimental to the health and well-being of children and is committed to its elimination. The AAP calls for concerted action by its state chapters as well as governmental, private, nonprofit, faith-based, philanthropic, and other advocacy organizations to reduce child poverty by supporting and expanding existing programs that have been shown to work and to make efforts to develop, identify, and promote other potentially effective policies and programs. In 1935, the US Congress passed the Social Security Act and in 1965 enacted Medicare. Together, these 2 pieces of legislation have greatly reduced and nearly eliminated poverty in the elderly. It is time to enact similar reforms to eliminate child poverty. By embracing the policies and enacting the recommendations in this statement, the AAP joins with governmental, philanthropic, private, and other health care organizations in a concerted and dedicated effort to eliminate child poverty in the United States.

## ACKNOWLEDGMENTS

We acknowledge the following University of California–Los Angeles pediatric and med-peds residents for their research contributions to this policy statement: Natalie Cerda, MD, Jeremy Lehman Fox, MD, Neil A. Gholkar, MD, Lydia Soo-Hyun Kim, MD, MPH, Rachel J. Klein, MD, Ashley E. Lewis Hunter, MD, Sarah J. Maufe, MD, Colin L. Robinson, MD, MPH, Joseph R. Rojas, MD, and Weiyi Tan, MD, MPH.

## LEAD AUTHORS

James H. Duffee, MD, MPH, FAAP  
Alice A. Kuo, MD, PhD, FAAP  
Benjamin A. Gitterman, MD, FAAP

## COUNCIL ON COMMUNITY PEDIATRICS EXECUTIVE COMMITTEE, 2015–2016

Benjamin A. Gitterman, MD, FAAP, Chairperson  
Patricia J. Flanagan MD, FAAP, Vice-Chairperson  
William H. Cotton, MD, FAAP  
Kimberley J. Dilley, MD, MPH, FAAP  
James H. Duffee, MD, MPH, FAAP  
Andrea E. Green, MD, FAAP  
Virginia A. Keane, MD, FAAP  
Scott D. Krugman, MD, MS, FAAP  
Julie M. Linton, MD, FAAP  
Carla D. McKelvey, MD, MPH, FAAP  
Jacqueline L. Nelson, MD, FAAP

## LIAISONS

Jacqueline R. Dougé, MD, MPH, FAAP –  
*Chairperson, Public Health Special Interest Group*  
Janna Gewirtz O'Brien, MD – *Section on Medical Students, Residents, and Fellowship Trainees*

## FORMER EXECUTIVE COMMITTEE MEMBERS

Lance A. Chilton, MD, FAAP  
Thesia B. Gambon, MD, FAAP  
Alice A. Kuo, MD, PhD, FAAP  
Gonzalo J. Paz-Soldan, MD, FAAP  
Barbara Zind, MD, FAAP

## FORMER LIAISONS

Toluwalase Ajayi, MD – *Section on Medical Students, Residents, and Fellowship Trainees*  
Ricky Y. Choi, MD, MPH, FAAP – *Chairperson, Immigrant Health Special Interest Group*  
Frances J. Dunston, MD, MPH, FAAP – *Commission to End Health Care Disparities*  
M. Edward Ivancic, MD, FAAP – *Chairperson, Rural Health Special Interest Group*

## CONTRIBUTORS

John M. Pascoe, MD, MPH, FAAP  
David Wood, MD, MPH, FAAP

## CONSULTANT

Anne Brown Rodgers, Science Writer

## STAFF

Camille Watson, MS

## COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, 2015–2016

Michael Yogman, MD, FAAP, Chairperson  
Nerissa Bauer, MD, MPH, FAAP  
Thesia B. Gambon, MD, FAAP  
Arthur Lavin, MD, FAAP  
Keith M. Lemmon, MD, FAAP  
Gerri Mattson, MD, FAAP  
Jason Richard Rafferty, MD, MPH, EdM  
Lawrence Sagin Wissow, MD, MPH, FAAP

## LIAISONS

Sharon Berry, PhD, LP – *Society of Pediatric Psychology*  
Terry Carmichael, MSW – *National Association of Social Workers*  
Edward Christophersen, PhD, FAAP – *Society of Pediatric Psychology*  
Norah Johnson, PhD, RN, CPNP-BC – *National Association of Pediatric Nurse Practitioners*  
Leonard Read Sulik, MD, FAAP – *American Academy of Child and Adolescent Psychiatry*

