Child Health Disparities: What Can a Clinician Do?

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Pediatric primary and specialty practice has changed, with more to do, more regulation, and more family needs than in the past. Similarly, the needs of patients have changed, with more demographic diversity, family stress, and continued health disparities by race, ethnicity, and socioeconomic status. How can clinicians continue their dedicated service to children and ensure health equity in the face of these changes? This article outlines specific, practical, actionable, and evidence-based activities to help clinicians assess and address health disparities in practice. These tools may also support patient-centered medical home recognition, national and state cultural and linguistic competency standards, and quality benchmarks that are increasingly tied to payment. Clinicians can play a critical role in (1) diagnosing disparities in one’s community and practice, (2) innovating new models to address social determinants of health, (3) addressing health literacy of families, (4) ensuring cultural competence and a culture of workplace equity, and (5) advocating for issues that address the root causes of health disparities. Culturally competent care that is sensitive to the needs, health literacy, and health beliefs of families can increase satisfaction, improve quality of care, and increase patient safety. Clinical care approaches to address social determinants of health and interrupting the intergenerational cycle of disadvantage include (1) screening for new health “vital signs” and connecting families to resources, (2) enhancing the comprehensiveness of services, (3) addressing family health in pediatric encounters, and (4) moving care outside the office into the community. Health system investment is required to support clinicians and practice innovation to ensure equity.
avoidable. Almost all U.S. children have had a well-child visit in the past year, making primary care an ideal location to ensure that children have the support necessary for optimal development and that adversities are buffered. The family contact that both primary and specialty clinicians have in outpatient and inpatient settings can promote health equity and improve health outcomes. Patient-centered medical home recognition and quality benchmarks tied to payment recognize the importance of culturally competent care. National standards for culturally and linguistically appropriate services (CLAS) in health care by the Office of Minority Health have been increasingly embraced by state agencies and legislation. This article outlines specific, practical, actionable, and evidence-based activities that help clinicians assess and address health disparities related to race/ethnicity and SES (Table 1).

**“DIAGNOSE DISPARITIES” IN ONE’S COMMUNITY AND PRACTICE**

In the 1940s, Sidney Kark conceptualized “community-oriented primary care”8; later, the Folsom Commission report, “Health Is a Community Affair,” emphasized the importance of knowing one’s community and improving health on the local level.9,10 Today, these ideas continue to resonate. Because communities are constantly changing, CLAS standards emphasize the importance of conducting “regular assessments of community health assets and needs and using the results to plan and implement services that respond to the cultural and linguistic diversity of populations in the service area.”11 Free and easy-to-navigate websites provide city, district, county, state, and national data as well as maps on child and family demographics, health status, and well-being by race/ethnicity and poverty status, with comparisons to others and targets for improvement (Table 1). By periodically reviewing these data, clinicians can keep tabs on the challenges their patients may face and can identify opportunities to help. For instance, if data show changing demographics with a growing immigrant community, assessing linguistic competency, health literacy, and cultural norms may be necessary, with implications for educational efforts, materials, and staffing.

In addition to reviewing population data, examining one’s practice performance data stratified by insurance status, race/ethnicity, language, and SES as outlined in the Affordable Care Act (ACA) is critical to understanding areas for improvement. In this era of clinician accountability and performance measures, the QI and health disparities fields must join forces. There is evidence that culturally tailored or targeted QI approaches may have more promise than generic efforts.12,13

Finally, families must be involved. Conducting a community needs assessment and including families in improvement approaches can be powerful. For instance, an assessment of community needs identified poor oral health and difficulty finding pediatric dentists who accepted Medicaid. Identifying dentists and disseminating this information improved access and provided a patient voice in advocacy efforts to increase capacity.

Many practices and hospitals have initiated family advisory boards to provide feedback on care systems. Families can provide valuable insight about screening and referral efforts, development of community partnerships, and prioritization of resources and interventions. The National Initiative for Children’s Healthcare Quality’s toolkit, “Creating a Patient and Family Advisory Council,” provides a step-by-step approach to assess practice readiness, recruit members, and involve, evaluate, and sustain an advisory council.14 The Robert Wood Johnson Foundation has a compendium of useful tools to engage patients in improving ambulatory care (Table 1).15 Partnering with the community is the focus of research efforts by the Patient-Centered Outcomes Research Institute established in the ACA.

