# Screening for Poverty and Poverty-Related Social Determinants of Health

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## Practice Gap

Pediatricians should screen for and address poverty and poverty-related social determinants of health because they have clear negative effects on children's health and well-being. This task requires coordination of services beyond the medical home. Pediatricians may also advocate at local and federal levels to further serve patients living in poverty.

### Objectives After completing this article, readers should be able to:

- 1. Define social determinants of health and understand their effect on children's health.
- 2. Access tools to screen for poverty and poverty-related social determinants of health.
- Describe evidence-based interventions that address poverty and poverty-related social determinants of health.
- 4. Outline government policies and programs for impoverished families for which pediatricians may advocate.

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#### **ABBREVIATIONS**

AAP American Academy of Pediatrics
APA Academic Pediatric Association
EITC Earned Income Tax Credit
SNAP Supplemental Nutrition Assistance
Program

WIC Special Supplemental Nutrition
Program for Women, Infants, and
Children

#### CASE SCENARIO

A 13-year-old girl has an appointment with her pediatrician for follow-up of her asthma. She had gone to the emergency department 3 times in the 10 days before the appointment for cough and difficulty breathing. Each time, she was given nebulizer treatments, improved, and was discharged home. She was also treated with oral corticosteroids and azithromycin. Her symptoms have persisted up to the day of the appointment. Her mother reports complete compliance with her inhaled medications, oral corticosteroids, and antibiotic. On further questioning, her mother reports that she, the patient, and the patient's younger brother are living in a shelter. The shelter apartment they initially lived in had no heat, so they were transferred to an apartment on a different floor. The heat did not work in the new apartment, so they were transferred to an apartment in another building, which did not have heat or hot water. The patient's mother tried using the stove to heat the apartment, but it had a strange

odor, so she turned it off, concerned that it would make the patient's asthma worse. The patient has missed 8 days of school during this period.

#### **BACKGROUND**

Children are the poorest demographic of the US population. (1) In 2014, 43% of all US children younger than 18 years lived in "poor, near poor, or low-income" households, defined as household incomes up to 200% of the federal poverty level (annual income of \$47,700 for a family of four for the 48 contiguous states, excluding Alaska and Hawaii, which have different federal poverty guidelines). (2) From a societal perspective, the cost of childhood poverty is estimated to be \$500 billion a year, which is almost 4% of the gross domestic product. This cost is attributed to decreased productivity and greater social expenditures. For example, impoverished children are less likely to finish high school, which is associated with higher rates of unemployment and incarceration in adulthood and higher rates of teen pregnancy. Poverty is also associated with multiple adverse effects on children's health and development, including low birthweight, infant mortality, developmental delay, chronic illness, injury, malnutrition, obesity, and behavioral concerns. Furthermore, poverty makes parenting more challenging, as caregivers struggle to balance caring for their children with meeting their families' basic social needs. (3)

Given the known negative outcomes associated with poverty, it is important for pediatricians to identify families living in poverty. This need has been long recognized by the American Academy of Pediatrics (AAP) and the Academic Pediatric Association (APA), and in the spring of 2016, these 2 organizations independently issued statements addressing the growing problem of childhood poverty and its implications for children's health. The statements urge pediatricians to screen for poverty-related social determinants of health, to develop interventions to reduce the adverse effects of poverty, and to advocate for programs and policies aimed at eliminating childhood poverty. The AAP and APA recommend several programs that pediatricians may establish in their practices and encourage pediatricians to advocate for specific governmental policies addressing poverty. The statements highlight that pediatric providers are uniquely positioned to address childhood poverty through their common objective of preventing childhood diseases, through their opportunity to provide anticipatory guidance throughout children's lives, and through their shared passion for supporting children and families. (3)

The objectives of this article are 1) to review screening tools for poverty and poverty-related social determinants of health that pediatricians may use in practice; 2) to describe interventions that support patients whose screens are positive; and 3) to outline government policies and programs for families living in poverty for which pediatricians may advocate. As an example, we describe how we address each of these items in our urban academic general pediatric practice, located in one of the poorest communities in the United States.