## CONSULTANT

George J. Cohen, MD, FAAP

## STAFF

Stephanie Domain, MS, CHES

## ABBREVIATIONS

AAP: American Academy of Pediatrics  
CHIP: Children's Health Insurance Program  
EITC: earned income tax credit  
FCMH: family-centered medical home  
FPL: federal poverty level  
MIECHV: Maternal, Infant, and Early Child Home Visiting  
SNAP: Supplemental Nutrition Assistance Program  
SPM: Supplemental Poverty Measure  
TANF: Temporary Assistance for Needy Families  
VIP: Video Interaction Project  
WIC: Supplemental Nutrition Program for Women, Infants, and Children

## REFERENCES

1. Brooks-Gunn J, Duncan GJ. The effects of poverty on children. *Future Child*. 1997;7(2):55–71
2. Blair C, Granger DA, Willoughby M, et al; FLP Investigators. Salivary cortisol mediates effects of poverty and parenting on executive functions in early childhood. *Child Dev*. 2011;82(6):1970–1984
3. Garner AS, Shonkoff JP; Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. Early childhood adversity, toxic stress, and the role of the pediatrician: translating developmental science into lifelong health. *Pediatrics*. 2012;129(1). Available at: [www.pediatrics.org/cgi/content/full/129/1/e224](http://www.pediatrics.org/cgi/content/full/129/1/e224)
4. Boyle CA, Boulet S, Schieve LA, et al. Trends in the prevalence of developmental disabilities in US children, 1997–2008. *Pediatrics*. 2011;127(6):1034–1042
5. Belfield CR, Levin HM, eds. *The Price We Pay: Economic and Social Consequences of Inadequate Education*. Washington, DC: Brookings Press; 2007
6. Shonkoff JP, Garner AS; Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*. 2012;129(1). Available at: [www.pediatrics.org/cgi/content/full/129/1/e232](http://www.pediatrics.org/cgi/content/full/129/1/e232)
7. Holzer H, Schanzenbach DW, Duncan GJ, Ludwig J. The economic costs of childhood poverty in the United States. *J Child Poverty*. 2008;14(1):41–61
8. Belfield CR, Levin HM, Rosen R. The economic value of opportunity youth. Washington, DC: Corporation for National and Community Service; 2012. Available at: [www.serve.gov/new-images/council/pdf/econ\\_value\\_opportunity\\_youth.pdf](http://www.serve.gov/new-images/council/pdf/econ_value_opportunity_youth.pdf). Accessed January 11, 2016
9. UNICEF Innocenti Research Centre. Measuring child poverty: new league

