



**REDUCING HEALTH DISPARITIES
AMONG CHILDREN:
STRATEGIES AND PROGRAMS
FOR HEALTH PLANS**

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EXECUTIVE SUMMARY

Low-income and children of color continue to have poorer health status than their more affluent and White peers. Efforts to reduce, if not eliminate, health disparities among children are a vital means of improving the current status of children's health and securing their continued health into adulthood. It is important to inform stakeholders, including policy makers, health care professionals, health plans, health care purchasers, and beneficiaries, especially parents and families, about the roots of health disparities and the current state of health disparities among children. This paper is intended to provide a brief overview of health disparities, including the importance and limitations of health insurance to address these disparities, concluding with current health plan efforts focused on eliminating health care barriers and improving the cultural competence of health care delivery. Following a brief introduction on the importance of addressing health disparities, the discussion of health disparities among children is divided into six sections.

Section One: The Roots of Health Disparities

A number of factors influence health status and can contribute to poor health or disease among children, including socioeconomic status (SES) and race and ethnicity. SES, including income, education and the availability of social and individual supports, is one of the most powerful, and each of these components provides a different relationship to health outcomes. Disparities based on race and ethnicity are believed to be the result of environmental factors, such as racism and discrimination in the U.S., as well as specific health behaviors, including a lack of health care or adherence to health instructions due to cultural or language preferences of some racial and ethnic groups.

Section Two: Health Disparities Among Children

The association between socioeconomic status and health and persistent racial and ethnic disparities in health is

well documented among children in the U.S. Low-income children have higher rates of mortality and disability and are more likely to be in fair or poor health. Black and Latino children are more likely to be in poor health than their White counterparts. Children who are poor, of color or uninsured are more likely to lack access to appropriate health care. Health insurance and health care are vital to children's health status as a means of preventing and mitigating health problems and educating families about health issues.

Section Three: Case Studies: Asthma and Obesity

Asthma and obesity are two conditions in which disparities in children's health are particularly evident, and the underlying causes of disparities in asthma and obesity can be tied to individual, social and environmental factors. Low-income children and children of color are disproportionately subject to poor air quality, exposure to pesticides and substandard housing, all of which lead to disparities in childhood asthma. Childhood overweight can similarly be tied to factors affecting poor, racial and ethnic groups, including decreased availability of healthy foods, increased time spent in sedentary activities and limited access to physical activity in schools and neighborhoods.

Section Four: Solutions and Strategies

Multiple strategies are required in order to reduce, if not eliminate, health disparities among children. Ensuring that all children have access to health insurance is the most commonly identified approach, as health insurance is a strong predictor of children's access to health care services and a means for addressing health problems early in life. However, "non-insurance" barriers to care exist, including cultural and linguistic barriers that prevent many children from receiving equal access to care, and steps are necessary to organize health services that address the needs of diverse communities. Effectively reducing health disparities will

require going beyond the health care system and addressing the socioeconomic disparities that underscore health disparities in children. Yet within the context of the health care system, health plans can show leadership by supporting and implementing efforts to reduce disparities among their memberships and their communities.

Section Five: Health Plan Innovations to Reduce Disparities and Ensure Cultural Competence

Health plans influence access to and delivery of health care for children, and they play a particularly important role in the lives of children by expanding current programs or implementing new programs aimed at reducing disparities in children's health. These efforts encompass children enrolled in publicly and privately financed insurance, as well as the uninsured in their communities or other underserved populations, and serve as a model for other health plans thinking about implementing efforts within their memberships or communities. As these efforts continue to expand and evolve, it will be essential to monitor how the health status of children involved in the programs improves in order to learn which programs are effective in reducing health disparities among children.

Reducing childhood health disparities is an important social goal for a number of reasons, especially due to the implications of child health on lifelong health and productivity in adulthood, and the costs associated with both.