**“DIAGNOSE DISPARITIES” IN CLINICAL ENCOUNTERS AND INNOVATE NEW PRACTICE MODELS**

To prevent or buffer adversities that children and families may encounter, new delivery approaches and payment models are needed. The Maternal and Child Health Bureau encourages a “whole-person, whole-family, whole-community systems approach” that addresses upstream social determinants of health.16 Clinical approaches include (1) diagnosing disparities by universal screening and connecting families to resources, (2) enhancing the comprehensiveness of services to address social determinants, (3) addressing family health in pediatric encounters, and (4) moving care outside the office into the community (eg, home, school, daycare) (Fig 1).

The first approach is to diagnose disparities through universal screening for new health vital signs. The American Academy of Pediatrics (AAP) Policy on Health Equity emphasizes that clinic visits are opportunities to screen and address the social, economic, educational, environmental, and person-capital needs of children and families.17 Whereas clinical vital signs include temperature, heart rate, respiratory rate, blood pressure, and growth parameters, the Robert Wood Johnson Foundation Commission to Build a Healthier America strongly recommended that “new health vital signs” reflecting the root causes of health disparities be included, such as food security, educational progress, family employment, health literacy, neighborhood safety, and adequate housing.18 For instance, poor housing is linked to health status.19–21 A child
with asthma living in housing with a cockroach infestation or mold will require assistance from social workers, legal advocates, and housing organizations to reduce allergen exposure and improve health. Addressing these vital signs will require research on effective screeners and interventions, partnerships with community organizations, and appropriate payment for screening and management. Although the clinician’s office is often considered a safe environment in which to address family psychosocial problems, many clinicians fail to monitor these new vital signs and subsequently miss the opportunity to

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TABLE 1 Free Web Resources to Assist Clinicians in Assessing and Addressing Health Disparities in Practice
The WE CARE 10-item family psychosocial screening instrument was developed to assess family employment, education, housing, or food needs. A study using this screener with referral to community resources was found to be feasible in primary care, adding 2 minutes to the visit and leading to greater discussion of topics and referral completion. Screening can be completed before or during a visit using the Internet, smartphones, kiosks, or paper and pencil. The iScreen study compared a screener for social determinants of health on a computer tablet or face-to-face in a pediatric emergency department, finding greater disclosure in electronic format. Screening for adverse childhood experiences has also been proposed to identify and address trauma. Some clinicians have avoided this type of screening because of limited resources. However, clinician acknowledgment, support, and referrals can be therapeutic, and educational resources are available. For instance, the smokefree.gov website from the National Cancer Institute provides a free quit line or instant messaging support, and all states have quit lines listed. If screening suggests depression, acknowledgment of the concern and referral to clinicians and crisis management hotlines are critical first steps. New models connecting patients to community resources have been developed. The national Health Leads program uses a Family Help Desk staffed by undergraduate volunteers who connect families to community services. The CAP4Kids Web site (cap4kids.org/whatscap4kids.html) provides up-to-date information on community resources in certain cities. New web-based products for sale are being developed and disseminated. Increasing the comprehensiveness of services in primary or specialty care can provide one-stop shopping to address the new vital signs. Integrating services such as mental health can increase utilization and improve health outcomes. The Healthy Steps model incorporates a child psychologist or developmentalist into pediatric practices, demonstrating greater parent satisfaction and improvement in timely well-child care, immunization and breastfeeding rates, and discipline strategies. Other “wraparound” services could include social work, case management, nutritionists, lactation consultants, health educators, substance use counselors, legal advocates, and career counselors. Reach Out and Read family literacy programs in primary care have demonstrated effectiveness in increasing parental support and how much parents read to their children. Medical-legal partnerships integrate pro bono legal services into care teams to address issues such as public benefits, housing, and special education. The Johns Hopkins Children’s Center Harriet Lane Clinic is an example of a medical home that has incorporated many of the above services through partnerships with community organizations, optimized billing, and leveraged funds from health plans and private foundations. With the current emphasis on population health and quality measures, payers have greater interest in investing in these services to improve practice and community health outcomes.