#### RECOMMENDATIONS FOR SCREENING

The World Health Organization defines social determinants of health as "the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life" (4). Social determinants fall under several domains, including income, food security, housing stability, academic attainment and literacy, legal status/immigration, and personal safety, and poverty has a unifying effect on many of them. (5)

The AAP recommends screening for social determinants of health at each health supervision visit from birth until age 21 years. New guidelines recently put forth in *Bright Futures*, a compilation of evidence-based pediatric preventive care guidelines, encourage providers to consider social factors, such as food insecurity and violence, that may affect a child's and family's health. (6)

Table I is a compilation of screening tools for social determinants of health that may be used in pediatric practices and may be particularly helpful to providers supporting families living in poverty. Included are general screening tools, which screen for multiple social determinants, as well as domain-specific screening tools. Screening for social determinants of health should be tailored to each community, addressing the most common issues faced by that community (food insecurity or housing instability) as well as issues that are less common but critical (abuse and neglect). Parent input can be exceedingly helpful in directing which issues to identify. Screening should be appropriate for a child's age and should be performed at multiple visits, as families' needs change over time. (7)

Multiple barriers to screening for poverty-related social determinants of health exist in clinical practice. Before screening, practices need to identify which social determinants are relevant to their patient population, choose which screening tools to use, decide who will administer them, and determine how often and at which ages to screen. Screening may require additional time, space, clinical staff, and expenses; may interrupt the workflow of the practice; and

TABLE 1. Screening Tools

SCREENING TOOL	DESCRIPTION	LANGUAGES	READING LEVEL	WEBSITE REFERENCES
Accountable Health Communities Core Health- Related Social Needs Screening Tool	10 questions (variable responses depending on social determinant) addressing housing instability, food insecurity, transportation needs, utilities, and interpersonal safety     Can be self-administered	English		https://nam.edu/wp-content/ uploads/2017/05/ Standardized-Screening-for- Health-Related-Social-Needs- in-Clinical-Settings.pdf
	• Carr be sell-administered			in the article posted at this website.
Food insecurity 2-question screening tool	In the past 12 mo:  a) We worried whether our food would run out before we got money to buy more b) The food that we bought just didn't last and we didn't have money to get more If 1 or both statements are often or sometimes true, the screen is positive for food insecurity  Administered by clinician	Any language		http://www.hungercare.org/ provider-resources/
Health Leads	13 items (yes/no) addressing parent education, parent employment, child care, housing instability, food insecurity, utilities, income assistance/public benefits, health insurance, legal assistance/immigration, home/neighborhood safety, and domestic violence     Can be self-administered	English and Spanish	4th grade	https://healthleadsusa.org/ tools-item/health-leads- screening-toolkit/  The screening tool is part of the Social Needs Screening Toolkit that can be downloaded at no cost from this website.
HelpSteps	Questions addressing nutrition and fitness (disordered eating, opportunity for physical activity), parent education, safety equipment (smoke detectors, car seats), heath-care access, housing instability, utilities, food insecurity, parent employment, income assistance, substance use, interpersonal violence  Can also request help with sexual health needs, special health-care needs (cognitive and physical disabilities), mental health needs, and parenting needs and support  Self-administered web-based tool that progresses through a series of questions about the above items and links patients to resources based on their responses  Specific to Massachusetts	English		https://www.helpsteps.com/ home.html

Continued

TABLE 1. (Continued)

SCREENING TOOL	DESCRIPTION	LANGUAGES	READING LEVEL	WEBSITE REFERENCES
IHELLP (Income, Housing, Education, Legal Status, Literacy, Personal Safety)	Variable number of questions (clinician-dependent, yes/no and open-ended) addressing: Income (employment, food insecurity, utilities, health insurance, income assistance/ public benefits, transportation)  Housing (housing instability, crowding, lead exposure, smoke exposure, substance use)  Education (child education, school violence, child care)  Legal (legal assistance, immigration status)  Literacy (parent education, parent literacy, reading to children)  Personal safety (community and domestic violence, parent and child trauma exposure)  Administered by clinician	Any language	4th grade	https://www.aap.org/ en-us/Documents/ IHELLPPocketCard.pdf
SWYC (Survey of Well-Being of Young Children) Family Questions	9 questions (yes/no and 3- and 4-point Likert scale) addressing smoke exposure, substance use, food insecurity, parent depression, domestic violence     Part of larger screening tool assessing developmental milestones, behavioral/ emotional development, and family stress     Administered by clinician	English, Spanish, Portuguese, Burmese, and Nepali	6th grade	https://www.floatinghospital. org/The-Survey-of- Wellbeing-of-Young- Children/Overview.aspx
WE CARE (Well Child Care, Evaluation, Community Resources, Advocacy, Referral, Education)	6 questions (yes/no) addressing parent education, parent employment, child care, housing instability, food insecurity, and utilities     Can be self-administered	English and Spanish	3rd grade	http://pediatrics. aappublications.org/ content/135/2/e296  The screening tool can be found in the supplement to the article posted at this website.
WellRx	<ul> <li>11 questions (yes/no)         addressing food insecurity,         housing, utilities, income,         employment, transportation,         substance abuse, child care,         safety, and abuse</li> <li>Can be self-administered</li> </ul>	English and Spanish	5th grade	http://www.jabfm.org/content/ 29/3/414/T1.expansion.html