Section Six: Summary and Conclusion

Reducing childhood health disparities is an important social goal for a number of reasons, especially due to the implications of child health on lifelong health and productivity in adulthood, and the costs associated with both. Social, environmental and political factors all influence the persistence of health disparities in the U.S. making the reduction and ultimate elimination of health disparities among children a complex responsibility for all of society. Yet, stakeholders in children's health continue to work on the national, state and local levels to make incremental changes leading to improved health outcomes for all children. Health plans can and have shown leadership in this area, and can continue to learn from each other and through partnering with other stakeholders to work toward eliminating all health disparities among children.

INTRODUCTION

Health disparities are differences that occur by gender, race and ethnicity, education level, income level, disability, or geographic location. Health disparities exist among all age groups, including among children and adolescents. For example, low-income and children of color lag behind their more affluent and White peers in terms of health status. Children lower in the socioeconomic hierarchy suffer disproportionately from almost every disease and show higher rates of mortality than those above them.[1] Low-income children have higher rates of mortality[2] and are more likely to have greater severity of disability[3] even with the same type of disability[4] and to have multiple conditions.[5] The relationship between health status and socioeconomic status is also seen when the education level and occupation of children's parents are considered.[6]

Some health disparities are unavoidable, such as health problems that are related to a person's genetic structure. However, most health disparities are potentially avoidable, especially when they are related to factors such as living in low-income neighborhoods or having unequal access to medical care. Reducing, if not eliminating, health disparities is an important goal for a number of reasons. Childhood is a time of enormous physical, social and emotional growth. Children who experience health problems are more likely to miss school, to have lifelong health problems and to incur high costs for medical care. In addition to the implications for individual children and their families, health disparities have social implications in terms of productivity in adulthood as well as costs associated with health care. Health disparities are also an issue of equity; all children deserve the opportunity to be healthy and thrive.

The purpose of this paper is to review what is known about health disparities among children and to explore solutions and strategies for addressing these disparities. Toward that end, we describe initiatives among health plans to reduce, if not eliminate, these disparities, including a discussion about the importance and limitations of health insurance in improving health and well-being.