- tables of child poverty in the world's rich countries. Florence, Italy: UNICEF Innocenti Research Centre; 2012. Innocenti Report Card 10. Available at: [www.unicef-irc.org/publications/pdf/rc10\\_eng.pdf](http://www.unicef-irc.org/publications/pdf/rc10_eng.pdf). Accessed January 11, 2016
10. Organization for Economic Cooperation and Development. Child poverty. Available at: [www.oecd.org/els/soc/C02\\_2\\_ChildPoverty\\_Jan2014.pdf](http://www.oecd.org/els/soc/C02_2_ChildPoverty_Jan2014.pdf). Accessed January 11, 2016
  11. United Nations. Sustainable Development Goals. Goal 1: end poverty in all its forms everywhere. Available at: [www.un.org/sustainabledevelopment/poverty/](http://www.un.org/sustainabledevelopment/poverty/). Accessed January 11, 2016
  12. DeNavas-Walt C, Proctor BD; US Census Bureau. Current population reports, P60-252, income and poverty in the United States: 2014. Washington, DC: US Government Printing Office; 2015
  13. US Census Bureau. One in five children receive food stamps, Census Bureau reports. Available at: [www.census.gov/newsroom/press-releases/2015/cb15-16.html](http://www.census.gov/newsroom/press-releases/2015/cb15-16.html). Accessed September 28, 2015
  14. Kids Count Data Center. 2011 Kids Count Data Book. Available at: <http://datacenter.kidscount.org>. Accessed July 31, 2015
  15. The Annie E. Casey Foundation. 2013 Kids Count Data Book. Available at: [www.aecf.org/MajorInitiatives/KIDSCOUNT.aspx?rules=2](http://www.aecf.org/MajorInitiatives/KIDSCOUNT.aspx?rules=2). Accessed July 31, 2015
  16. Ratcliffe C, McKernan SM. Childhood poverty persistence: facts and consequences. Urban Institute Brief. June 2010. Available at: [www.urban.org/UploadedPDF/412126-child-poverty-persistence.pdf](http://www.urban.org/UploadedPDF/412126-child-poverty-persistence.pdf). Accessed July 31, 2015
  17. Isaacs JB. International comparisons of economic mobility. In: Isaacs JB, Sawhill IV, Haskins R, eds. *Getting ahead or losing ground: economic mobility in America*. Washington, DC: The Brookings Institution; 2008:37–44. Available at: [www.brookings.edu/~media/Research/Files/Reports/2008/2/economic%20mobility%20sawhill/02\\_economic\\_mobility\\_sawhill.pdf](http://www.brookings.edu/~media/Research/Files/Reports/2008/2/economic%20mobility%20sawhill/02_economic_mobility_sawhill.pdf). Accessed January 11, 2016
  18. Mitnik PA, Grusky DB. Economic mobility in the United States. 2015. Philadelphia, PA: Pew Charitable Trusts, Russell Sage Foundation; 2015. Available at: [www.pewtrusts.org/~media/assets/2015/07/fsm-irs-report\\_artfinal.pdf](http://www.pewtrusts.org/~media/assets/2015/07/fsm-irs-report_artfinal.pdf). Accessed December 27, 2015
  19. Saez E. Striking it richer: the evolution of top incomes in the United States. Berkeley, CA: University of California Berkeley; 2015. Available at: <http://eml.berkeley.edu/~saez/saez-UStopincomes-2013.pdf>. Accessed December 27, 2015
  20. Stiglitz J. Inequality in America: a policy agenda for a stronger future. *Ann Am Acad Pol Soc Sci*. 2015;657(1):8–20
  21. Economic Policy Institute. The state of working America: key numbers. African Americans. Available at: <http://stateofworkingamerica.org/files/book/factsheets/african-americans.pdf>. Accessed December 27, 2015
  22. Wagmiller RL, Adelman RM. Childhood and intergenerational poverty. New York, NY: National Center for Children in Poverty; 2009. Available at: [www.nccp.org/publications/pub\\_909.html](http://www.nccp.org/publications/pub_909.html). Accessed December 27, 2015