may not be reimbursable. (3)(8) Families should be informed that screening is universal in the practice. (7) Once screening is implemented, practices may find that the needs of their patient population surpass their ability to provide services. Practices are, therefore, encouraged by the AAP and the APA to take small steps toward screening, to establish systems such that they are not overburdened by

screening and by their patients' needs, and to take advantage of existing models of such systems. (3)(8)

#### Our Practice

We initially began screening for social determinants of health by using the IHELLP screening tool described in Table  $\scriptstyle\rm I$  to take an expanded social history at  $\scriptstyle\rm I$  of 3 academic

practice sites in our network. The IHELLP screening tool was developed at Boston Medical Center and Boston Children's Hospital and is a mnemonic for Income, Housing, Education, Literacy, Legal status, and Personal safety, reminding providers to address multiple domains of povertyrelated social determinants in the social history. (5) This tool led to improved detection of social needs in the inpatient setting when used as part of a multiple stepwise behavioral intervention at another academic institution and was modified to fit the needs of the outpatient pediatric population in our clinics. (9) We began by educating providers about the social determinants of health as they pertained to our patient population and informed them of local community and government-based resources. We created prompts in our electronic medical record for IHELLP that can be added to the social history section of a patient's medical record, and we developed lists of domain-specific resources that can be printed from our electronic medical record and given to patients at the end of the visit. This screening initiative was first implemented among residents in our Social Pediatrics Residency Program at I training site and was later expanded to include all pediatric residents at all 3 clinic sites.

Most recently, the ambulatory network sites at our institution have begun universal screening for social determinants of health using the Health Leads screening tool. Caregivers complete the paper-based screening tool before or during the visit with the clinician. The clinician reviews the results and places an appropriate referral for positive screens. Depending on the clinic site, a social worker and/or a community health worker is available to discuss social needs with patients via a "warm handoff," in which the primary care pediatrician introduces the social worker or community health worker to the patient during the visit or phone call. With the eventual use of a web-based platform that facilitates communication between the clinic and local community organizations, electronic referrals will ultimately be made to area resources.

#### **INTERVENTIONS**

For screening to be worthwhile, it is essential to identify resources and to provide support for patients whose screens are positive. Such interventions may be generalized, addressing multiple social determinants of health, or targeted, addressing particular domains. Several evidence-based programs have been developed to help patients.

# General Interventions Addressing Multiple Social Determinants of Health

Practices may provide a handout for patients containing information about local services, community organizations, and programs that address multiple social determinants of health. In the WE CARE model, a family resource guide specific to the community of the health center contains perforated patient handouts listing community resources for various needs. Providers give the handouts to their patients, and clinic staff help patients apply for services. Studies of the WE CARE model have shown that patients who are screened for social determinants and referred to resources based on their needs are more likely to be enrolled in community resources than are patients who are not screened and referred. (10)

Creating and updating a resource guide, however, is challenging for busy pediatric practices. To facilitate this effort, practices may work together with public health agencies, community programs, and other members of their AAP chapters. Furthermore, several online tools and telephone hotlines have been established to help connect providers to community resources, which are summarized in Table 2. Note that several of these resources are commercial products that we mention as options for pediatricians but that we do not specifically endorse.