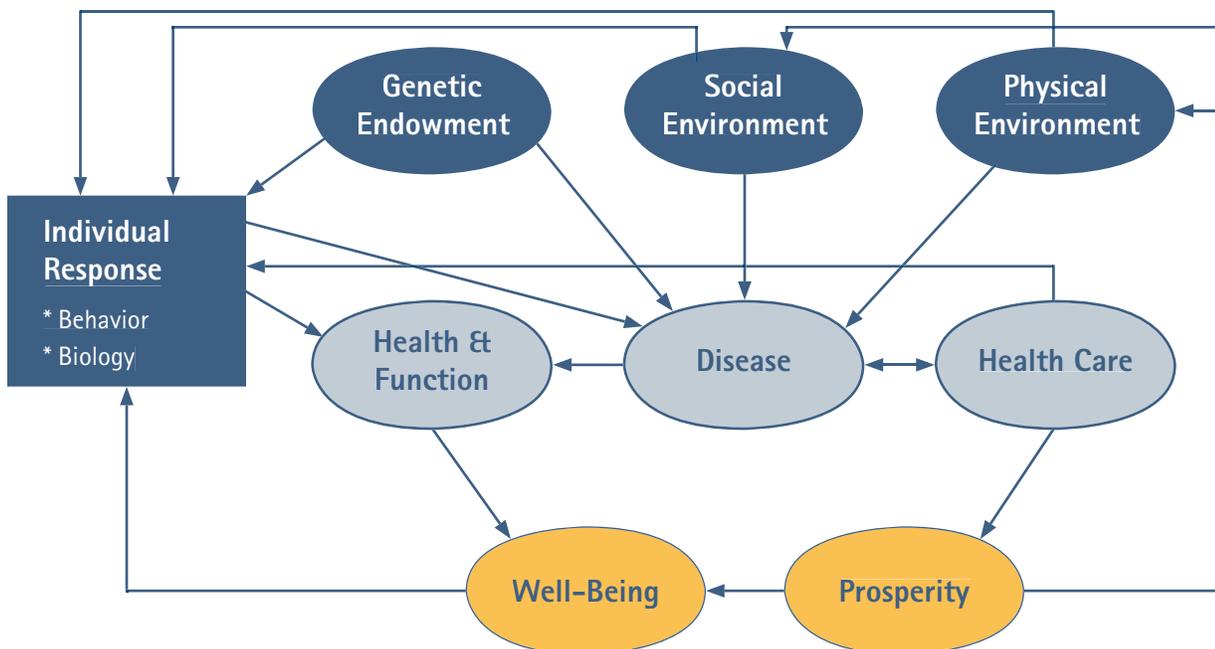
THE ROOTS OF HEALTH DISPARITIES

Health status is influenced by numerous factors including biological and genetic, environmental, socioeconomic, behavioral and health care factors.[7] As Figure 1 demonstrates, health and functioning, as well as disease, are products of inter-related individual, physical and social influences. Together, these influences operate to protect individuals or contribute to poor health or disease. While the relative contributions of these various factors are variable by health condition and by individual, it is clear that they typically work in combination.

SES: Among these factors, socioeconomic status (SES) – including income, education and the availability of social and individual supports – is one of the most powerful because it can influence the extent to which the other factors provide

protection or present risks. Each component provides different resources and displays different relationships to various health outcomes. For example, poverty is strongly associated with multiple risk factors for poor health, including reduced access to health care, poor nutrition, inadequate housing, and greater exposure to environmental threats.[8,9,10,11] Conversely, affluence can provide protection against poor health and disease. For example, people with greater resources generally seek out and are able to live and work in areas with more favorable physical and social conditions. Higher income can also provide better nutrition, housing, schooling and recreation.[12] Income influences the availability of health insurance – low-income persons are far less likely than higher income persons to have employment-related health insurance – and can provide the means for purchasing health

Figure 1: A Comprehensive Framework of Factors Affecting Health and Well-Being



Source: Evans, R.G., and Stoddard, G.L. Producing health, consuming health care. *Social Science Medicine* (1990) 31 (12): 1359, figure 5.

care. Finally, lower income is also associated with risky health behaviors. However, studies show that health behaviors such as smoking, alcohol consumption, body mass index and physical activity explain not more than “12% to 13% of the effect of income on mortality.”[13]

Education influences health status directly and indirectly. Indirectly, education levels shape future occupational opportunities and earning potential which affect affluence (or lack thereof) and all that is associated with income, as described above. Directly, education levels can affect an individual's ability to understand health risks and to respond to health care instructions.

Even when controlling for income and insurance coverage, children of color fare worse than white children with respect to various indicators of access to care such as presence of a usual source of care, number of physician contacts, and frequency of unmet health needs.[17]

SES also influences health by affecting the amount and quality of social support available to counter adverse economic, physical and emotional antecedents of poor health. Kaplan and colleagues argue that persons of lower socioeconomic status face greater social and community demands while having fewer resources (including money, access to medical care, interpersonal resources such as social supports and personal resources such as coping mechanisms.)[14] There may also be a more direct link between social standing and health status through health behaviors that individuals in lower SES levels undertake to cope with isolation and depression associated with their position. According to Redford Williams, “The harsh and adverse environment in which poorer people live, especially during childhood, is a candidate to account for the clustering of health-damaging behavioral, biologic, and psychosocial factors in lower SES groups.”[15]

Race and Ethnicity: As indicated above, health disparities are found by race and ethnicity as well as socioeconomic status. In part, this is explained by the overrepresentation of people of color among lower socioeconomic levels. Data from the US Census Bureau show that White households had incomes that were two-thirds higher than Blacks¹ and 40% higher than Latinos in 2005.[16] White adults were also more likely than Black and Latino adults to have college degrees and to own their own homes.