  23. Bolin B, Grineski S, Collins T. The geography of despair. *Hum Ecol Rev*. 2005;12(2):156–168
  24. Kneebone B. *Confronting Suburban Poverty in America*. Washington, DC: Brookings Press; 2013
  25. Joint Center's Health Policy Institute. Building stronger communities for better health. 2004. Available at: [www.racialequitytools.org/resourcefiles/jointcenter3.pdf](http://www.racialequitytools.org/resourcefiles/jointcenter3.pdf). Accessed December 28, 2015
  26. Council on Community Pediatrics and Committee on Native American Child Health. Policy statement—health equity and children's rights. *Pediatrics*. 2010;125(4):838–849
  27. Council on Community Pediatrics. Providing care for children and adolescents facing homelessness and housing insecurity. *Pediatrics*. 2013;131(6):1206–1210
  28. Pascoe JM, Wood DL, Kuo A, Duffee JH; Committee on Psychosocial Aspects of Child and Family Health; Council on Community Pediatrics. Mediators and adverse effects of child poverty in the United States. *Pediatrics*. 2016;137(4):e20160340
  29. Fox L, Garfinkel I, Kaushal N, Waldfogel J, Wimer C. *Waging War on Poverty: Historical Trends in Poverty Using the Supplemental Poverty Measure*. Cambridge, MA: National Bureau of Economic Research; 2014. Working Paper 19789. Available at: [www.nber.org/papers/w19789](http://www.nber.org/papers/w19789). Accessed July 31, 2015
  30. Center on Budget and Policy Priorities. Policy basics: the earned income tax credit. January 2014. Available at: [www.cbpp.org/files/policybasics-eitc.pdf](http://www.cbpp.org/files/policybasics-eitc.pdf). Accessed July 31, 2015
  31. Center on Budget and Policy Priorities. Earned income tax credit promotes work, encourages children's success at school, research finds. April 2013. Available at: [www.cbpp.org/files/6-26-12tax.pdf](http://www.cbpp.org/files/6-26-12tax.pdf). Accessed July 31, 2015
  32. Leibman J. The impact of the earned income tax credit on incentives and income distribution. In: Poterba JM, ed. *Tax Policy and the Economy*. Cambridge, MA: MIT Press; 1998: 83–120
  33. Hoynes HW, Miller DL, Simon D. The EITC: linking income to real health outcomes [policy brief]. Davis, CA: University of California Davis Center for Poverty Research; 2013. Available at: <http://poverty.ucdavis.edu/research-paper/policy-brief-linking-eitc-income-real-health-outcomes>. Accessed July 31, 2015
  34. Center on Budget and Policy Priorities. Policy basics: the child tax credit. January 2014. Available at: [www.cbpp.org/files/policybasics-ctc.pdf](http://www.cbpp.org/files/policybasics-ctc.pdf). Accessed July 31, 2015
  35. Center on Budget and Policy Priorities. TANF weakening as a safety-net for poor families. March 2012. Available at: [www.cbpp.org/files/3-13-12tanf.pdf](http://www.cbpp.org/files/3-13-12tanf.pdf). Accessed July 31, 2015
  36. Hernandez DJ. Declining fortunes of children in middle-class families: economic inequality and child well-being in the 21st century. New York, NY: Foundation for Child Development; 2011. Available at: [http://fcd-us.org/sites/default/files/2011%20Declining%20Fortunes\\_0.pdf](http://fcd-us.org/sites/default/files/2011%20Declining%20Fortunes_0.pdf). Accessed July 31, 2015
  37. Dube A. Minimum wages and the distribution of family incomes. UMass Amherst Working Paper.