Patients may also be referred to programs embedded in the clinic. A clinic may have an in-house social worker to help patients connect to services as well as to provide counseling for patients and families struggling with mental illness. Through the Medical-Legal Partnership, physicians and attorneys partner to help patients with social and legal issues. In this model, a lawyer may meet with patients directly in the clinic, may be available as a consultant for physicians, or may take a patient as a pro bono client. Studies have shown that medical-legal partnerships have a positive effect on patient well-being, use of health-care services, patient empowerment, and legal problem-solving abilities. (8)(11) Health Leads is a national program, funded by corporate and private donors, in which patients who screen positive are referred by their providers to advocates in the clinic who help them connect to community resources as well as to government benefits programs. Studies have shown that Health Leads has been successful in ensuring that families' social needs are met. (8)(12) In addition, community health workers, who are trusted members of the community, can serve as integral members of a clinic team because they are able to overcome cultural and economic barriers to address social determinants of health that limit patients' access to health care. The integration

# TABLE 2. Resources

RESOURCE	DESCRIPTION	WEBSITE
Help Me Grow	<ul> <li>Links providers with community organizations</li> <li>Maintains a phone line and resource center for providers and patients</li> <li>Available in 23 states</li> </ul>	https://helpmegrownational.org
The Children's Advocacy Project (CAP4Kids)	<ul> <li>Enables providers to create online patient handouts of local organizations and services in 13 communities</li> <li>Providers can update the directories provided by the website</li> </ul>	http://cap4kids.org/whatiscap4kids.html
HelpSteps	<ul> <li>Online screening tool, specific to Boston, Massachusetts, that patients can use while in the waiting room to search for local social services</li> </ul>	https://www.helpsteps.com/home.html
Healthify	<ul> <li>Tablet-based tool developed for self-administration by patients while in the waiting room that transmits a list of social needs to the clinician electronically</li> <li>Provides patients with a list of local community and governmental resources, and sends follow-up text messages</li> <li>This tool is a commercial product that we mention as an option but that we do not specifically endorse</li> </ul>	https://www.healthify.us/platform
Aunt Bertha	<ul> <li>Comprehensive online platform that assists providers and patients to find local community programs and services across the United States through a zip code search function</li> </ul>	www.auntbertha.com
Community Services Locator	<ul> <li>Connects providers and families to various social services, including child care, early childhood education, special education services, income support, wellness programs, and parenting programs</li> <li>Maintained by the National Center for Education in Maternal and Child Health</li> </ul>	https://www.ncemch.org/knowledge/ community.php
United Way	<ul> <li>Phone line and website for families to find resources for housing, employment, food, and health care (including addiction, trauma, and other mental health services)</li> </ul>	http://www.211.org/
Reach Out and Read	<ul> <li>Program that promotes early language development and literacy</li> </ul>	http://www.reachoutandread.org/
Healthy Steps for Young Children	<ul> <li>Program that focuses on child development and parenting skills</li> <li>Must be a member of Healthy Steps to view resources on the website</li> </ul>	http://healthysteps.org/
The Incredible Years	<ul> <li>Program that focuses on child development and parenting skills</li> <li>This tool is a commercial product that we mention as an option but that we do not specifically endorse</li> </ul>	http://incredibleyears.com/
Triple P	<ul> <li>Program that focuses on child development and parenting and teaching skills</li> <li>This tool is a commercial product that we mention as an option but that we do not specifically endorse</li> </ul>	http://www.triplep-parenting.com/us-en/ triple-p/
The Medical-Legal Partnership	<ul> <li>Partnership of physicians and attorneys to help patients with social and legal issues</li> </ul>	http://medical-legalpartnership.org/

of community health workers into health-care settings has been shown to directly lead to cost-savings, decreased emergency department visits, and improvement in quality of life. (13) Clinic-based practices may also use trained volunteers, such as AmeriCorps volunteers or undergraduate students, to serve as liaisons between busy clinicians and families to facilitate referrals to community resources. (14) The availability of such in-person navigators has been shown to help families meet social needs and to improve children's overall reported health status. (15)