Lower socioeconomic status does not fully explain racial and ethnic health disparities, however. Even when controlling for income and insurance coverage, children of color fare worse

than white children with respect to various indicators of access to care such as presence of a usual source of care, number of physician contacts, and frequency of unmet health needs.[17] The reasons for persistent racial and ethnic disparities are not well understood but are believed to be the result of an interaction among genetic variations, environmental factors and specific health behaviors.[18] It is also likely a function of a general lack of health care that reflects the cultural and language preferences of some racial and ethnic groups, which affects access to care, as well as the ability and willingness of patients to comply with health instructions. It is important to note that genetic differences based on race are not clearly delineated. The American Association of Physical Anthropology

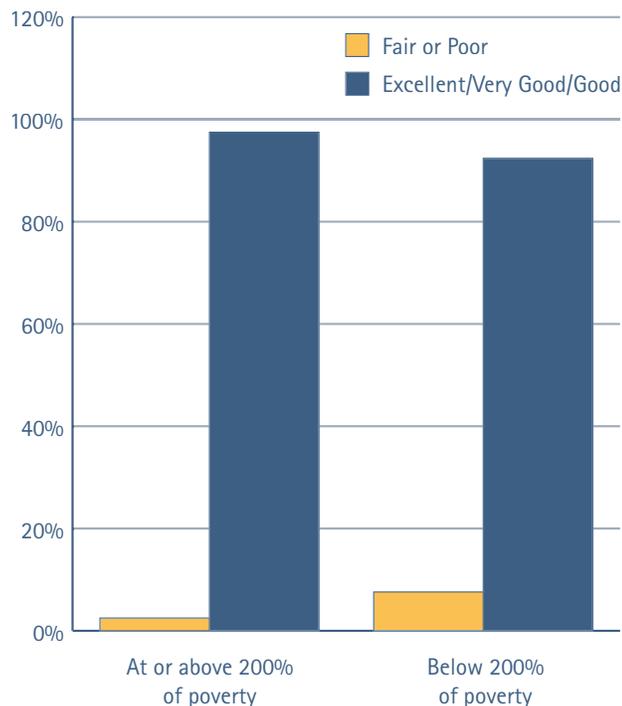
has stated that “Pure races in the sense of genetically homogeneous populations do not exist in the human species today, nor is there any evidence that they have ever existed in the past.”[19] As David Williams of the University of Michigan argues, racial categorizations are largely a social and political construct, rather than genetically or biologically based.[20] Disparities based on race and ethnicity are at least partially attributable to racism and discrimination in the United States, which have led to institutional barriers to health care, education, occupational and housing opportunities, as well as “the stigma of inferiority,” all of which can adversely affect health status.

¹ Various data sets use the terms Blacks or African Americans and Latino or Hispanic. For purposes of consistency, Blacks and Latinos are used throughout this paper.

HEALTH DISPARITIES AMONG CHILDREN

The association between socioeconomic status and health holds true for children as well as adults. Low-income children have higher rates of mortality (even with the same condition),^[21] have higher rates of disability,^[22,23] and are more likely to have multiple conditions.^[24] Children from low-income families and children whose parents had less than a high school education were far more likely to be in fair or poor health compared with other children. (See Figures 2 and 3). And when low-income children have health problems, they tend to suffer more severely.^[25] Children whose parents have lower education levels and lower paid occupations also tend to have worse health than their more economically advantaged peers.^[26,27,28]