2013. Available at: [https://dl.dropboxusercontent.com/u/15038936/Dube\\_MinimumWagesFamilyIncomes.pdf](https://dl.dropboxusercontent.com/u/15038936/Dube_MinimumWagesFamilyIncomes.pdf). Accessed July 31, 2015
38. Issacs JB, Magnuson K. Income and education as predictors of children's school readiness. Washington, DC: Brookings Institute; 2011. Available at: [www.brookings.edu/research/reports/2011/12/15-school-readiness-isaacs](http://www.brookings.edu/research/reports/2011/12/15-school-readiness-isaacs). Accessed July 31, 2015
  39. Duncan GJ, Ziol-Guest KM, Kalil A. Early-childhood poverty and adult attainment, behavior, and health. *Child Dev*. 2010;81(1):306–325
  40. Knox V, London A, Scoot E. Welfare reform, work, and child care. MDRC policy brief. 2003. Available at: [www.mdrc.org/sites/default/files/policybrief\\_40.pdf](http://www.mdrc.org/sites/default/files/policybrief_40.pdf). Accessed July 31, 2015
  41. Cohen J, Ewen D. Infants and toddlers in child care [policy brief]. Washington, DC: Zero to Three; 2008. Available at: [http://main.zerotothree.org/site/DocServer/Infants\\_and\\_Toddlers\\_in\\_Child\\_Care\\_Brief.pdf?docID=6561](http://main.zerotothree.org/site/DocServer/Infants_and_Toddlers_in_Child_Care_Brief.pdf?docID=6561). Accessed July 31, 2015
  42. Allegretto S. Basic family budgets: working families' incomes often fail to meet living expenses around the U.S. Economic Policy Institute; 2005. Available at: [www.epi.org/publication/bp165/](http://www.epi.org/publication/bp165/). Accessed July 31, 2015
  43. MacGillvary J, Lucia L. Economic impacts of early care and education in California. Berkley, CA: UC Berkley Center for Labor Research and Education; 2011. Available at: [http://laborcenter.berkeley.edu/pdf/2011/child\\_care\\_report0811.pdf](http://laborcenter.berkeley.edu/pdf/2011/child_care_report0811.pdf). Accessed July 31, 2015
  44. Tax Policy Center. Taxation and the family. How does the tax system subsidize child care expenses? 2015. Available at: [www.taxpolicycenter.org/briefing-book/key-elements/family/child-care-subsidies.cfm](http://www.taxpolicycenter.org/briefing-book/key-elements/family/child-care-subsidies.cfm). Accessed July 31, 2015
  45. National Health Interview Survey Early Release Program. Health insurance coverage: early release of estimates from the National Health Interview Survey, January–March 2014. Available at: [www.cdc.gov/nchs/data/nhis/earlyrelease/insur201409.pdf](http://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201409.pdf). Accessed January 11, 2016
  46. Abdus S, Selden TM. Adherence with recommended well-child visits has grown, but large gaps persist among various socioeconomic groups. *Health Aff (Millwood)*. 2013;32(3):508–515
  47. Perry CD, Kenney GM. Preventive care for children in low-income families: how well do Medicaid and state children's health insurance programs do? *Pediatrics*. 2007;120(6). Available at: [www.pediatrics.org/cgi/content/full/120/6/e1393](http://www.pediatrics.org/cgi/content/full/120/6/e1393)
  48. Howell EM, Kenney GM. The impact of the Medicaid/CHIP expansions on children: a synthesis of the evidence. *Med Care Res Rev*. 2012;69(4):372–396
  49. Racine AD, Long TF, Helm ME, et al; Committee on Child Health Financing. Children's Health Insurance Program (CHIP): accomplishments, challenges, and policy recommendations. *Pediatrics*. 2014;133(3). Available at: [www.pediatrics.org/cgi/content/full/133/3/e784](http://www.pediatrics.org/cgi/content/full/133/3/e784)