# Targeted Interventions Addressing Specific Social Determinants of Health

Food Insecurity. Food pantries co-located in hospitals have been developed to address the issue of food insecurity. Providers from clinics affiliated with the hospitals can refer their patients to the pantries. Boston Medical Center was one of the first hospitals to open a food pantry. Patients who are referred to the pantry receive customized bags of food, based on their medical conditions, and are able to visit the food pantry twice a month. The pantry has expanded to include a demonstration kitchen where patients can learn how to cook nutritious foods in healthy ways. (16) Similarly, clinicians and local food banks have collaborated in the establishment of community-based food pharmacies, which take prescriptions from clinicians for specific nutritional items for children with medical conditions, which are exacerbated by nutritional deficiencies. (17) Health centers have also experimented with bringing community supported agriculture programs to their clinics to provide fresh produce to their patients, combatting food insecurity, poor nutrition, and obesity. (17) Furthermore, waiting room materials describing the Supplemental Nutrition Assistance Program (SNAP) incentive programs, through which SNAP funds can be used at higher value at farmers markets, have been successful at addressing financial barriers to food security and have significantly increased fruit and vegetable consumption. This behavior change has been sustained even after the financial incentive is no longer available. (18)

**Income.** Tax preparation programs at pediatric clinics, staffed by volunteers, help families access tax credits that they did not previously receive, particularly the Earned Income Tax Credit (EITC). Many families are eligible but do not receive this benefit due to lack of knowledge, tax complexities, or inadequate assistance. The EITC helped lift 1.7 million children out of poverty in 2013 and is associated with a significant reduction in infant mortality. (19)(20)

**Child Care.** Child care vouchers, funded through a combination of federal and state programs, administered by states, and delivered by local agencies, allow low-income

families to work or attend school. However, use of child care subsidies among eligible families is low (7%–34%) due to lack of knowledge about available subsidies, burdensome paperwork, and stigma. (21) Availability of child care subsidy applications or screens for eligibility in the waiting room may assist low-income families in navigating these barriers.

**Housing.** Several projects have been developed to address issues of housing and homelessness. A pilot study in Boston is evaluating the impact of "housing prescriptions" (referrals to a case management organization in the community that assists with housing) on housing stability, emergency department utilization, health-care compliance, mental health, and food security. (22) An intervention using community health workers to perform in-home environmental assessments, providing other social supports, and advocating for improved housing conditions resulted in decreased asthma-related urgent care use and fewer days with asthma symptoms, with significant projected cost-savings. (23) Community health workers can also help homeless clients and families complete and file paperwork for the local housing authority and can follow up and track patients experiencing homelessness. (13)

Lead exposure has become an increasingly concerning housing issue for families with young children, as we have learned that there is no safe lead level and given the recent contamination of drinking water in Flint, Michigan. The AAP's lead exposure and lead poisoning initiative provides pediatricians with information about the effects of lead poisoning on children, resources they may distribute to families, and opportunities for advocacy. (24) In addition, the Centers for Disease Control and Prevention's (CDC's) Lead Poisoning Prevention Program is an integral resource for families and health-care providers. This program provides information about childhood lead poisoning, allows the public to access national and local surveillance data, provides links online to tools and training about lead, and maintains a list of lead poisoning prevention programs by state. (25)

Literacy. Reach Out and Read is a program that promotes early language development and literacy. The program includes providing waiting room activities, counseling caregivers on the benefits of reading to their children, and giving age-appropriate books to children at each health supervision visit from 6 months through 5 years old. Reach Out and Read has been shown to increase the frequency with which parents and children read together, increase the number of children's books present in families' homes, and improve children's expressive and receptive language scores. (8)(26)

The Video Interaction Project is another program that aims to enhance early language development and literacy as well as cognitive and social-emotional development. In this program, during health supervision visits, a mother and child are recorded on video, a child life or child development specialist reviews the video with the mother, and together they identify positive interactions and areas for improvement. The mother takes the video home after each health supervision visit. Studies have demonstrated that this program improves children's cognitive development and reduces symptoms of maternal depression. (8)(27)

Public libraries provide free membership and programs for children to community residents, and pediatric clinics can be instrumental in connecting patients and families to the local library. Public library use has been found to be associated with higher rates of reading aloud between parents and children. (28)

Parenting Skills. Healthy Steps for Young Children is a program that focuses on child development and parenting skills. Healthy Steps specialists meet with families during health supervision visits as well as separately to discuss issues of development, behavior, and safety. The program may also include home visits and parent support groups. Healthy Steps has been shown to improve quality of care and to enhance parenting skills. (8)(29)

#### **Our Practice**

We have several interventions embedded in our clinics for patients who screen positive for poverty-related social determinants of health. Social workers meet with patients who report food insecurity, housing instability, and other financial difficulties. Our clinics have an on-site attorney to whom patients struggling with immigration status, difficulties with landlords, and other legal issues can be referred. Through state-sponsored funding, our clinics have hired community health workers, who can refer our patients to food pantries, housing organizations, employment centers, immigration aid, and other social service programs. To help alleviate food insecurity, health educators at our clinics distribute Health Bucks to patients, a city-sponsored food voucher that can be used to purchase fresh produce at farmers markets. A co-located Medicaid office facilitates referrals for parents and children who are struggling with insurance coverage issues. Through Reach Out and Read, patients 6 months to 5 years old receive a new book at every health supervision visit.