Figure 2: Self Reported Health Status of Children by Income, 1999



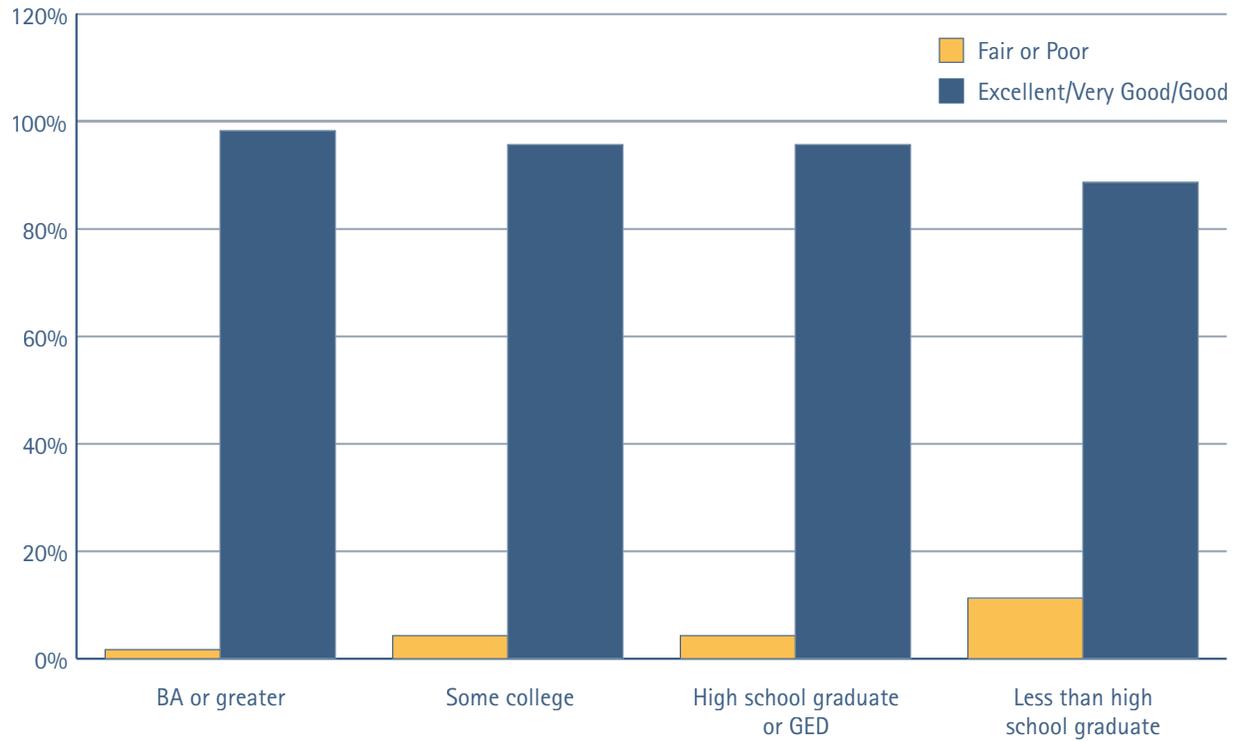
Source: National Health Interview, 1999. National Center for Health Statistics. Centers for Disease Control and Prevention.

Numerous studies have also documented racial and ethnic disparities in health.^[29] White children are half as likely as Black and Latino children not to be in excellent or very good health.^[30] Some disparities are starkest between White and Black children. For example, Black children are 20% more likely to have a limitation of activity and more than twice as likely to have elevated blood lead levels.

Disparities are also apparent in access to health care. Children who lack sufficient resources due to family income or insurance status and children of color face greater problems in receiving appropriate care.^[31] (See Figure 4). For example, compared with children from non-poor, White, and insured families, children who are poor, of color, or are uninsured are significantly more likely to lack a usual source of care, to be unable to identify a regular clinician, to delay or miss care for economic reasons, to have infrequent physician contact, to have fewer physician contacts, or to be unable to get needed medical care, dental care, vision care, or mental health services.^[32]