  50. Head Start Program. Head Start Program facts fiscal year 2011. Available at: <http://eclkc.ohs.acf.hhs.gov/hslc/mr/factsheets/2011-hs-program-factsheet.html>. Accessed July 31, 2015
  51. DiLaruro E. Learning, thriving and ready to succeed. Zero to Three; 2009. Available at: <http://main.zerotothree.org/site/DocServer/EHSsinglesMar5.pdf?docID=7884>. Accessed July 31, 2015
  52. Administration for Children and Families, Office of Child Care. OCC fact sheet. Available at: [www.acf.hhs.gov/programs/occ/fact-sheet-occ](http://www.acf.hhs.gov/programs/occ/fact-sheet-occ). Accessed January 19, 2016
  53. Karoly LA, Kilburn MR, Cannon JS. Proven benefits of early childhood interventions [research brief]. Santa Monica, CA: Rand Corporation; 2005. Available at: [www.rand.org/content/dam/rand/pubs/research\\_briefs/2005/RAND\\_RB9145.pdf](http://www.rand.org/content/dam/rand/pubs/research_briefs/2005/RAND_RB9145.pdf). Accessed July 31, 2015
  54. Heckman JJ. The case for investing in disadvantaged young children. In: *Big Ideas for Children: Investing in Our Nation's Future*. Washington, DC: First Focus; 2008:49–58
  55. Special Supplemental Nutrition Program for Women, Infants, and Children. WIC eligibility requirements. Available at: [www.fns.usda.gov/wic/howtoapply/eligibilityrequirements.htm](http://www.fns.usda.gov/wic/howtoapply/eligibilityrequirements.htm). Accessed July 31, 2015
  56. Colman S, Nichols-Barrer IP, Redline JE, Devaney BL, Ansell SV, Joyce T. Effects of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): a review of recent research. Alexandria, VA: US Department of Agriculture, Food and Nutrition Service; 2012. Report WIC-12-WM. Available at: [www.mathematica-mpr.com/~media/publications/pdfs/nutrition/wic\\_research\\_review.pdf](http://www.mathematica-mpr.com/~media/publications/pdfs/nutrition/wic_research_review.pdf). Accessed January 11, 2016
  57. Suchman A, Mendelson M, Patlan KL, Freeman B, Gotlieb R, Connor P. *WIC Participant and Program Characteristics 2012*. Prepared by Insight Policy Research under contract no. AG-3198-C-11-0010. Alexandria, VA: Food and Nutrition Service, US Department of Agriculture; 2013
  58. Jackson MI. Early childhood WIC participation, cognitive development and academic achievement. *Soc Sci Med*. 2015;126:145–153
  59. Executive Office of the President of the United States. Long-term benefits of the Supplemental Nutrition Assistance Program. December 2015. Available at: [https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/SNAP\\_report\\_final\\_nonembargo.pdf](https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/SNAP_report_final_nonembargo.pdf). Accessed January 11, 2016
  60. US Department of Agriculture, Economic Research Service. SNAP benefits alleviate the intensity and incidence of poverty. Available at: [www.ers.usda.gov/amber-waves/2012-june/snap-benefits.aspx#.VolJcBHVStV](http://www.ers.usda.gov/amber-waves/2012-june/snap-benefits.aspx#.VolJcBHVStV). Accessed January 11, 2016
  61. US Department of Agriculture, Food and Nutrition Service. National School Lunch Program. Available at: [www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf](http://www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf). Accessed July 31, 2015
  62. Southern Education Foundation. A New Majority Research Bulletin: low income students now a majority in the nation's public schools. Atlanta, GA: Southern Education Foundation; 2015. Available at: [www.southerneducation.org/Our-Strategies/Research-and-Publications/New-Majority-Diverse-Majority-Report-Series/](http://www.southerneducation.org/Our-Strategies/Research-and-Publications/New-Majority-Diverse-Majority-Report-Series/)