#### **ADVOCACY**

In addition to providing resources and establishing effective interventions, pediatricians may advocate for government policies and programs aimed at reducing the toxic effects of poverty. The AAP and APA reference several important programs that pediatricians can urge local and national representatives to support. The EITC and Temporary Assistance for Needy Families are programs that increase the earnings of low-income families. Children with special health-care needs may be eligible for Supplemental Security Income, of which parents may not be aware. The SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the National School Lunch Program, and the Summer Food Service Program (when school is not in session) help families struggling with food insecurity. Early Head Start, Head Start, and the Early Childhood Home Visiting Program promote early childhood education, child development, and literacy. (3)(8)

Although these programs are well established, many families who are eligible are not enrolled because they do not know they qualify and because they do not know how to apply. Therefore, in addition to contacting government representatives to advocate for these programs, pediatricians may provide families with online links to the programs and perhaps further information about eligibility and the application process. (8) Furthermore, pediatricians are instrumental in educating families with undocumented parents that children born in the United States are eligible for most government benefits, including WIC and SNAP, and that undocumented children are eligible for several benefits as well, such as free school lunch and government-sponsored insurance, depending on the state. (30) Table 3 lists federal websites that can serve as resources.

Pediatricians may also advocate for raising of the minimum wage in their local city and state governments, for paid family leave and paid sick leave, and for continued funding of child care subsidy programs, all of which will prevent working families from crossing into poverty.

The AAP maintains a federal advocacy website where pediatricians can find information about key advocacy issues and health-care coverage fact sheets by state (https://www.aap.org/en-us/advocacy-and-policy/federal-advocacy/Pages/Federal-Advocacy.aspx). For pediatricians with a greater interest in advocacy, the AAP has a listserv that sends timely federal updates via e-mail. To sign up, providers can e-mail <code>kids1st@aap.org</code>.

#### Our Practice

Many of our pediatricians are actively involved in advocacy. A group of pediatricians from our institution travels to Albany to attend the AAP Advocacy Day each year to meet with state representatives about policies we feel are crucial to the health of our patients. Our pediatric residents have