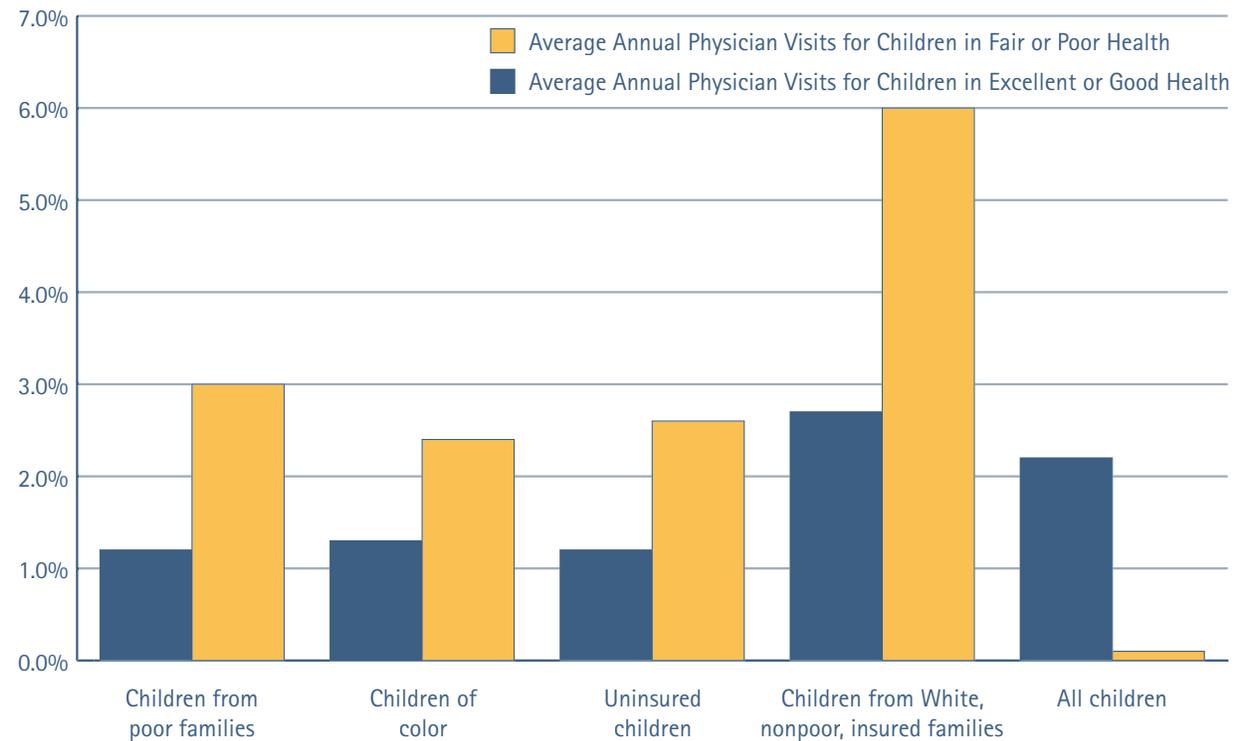
The primary role of health care (and by extension, health insurance as a means of providing access to needed care) in terms of influencing children's health status is to prevent and mitigate health problems. Specifically, health care serves to educate families about prevention measures, screen and detect problems as they emerge, and treat those conditions. As important as they are, however, neither health care nor health insurance alone influences children's health status as strongly as does socioeconomic status.

Figure 3: Self Reported Health Status of Children by Parental Education Level, 1999



Source: National Health Interview, 1999. National Center for Health Statistics. Centers for Disease Control and Prevention.

Figure 4: Average Annual Physician Visits Among Children, by Health Status, 1999



Source: National Health Interview, 1999. National Center for Health Statistics. Centers for Disease Control and Prevention.

CASE STUDIES: ASTHMA AND OBESITY

The significance and underlying causes of disparities in children's health status can be illustrated through the examples of two contemporary cases: asthma and obesity.

Asthma: Childhood asthma is a growing epidemic in this country. Children and adolescents under the age of 17 are twice as likely to suffer from asthma than adults.[33] From 1980 to 1994, cases of asthma in children under age 5 more than doubled. Older children ages 5-14 also experienced substantial increases, doubling from 1980-1994. Although the prevalence of asthma is increasing for all children, Black and low-income children are disproportionately affected. (See Figure 5). Black children and low-income children are not only more likely to ever have had asthma than White or Latino children and children from higher-income families, they are also more likely to have suffered acute asthma attacks.