- A-New-Majority-2015-Update-Low-Income-Students-Now. Accessed July 31, 2015
63. Lumeng JC, Kaciroti N, Sturza J, et al. Changes in body mass index associated with head start participation. *Pediatrics*. 2015;135(2). Available at: [www.pediatrics.org/cgi/content/full/135/2/e449](http://www.pediatrics.org/cgi/content/full/135/2/e449)
  64. US Department of Health and Human Services. Maternal, Infant, and Early Childhood Home Visiting Program. Available at: <http://mchb.hrsa.gov/programs/homevisiting/index.html>. Accessed July 31, 2015
  65. Health Resources and Services Administration. Home visiting models. Available at: <http://mchb.hrsa.gov/programs/homevisiting/models.html>. Accessed July 31, 2015
  66. Avellar S, Paulsell D, Sama-Miller E, Del Grosso P, Akers L, Kleinman R. Home visiting evidence of effectiveness review: executive summary. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services; 2015. Available at: [http://homvee.acf.hhs.gov/HomVEE\\_Executive\\_Summary\\_2015.pdf](http://homvee.acf.hhs.gov/HomVEE_Executive_Summary_2015.pdf). Accessed January 3, 2016
  67. Olds D. The nurse–family partnership: an evidence-based preventive intervention. *Infant Ment Health J*. 2006;27(1):5–25
  68. National Center for Community-Based Child Abuse Prevention. Protective Factors Survey. Available at: <http://friendsnrc.org/protective-factors-survey>. Accessed July 31, 2015
  69. Zuckerman B. Promoting early literacy in pediatric practice: twenty years of reach out and read. *Pediatrics*. 2009;124(6):1660–1665
  70. Mendelsohn AL, Dreyer BP, Brockmeyer CA, Berkule-Silberman SB, Morrow LM. Fostering early development and school readiness in pediatric settings. In: Dickinson D, Neuman SB, eds. *Handbook of Early Literacy Research*. Vol. 3. New York, NY: Guilford; 2011:279–294
  71. Minkovitz CS, Strobino D, Mistry KB, et al. Healthy Steps for Young Children: sustained results at 5.5 years. *Pediatrics*. 2007;120(3). Available at: [www.pediatrics.org/cgi/content/full/120/3/e658](http://www.pediatrics.org/cgi/content/full/120/3/e658)
  72. Perrin EC, Sheldrick RC, McMenamy JM, Henson BS, Carter AS. Improving parenting skills for families of young children in pediatric settings: a randomized clinical trial. *JAMA Pediatr*. 2014;168(1):16–24
  73. Bauer NS, Webster-Stratton C. Prevention of behavioral disorders in primary care. *Curr Opin Pediatr*. 2006;18(6):654–660
  74. Diener ML, Hobson Rohrer W, Byington CL. Kindergarten readiness and performance of Latino children participating in Reach Out and Read. *J Community Med Health Educ*. 2012;2:133
  75. Mendelsohn AL, Mogilner LN, Dreyer BP, et al. The impact of a clinic-based literacy intervention on language development in inner-city preschool children. *Pediatrics*. 2001;107(1):130–134
  76. Weintraub D, Rodgers MA, Botcheva L, et al. Pilot study of medical-legal partnership to address social and legal needs of patients. *J Health Care Poor Underserved*. 2010;21(2 suppl):157–168
  77. Vasan A, Solomon BS. Use of colocated multidisciplinary services to address family psychosocial needs at an urban pediatric primary care clinic. *Clin Pediatr (Phila)*. 2015;54(1):25–32
  78. Garg A, Butz AM, Dworkin PH, Lewis RA, Thompson RE, Serwint JR. Improving the management of family psychosocial problems at low-income children’s well-child care visits: the WE CARE Project. *Pediatrics*. 2007;120(3):547–558
  79. Council on Community Pediatrics; Committee on Nutrition. Promoting food security for all children. *Pediatrics*. 2015;136(5). Available at: [www.pediatrics.org/cgi/content/full/136/5/e1431](http://www.pediatrics.org/cgi/content/full/136/5/e1431)
  80. Haeger ER, Quiigg AM, Black MM, et al. Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*. 2010;126(1). Available at: [www.pediatrics.org/cgi/content/full/126/1/e26](http://www.pediatrics.org/cgi/content/full/126/1/e26)
  81. Brcic V, Eberdt C, Kaczorowski J. Development of a tool to identify poverty in a family practice setting: a pilot study. *Int J Family Med*. 2011;2011:812182
  82. Cutts DB, Meyers AF, Black MM, et al. US housing insecurity and the health of very young children. *Am J Public Health*. 2011;101(8):1508–1514
  83. Shonkoff JP, Richter L, van der Gaag J, Bhutta ZA. An integrated scientific framework for child survival and early childhood development. *Pediatrics*. 2012;129(2). Available at: [www.pediatrics.org/cgi/content/full/129/2/e460](http://www.pediatrics.org/cgi/content/full/129/2/e460)
  84. Heckman JJ. Skill formation and the economics of investing in disadvantaged children. *Science*. 2006;312(5782):1900–1902
  85. Barnett WS. Benefit-cost analysis of preschool education. 2004. Available at: <http://nieer.org/resources/files/BarnettBenefits.ppt>. Accessed July 31, 2015
  86. Yoshikawa H, Aber JL, Beardslee WR. The effects of poverty on the mental, emotional, and behavioral health of children and youth: implications for prevention. *Am Psychol*. 2012;67(4):272–284
  87. McEwen BS, Gianaros PJ. Central role of the brain in stress and adaptation: links to socioeconomic status, health, and disease. *Ann N Y Acad Sci*. 2010;1186:190–222
  88. Johnson SB, Riley AW, Granger DA, Riis J. The science of early life toxic stress for pediatric practice and advocacy. *Pediatrics*. 2013;131(2):319–327
  89. Woodrow Wilson School of Public and International Affairs at Princeton University; Brookings Institution. Helping parents, helping children: two-generation mechanisms. *Future Child*. 2014;24(1):1–170. Available at: [www.princeton.edu/futureofchildren/publications/journals/journal\\_details/index.xml?journalid=81](http://www.princeton.edu/futureofchildren/publications/journals/journal_details/index.xml?journalid=81). Accessed January 11, 2016
  90. Heckman JJ, Kautz T. Fostering and measuring skills: interventions that improve character and cognition. In: Heckman JJ, Humphries JE, Kautz T, eds. *The Myth of Achievement Tests: The GED and the Role of Character in*