The third approach pertains to family health. Pediatric professionals recognize that child and family health are intertwined. The AAP Task Force on the Family states that “families are the most central and enduring influence in children’s lives” and coined the term “family pediatrics,” which extends pediatrics to include screening, assessment, and referral of parents regarding their health issues. Addressing preconception women’s health in pediatric practice is another family care opportunity. Although U.S. infant mortality rates have decreased over time, racial disparities persist. Prenatal interventions have been emphasized, but there is growing attention to preconception women’s health. Addressing women’s access to care, reproductive planning, nutrition, substance use, and mental health can improve health of future pregnancies and family health.
practice is an opportune location of contact, as clinicians see all preconceptional adolescents as well as mothers who are inter-conceptional before their next child. Demonstration of cost-effectiveness and payment models for implementation are needed.

A fourth approach is to move care outside the office and into the community where children are: in the home, daycare, or school. Whereas the medical approach is to ask families to come to offices, population health approaches suggest place-based initiatives and outreach to the child’s natural environment. With growing emphasis on population health, prevention of readmissions, and quality measures, insurers and hospitals have become interested. Health reform has augmented home visitation programs. Integration with the medical home could reduce duplication of services and fragmentation while synergizing positive outcomes.47

School health, another area of ACA emphasis, has the potential to improve Healthcare Effectiveness Data and Information Set (HEDIS) quality measures, such as the well-adolescent visit rate, by accessing youth in schools. Integrated school health can improve immunization rates, augment chronic disease management, enhance student health education, and improve school outcomes.48

**BECOME LITERATE ON HEALTH LITERACY**

Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.49 Some studies report that health literacy may be a stronger predictor of health than race/ethnicity, income, employment, and education level.50 Addressing health literacy is critical for patient-centered, equitable, and safe care and involves improving patient and parent communication with clinicians, increasing knowledge about the health care system, reducing language barriers, and understanding health beliefs.1

The Agency for Healthcare Research and Quality (AHRQ) Health Literacy Universal Precautions Toolkit51 and the American Medical Association’s Health Literacy and Patient Safety Kit49 (Table 1) include instructional videos and a variety of tools to assess clinician communication skills with low-literacy patients and assess patient-friendly office processes. AHRQ discusses 4 areas: spoken communication, written communication, patient self-management and empowerment, and supportive systems.49 Checklists assess each of these areas and the toolkits offer practical strategies.

Recommendations to improve communication include slowing down, avoiding jargon, and using the “teach-back” technique. Teach-back is a method for clinicians to check whether they have adequately explained information in a manner that the patient understands. This method is 1 of the top 11 evidence-based patient safety practices identified by AHRQ,52 and research demonstrates that teach-back can improve retention of information, communication, and patient health outcomes.53–55 It involves asking, “I want to be sure I explained everything clearly. Can you explain it back to me so I can be sure I did?” or “We’ve gone over a lot of information. In your own words, please review with me what we talked about.”56 Training videos and assessment tools can be found online (Table 1; www.teachbacktraining.org).

**DEOLVE INTO YOUR UNCONSCIOUS BIASES**

A study performed using the Implicit Association Test (IAT), a measure of implicit social cognition, found that unconscious preferences and stereotypes are commonplace.57 Acknowledging that everyone has preferences and conscious or unconscious biases, it is important for clinicians to assess their implicit biases and explore how they affect behavior and treatment of patients. The free IAT assesses unconscious biases on a variety of characteristics such as race/ethnicity, gender, age, and weight status (https://implicit.harvard.edu/implicit).58 The literature has found an association between clinician race/ethnicity IAT results and their patient care decisions.59–61

**ENSURE A CULTURE OF EQUITY IN THE WORKPLACE**

The AAP policy on “Enhancing the Pediatric Workforce Diversity and Providing Culturally Effective Pediatric Care” discusses the value of regular clinician self-reflection, self-knowledge, and self-critique to ensure cultural competence. For quality and safety, linguistic competency must also be ensured.62,63 The AAP Culturally Effective Toolkit64 is a practical, hands-on resource to assist clinicians and their office staff, including tips for busy practices: (1) have staff reflect the diversity of the patient population, (2) know community resources available for racial/ethnic or immigrant groups, (3) ask about nontraditional treatments, (4) consider group visits for families with limited English proficiency, and (5) plan extra time for patients requiring interpreters.