# TABLE 3. Federal Programs

FEDERAL PROGRAM	DESCRIPTION	ELIGIBILITY CRITERIA (2017) <sup>a,b</sup>	WEBSITE
Medicaid/Children's Health Insurance Program (CHIP)	Medicaid provides health coverage for low-income individuals and families     CHIP provides low-cost health coverage to children in families that earn too much money to qualify for Medicaid     Each state has the option to cover its CHIP population within its Medicaid program, design a separate CHIP program, or establish a combination program     Jointly funded by state and federal governments and managed by states	<ul> <li>Annual gross income &lt;200% the federal poverty level (FPL) in 3 states, 200%–300% FPL in 29 states, and ≥300% FPL in 19 states, including DC</li> <li>US citizen or qualified immigrant<sup>c</sup></li> <li>Some states may use state funding to help cover lowincome non-qualified immigrant children</li> <li>Low-income non-qualified immigrant children eligible for emergency Medicaid in all states</li> </ul>	https://www.medicaid.gov/ medicaid/eligibility/index.htm https://www.medicaid.gov/chip/ eligibility-standards/index.htm https://www.kff.org/medicaid/ fact-sheet/where-are-states- today-medicaid-and-chip/
Earned Income Tax Credit (EITC)	<ul> <li>Federal antipoverty tax credit for working people with low to moderate income, particularly those with children</li> </ul>	<ul> <li>Annual gross income ~&lt;220% FPL</li> <li>US citizen or qualified immigrant</li> </ul>	https://www.irs.gov/credits- deductions/individuals/ earned-income-tax-credit
Temporary Assistance for Needy Families (TANF)	<ul> <li>Provides cash assistance to needy families with children.</li> <li>Administered by state government through federal block grant</li> </ul>	<ul> <li>Dependent child</li> <li>Gross monthly income below         ~16%-107% FPL, depending         on state</li> <li>US citizen or qualified         immigrant<sup>c</sup></li> </ul>	https://www.acf.hhs.gov/ofa/ programs/tanf
Supplemental Security Income (SSI)	Provides benefits to disabled adults and children who have limited income and resources	<ul> <li>Child fits strict definition of disability (physical/mental condition that very seriously limits activities AND condition expected to last 1 y or result in death)</li> <li>Child and family income/resource limits, varies by state</li> <li>US citizen or qualified immigrant<sup>c</sup></li> </ul>	https://www.ssa.gov/disabilityssi/ ssi.html
Supplemental Nutrition Assistance Program (SNAP)	<ul> <li>Federal nutrition assistance to low-income families; formerly known as the Food Stamp Program</li> </ul>	Gross monthly income <130% FPL Limited financial reserves (<\$2,250) in some states US citizen or qualified immigrant <sup>c</sup>	https://www.fns.usda.gov/snap/ eligibility
Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	Federal grant to states for supplemental foods for low- income pregnant and postpartum women, infants, and children	<ul> <li>Women must be pregnant, breastfeeding, or nonbreastfeeding postpartum (up to 6 mo)</li> <li>Infants and children aged &lt;5 y</li> <li>Gross monthly income &lt;185% FPL</li> <li>No citizenship or legal residency requirements</li> </ul>	https://www.fns.usda.gov/wic/ wic-eligibility-requirements
National School Lunch Program (NSLP)/Summer Food Service Program	Federally assisted meal program operating in schools to provide nutritionally balanced low-cost or free lunches to children	Child enrolled in a public or participating private school Reduced priced meals: gross monthly income <185% FPL Free meals: gross monthly income <130% FPL No citizenship or legal residency requirements	https://www.fns.usda.gov/nslp/ national-school-lunch- program-nslp

Continued

#### TABLE 3. (Continued)

FEDERAL PROGRAM	DESCRIPTION	ELIGIBILITY CRITERIA (2017) <sup>a,b</sup>	WEBSITE
Head Start/Early Head Start	Promotes school readiness of young children from low-income families through agencies in the local community		https://www.acf.hhs.gov/ohs

<sup>&</sup>lt;sup>a</sup>The 100% FPL for a family of 4 is defined as an annual income of \$24,600 in 2017 in the 48 contiguous states, excluding Alaska and Hawaii (federal poverty guidelines differ in these states).

attended I-day and 3-day legislative conferences in Washington, DC, to learn effective lobbying skills and to meet with members of Congress to advocate for national-level issues. Faculty and residents have also participated in an annual city-based advocacy conference, hosted by a local academic institution, to facilitate an exchange of ideas regarding advocacy and to hear from various community organizations.

#### CONCLUSION

The patient described in the case scenario herein was referred to the clinic's onsite attorney. The attorney obtained a letter from the patient's primary pediatrician explaining the necessity for heat and hot water in controlling the patient's asthma. Once the letter was completed, the attorney contacted the building manager of the shelter to request that the heat and hot water in the apartment be repaired. Three weeks later, the repairs were made. The patient went to the emergency department I additional time for an asthma exacerbation before the completion of the repairs and has not been back to the emergency department since then.

Although there is abundant evidence about the implications of poverty-related social determinants on children's health, more research is needed to understand the optimal ways to screen for social determinants of health, the most effective interventions to address them, and the most powerful ways to advocate for government policies and programs aimed at reducing the harmful effects of poverty. The known negative effects of poverty, homelessness, food insecurity, and other social factors on health, however, compel us, as pediatric providers, to screen, provide interventions, and advocate despite lack of rigorous evidence. In the words of Bernard Dreyer, MD, pastpresident of both the AAP and the APA, "poverty is the most significant non-communicable disease children are suffering from today." Pediatric providers' shared passion to mitigate the effects of childhood poverty on the lifelong trajectory of health, bolstered by partnerships with community agencies as well as by state and federal advocacy efforts, together have the potential to transform the lives of millions of children.