*American Life*. Chicago, IL: University of Chicago Press; 2014:293–317

91. Waldfogel J. Tackling child poverty and improving child well-being: lessons from Britain. Report for First Focus and Foundation for Child Development. 2010. Available at: <http://fcd-us.org/resources/tackling-child-poverty-and-improving-child-well-being-lessons-britain>. Accessed July 31, 2015
92. Antonelli RC, McAllister JW, Popp J. Making care coordination a critical component of the pediatric health system: a multidisciplinary framework. The Commonwealth Fund; 2009. Available at: [www.commonwealthfund.org/publications/fund-reports/2009/may/making-care-coordination-a-critical-component-of-the-pediatric-health-system](http://www.commonwealthfund.org/publications/fund-reports/2009/may/making-care-coordination-a-critical-component-of-the-pediatric-health-system). Accessed July 31, 2015
93. Rosenthal EL, Brownstein JN, Rush CH, et al. Community health workers: part of the solution. *Health Aff (Millwood)*. 2010;29(7):1338–1342
94. Nationwide Children's. Healthy neighborhoods, healthy families. Available at: [www.nationwidechildrens.org/healthy-neighborhoods-healthy-families](http://www.nationwidechildrens.org/healthy-neighborhoods-healthy-families). Accessed July 31, 2015
95. The Annie E. Casey Foundation. Improving access to public benefits helping eligible individuals and families get the income supports they need. April 2010. Available at: [www.aecf.org/~media/Pubs/Topics/Economic%20Security/Family%20Economic%20Supports/ImprovingAccessToPublicBenefitsHelpingEligible/BenefitsAccess41410.pdf](http://www.aecf.org/~media/Pubs/Topics/Economic%20Security/Family%20Economic%20Supports/ImprovingAccessToPublicBenefitsHelpingEligible/BenefitsAccess41410.pdf). Accessed July 31, 2015
96. US Department of Health and Human Services; Administration for Children and Families; Office of Head Start; USA.gov. Training guides for the Head Start Learning Community: abstracts. 2000. Available at: <http://eclkc.ohs.acf.hhs.gov/hslc/tta-system/pd/pds/Cultivating%20a%20Learning%20Organization/TrainingGuidesf.htm>. Accessed July 31, 2015
97. Center for the Study of Social Policy; American Academy of Pediatrics. Primary health partners. Promoting children's health and resiliency: a strengthening families approach. Available at: [www.cssp.org/reform/strengthening-families/messaging-at-the-intersection/Messaging-at-the-Intersections\\_Primary-Health.pdf](http://www.cssp.org/reform/strengthening-families/messaging-at-the-intersection/Messaging-at-the-Intersections_Primary-Health.pdf). Accessed July 31, 2015
98. The Neighborhood Developers. Available at: [www.theneighborhooddevelopers.org/money-wise/](http://www.theneighborhooddevelopers.org/money-wise/). Accessed July 31, 2015

**Poverty and Child Health in the United States**  
COUNCIL ON COMMUNITY PEDIATRICS

*Pediatrics* 2016;137;

DOI: 10.1542/peds.2016-0339 originally published online March 9, 2016;

**Updated Information & Services**

including high resolution figures, can be found at:  
<http://pediatrics.aappublications.org/content/137/4/e20160339>

**References**

This article cites 30 articles, 11 of which you can access for free at:  
<http://pediatrics.aappublications.org/content/137/4/e20160339#BIBL>

**Subspecialty Collections**

This article, along with others on similar topics, appears in the following collection(s):

**Current Policy**

[http://www.aappublications.org/cgi/collection/current\\_policy](http://www.aappublications.org/cgi/collection/current_policy)

**Council on Community Pediatrics**

[http://www.aappublications.org/cgi/collection/council\\_on\\_community\\_pediatrics](http://www.aappublications.org/cgi/collection/council_on_community_pediatrics)

**Advocacy**

[http://www.aappublications.org/cgi/collection/advocacy\\_sub](http://www.aappublications.org/cgi/collection/advocacy_sub)

**Permissions & Licensing**

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:

<http://www.aappublications.org/site/misc/Permissions.xhtml>

**Reprints**

Information about ordering reprints can be found online:  
<http://www.aappublications.org/site/misc/reprints.xhtml>

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



# PEDIATRICS<sup>®</sup>

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

**Poverty and Child Health in the United States**  
COUNCIL ON COMMUNITY PEDIATRICS

*Pediatrics* 2016;137;

DOI: 10.1542/peds.2016-0339 originally published online March 9, 2016;

The online version of this article, along with updated information and services, is  
located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/137/4/e20160339>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 345 Park Avenue, Itasca, Illinois, 60143. Copyright © 2016 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN<sup>®</sup>