**ADVOCATE FOR EFFORTS THAT ADDRESS ROOT CAUSES OF HEALTH DISPARITIES**

Health disparities are rooted in social and environmental conditions outside of the health care system. Clinicians must add their voice to child advocacy efforts ensuring affordable, quality health care, child care, education, housing, nutritious food, family supports, and guarantees of a living wage. The AAP tracks state legislative actions on many poverty-related policies and lists state commissions and potential coalition partners (Table 1). Child advocacy or medical associations, community
organizations, and AAP chapters can be powerful agents of change.

SUMMARY
Clinicians play a critical role in diagnosing, addressing, and eliminating the conditions that cause health disparities. Clinician and staff provision of culturally effective care requires periodic assessment. Evidence-based practices can guide improvements. Health system investment in practice approaches to address social determinants of health offer promise to improve population health and ensure health equity.

ABBREVIATIONS
AAP: American Academy of Pediatrics
ACA: Affordable Care Act
AHRQ: Agency for Healthcare Research and Quality
CLAS: culturally and linguistically appropriate services
IAT: Implicit Association Test
QI: quality improvement
SES: socioeconomic status

REFERENCES


42. Committee on Environmental Health; Committee on Substance Abuse; Committee on Adolescence; Committee on Native American Child. From the American Academy of Pediatrics: Policy statement—Tobacco use: a pediatric disease. *Pediatrics.* 2009; 124(5). Available at: www.pediatrics.org/cgi/content/full/124/5/e1474

43. Earls MF; Committee on Psychosocial Aspects of Child and Family Health American Academy of Pediatrics. Incorporating recognition and management of perinatal and postpartum depression into pediatric practice. *Pediatrics.* 2010;126(5). Available at: www.pediatrics.org/cgi/content/full/126/5/e1032

44. Thackery JD, Hibbard R, Dowd MD; Committee on Child Abuse and Neglect; Committee on Injury, Violence, and Poison Prevention. Intimate partner violence: the role of the pediatrician. *Pediatrics.* 2010;125(5). Available at: www.pediatrics.org/cgi/content/full/125/5/e1094


GENES FOR OMEGA-3: A trip to the nutritional supplement aisle of any supermarket or drug store will reveal a large selection of supplements containing omega-3 fatty acids. Many foods that have high levels of omega-3 are promoted as health foods. For many years, scientists, physicians, and nutritionists have recommended increasing the amount of omega-3 fatty acids that Americans should consume. This recommendation is based on the observation made in the 1970s that Inuit peoples have a low incidence of heart attacks despite an extreme diet rich in protein, fatty meat, and fish. The hypothesis is omega-3 fatty acids (typically found in fish) help protect against heart disease. Unfortunately, recent trials have failed to demonstrate that omega-3 supplementation actually helps protect against heart attack or stroke.

As reported in The New York Times (Science: September 17, 2015), we now have a better understanding why this may be. Scientists investigated the genome of Greenlanders who were 95% or more Inuit. They were looking for loci that could explain selection advantage or adaptation. While they found several loci that met these criteria, the strongest was located in the area coding for fatty acid desaturases. These desaturases determine omega-3 polyunsaturated fatty acid levels. Almost all Inuit had gene variants in this region compared to 25% of people with Chinese and only 2% with European ancestry. Those with two copies of the gene variant had lower levels of fatty acids in the blood than those without variants. The gene variants allowed Inuit to keep fatty acid levels within a healthy range despite a diet so loaded with omega-3s.

The gene variants do have other consequences, however. Those individuals with two copies tend to be an inch shorter and weigh 10 pounds less than those without the variants – an effect that can be seen in Europeans as well. The findings that the Inuit have developed genetic adaptations should not be so surprising. Lactose intolerance is uncommon in individuals descended from societies that domesticated cattle – such as Northern European and East African societies. Descendants from other societies in which cattle were not used for milk are much more likely to be lactose intolerant. Two, among many, conclusions can be drawn from the study. First, humans have adapted to maximize the nutritional supplies available. Second, assuming a causal pathway from observational studies is fraught with danger.

Noted by WVR, MD
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*Pediatrics* 2015;136;961; originally published online October 12, 2015;
DOI: 10.1542/peds.2014-4126

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