#### **ACKNOWLEDGMENTS**

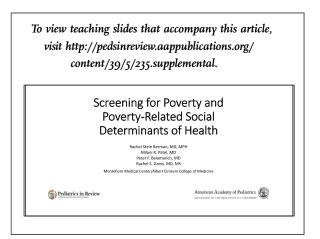
The authors would like to thank Drs Yonit Lax and Sandra Braganza for their work on the IHELLP initiative through the Social Pediatrics Residency Program; and Julie Brandfield, Esq., associate director of LegalHealth of the New York Legal Assistance Group, for her assistance with the case scenario and recommendations for screening tools.

<sup>&</sup>lt;sup>b</sup>Qualified immigrant includes lawful permanent residents (LPR/Green Card Holder); asylees/refugees; Cuban/Haitian entrants; people paroled into the United States for at least 1 year; conditional entrant granted before 1980; battered noncitizens, spouses, children, or parents; victims of trafficking and their spouse, child, sibling, or parent or individuals with a pending application for a victim of trafficking visa; granted withholding of deportation; and member of a federally recognized Indian tribe or American Indian born in Canada.

<sup>&</sup>lt;sup>c</sup>May have a 5-year waiting period, varies by state.

## Summary

- On the basis of strong research evidence, poverty-related social determinants of health have a deleterious effect on children's health. (3)(7)(8)
- On the basis of some research evidence as well as consensus, pediatricians are encouraged to screen for poverty and poverty-related social determinants of health. (10)
- On the basis of strong research evidence, several effective interventions have been established that pediatricians may adopt in their practices to address poverty and poverty-related social determinants of health. (8)(10)(12)(16)
- On the basis of consensus due to lack of relevant clinical studies, pediatricians are encouraged to advocate for government policies and programs aimed at eliminating poverty and poverty-related social determinants of health on children and families.



References and Suggested Readings for this article are at http://pedsinreview.aappublications.org/content/39/5/235.

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- 1. You are the director of an inner city clinic that has recently opened. You are in the process REQUIREMENTS: Learners of organizing a clinic protocol that adheres to addressing social determinants of health as put forth by the American Academy of Pediatrics. Which of the following is not considered a social determinant of health?
  - A. Food security.
  - B. Income.
  - C. Legal immigration status.
  - D. Length of time in current housing.
  - E. Religious belief.
- 2. You would like to administer a screening questionnaire for social determinants of health in your clinic. Presently your city-based clinic does not have the staffing, and neither do you have the time in your clinic schedule to directly administer a questionnaire or additional questions to your patients during the 15-minute time allotted for a new patient office visit. Which of the following questionnaires would be the most appropriate to implement in this situation?
  - A. Accountable Health Communities Core Health-Related Social Needs Screening Tool
  - B. Reach Out and Read.
  - C. The Medical-Legal Partnership.
  - D. IHELLP (Income, Housing, Education, Legal Status, Literacy, Personal Safety).
  - E. SWYC (Survey of Well-Being of Young Children) Family Questions.
- 3. You are a pediatrician in a community clinic. You are seeing a new patient for a routine health supervision visit. The Health Leads screening tool is administered and the patient screens positive. Otherwise, the patient has no acute medical or physical problems. Referral of this patient to be seen by which of the following professionals is the most appropriate next step in management?
  - A. Child life therapist.
  - B. Community worker.
  - C. Nutritionist.
  - D. Physical therapist.
  - E. Psychologist.
- 4. You are caring for a 3-year-old boy with Down syndrome in your pediatric clinic. The family income is below the federal poverty level. Compared with a family with the same income level but with a developmentally normal child who does not have Down syndrome, which of the following additional programs would the family of this child uniquely qualify for?
  - A. Early Head Start.
  - B. Earned Income Tax Credit (EITC).
  - C. Supplemental Security Income.
  - D. Temporary Assistance for Needy Families (TNAF).
  - E. Women, Infants, and Children (WIC).
- 5. You are caring for a 7-year-old boy in your clinical practice who is "undocumented," as are both parents. Which of the following programs would this child most likely be eligible for?
  - A. EITC.
  - B. Free school lunch.
  - C. Supplemental Nutrition Assistance Program (SNAP).
  - D. TNAF.
  - E. WIC.

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#### **Screening for Poverty and Poverty-Related Social Determinants of Health**

Rachel Stein Berman, Milani R. Patel, Peter F. Belamarich and Rachel S. Gross

Pediatrics in Review 2018;39;235 DOI: 10.1542/pir.2017-0123

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