The costs to individual children and their families – and society as a whole – are staggering. Each year over 136,000 children must seek emergency treatment for asthma care.[34] Asthma is also the leading cause of school absences among all chronic conditions. Affected children miss out on their education by missing school and by performing more poorly than their healthy counterparts, and their absences cost schools tens of millions of dollars per year in lost funding.² For California children ages 12-17 alone, the California Department of Health Services estimates a loss of \$40.8 million to schools from preventable absences due to asthma in 2001.[35] According to the Centers for Disease Control and Prevention, the estimated cost of treating asthma in those younger than 18 years of age is \$3.2 billion per year.[36]

Disparities in childhood asthma can be directly tied to several factors which disproportionately affect lower income children and children of color, including:

- substandard and over-crowded housing;
- poor ambient air quality (often related to living near freeways, ports, or industrial sources of pollution);

- exposure to pesticides, particularly among migrant families but also children attending schools close to fields where pesticides are sprayed; and
- attendance in older schools with poor indoor air quality.

Lower income children are also more likely to face barriers to quality health care to treat and control their asthma.

Obesity: Obesity and its consequences, such as diabetes, are widespread in this country, especially among poor, ethnic and racial groups. Children covered by Medicaid are nearly six times more likely to be treated for a diagnosis of obesity than children covered by private insurance (1,115 per 100,000 versus 195 per 100,000).[37] For the period 1999-2002, nearly one third (31.0%) of all children aged 6 through 19 years were either at risk for obesity or overweight, and 16.0% were considered overweight.[38] Among children ages 2 through 18, Latino children are most likely to be overweight or at risk of being overweight, followed by Black children. (See Figure 6). Children living in families under 200% of the Federal Poverty Level are more likely than their more affluent counterparts to be overweight or at risk for being overweight.

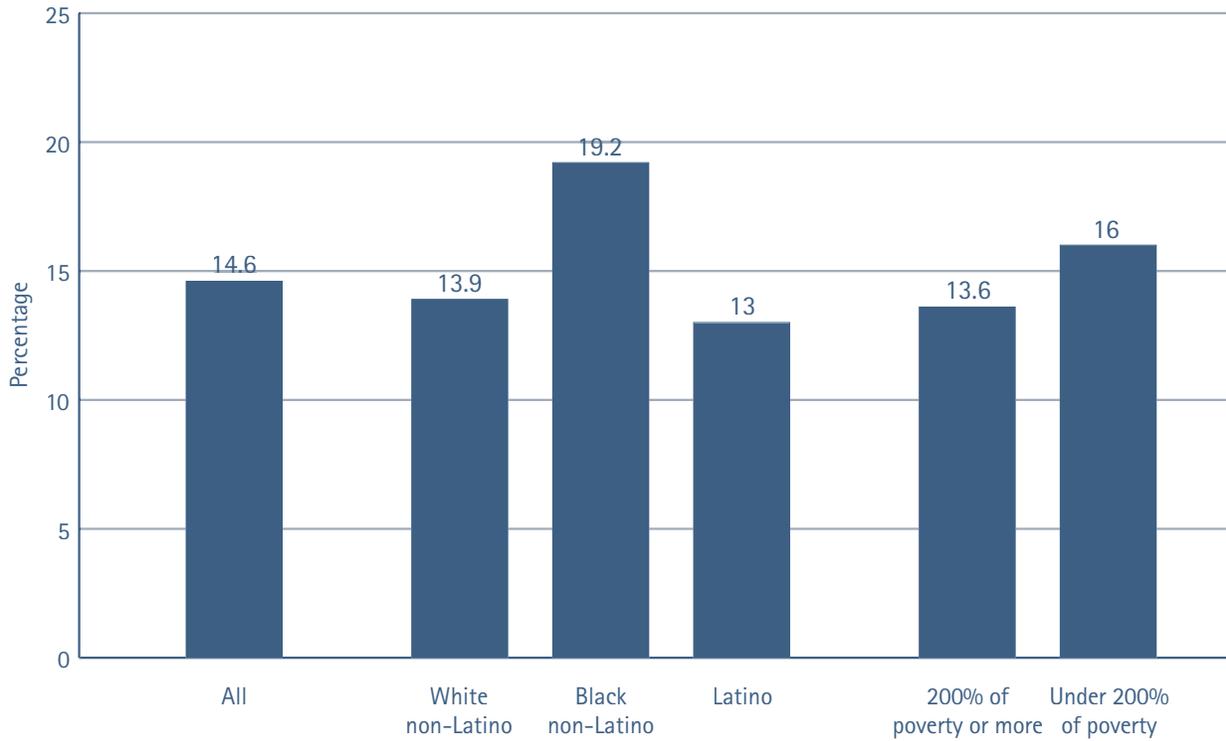
The crisis of childhood overweight is the result of a variety of individual, social, and environmental factors, including:

- increased availability and consumption of soft drinks and high-fat, high-calorie foods;
- increasing amounts of time spent in sedentary activities, including television viewing;
- inadequate school physical education programs; and
- limited access in many neighborhoods to healthy foods and safe places to be physically active.

These problems go beyond factors under the control of children and their parents to include conditions in schools and communities that encourage children to eat and drink unhealthy foods and beverages and that limit their physical activity.

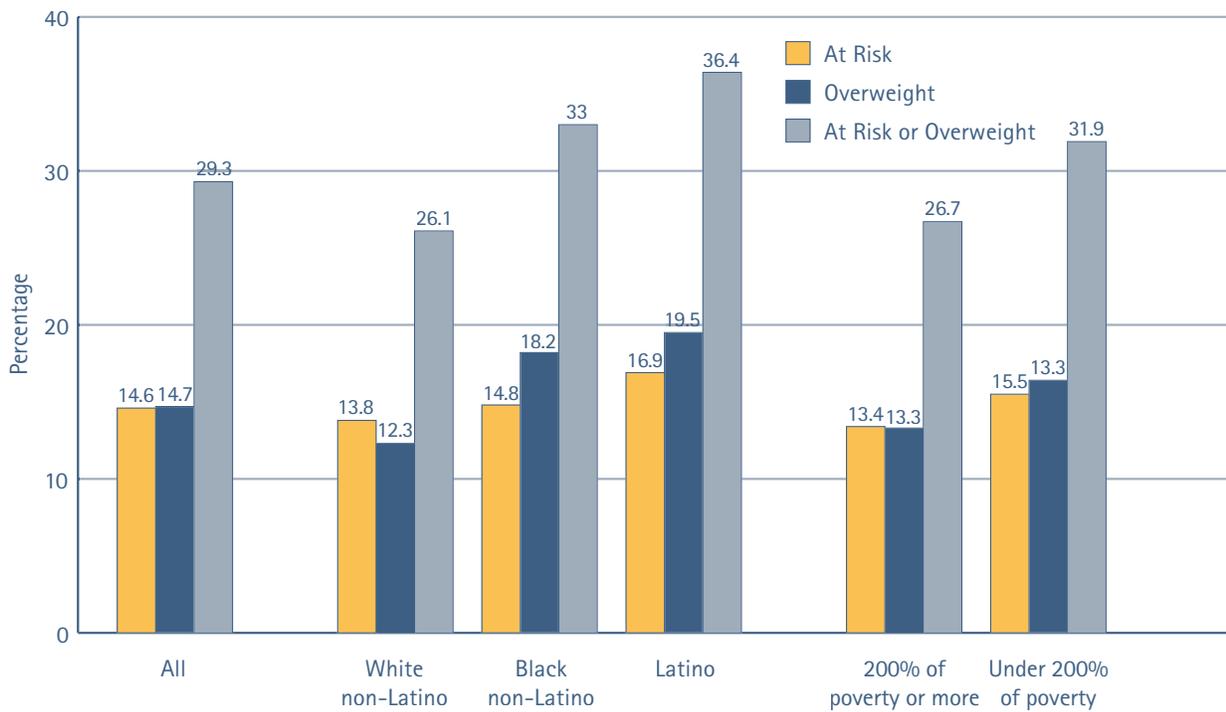
² Schools receive government funding, called Average Daily Attendance (ADA). When children are absent, schools forego this funding source for those absences whether excused or not.

Figure 5: Percent of Children Ever Told That They Had Asthma



Source: National Health and Nutrition Examination Survey, 1999-2000 and 2001-2002. Centers for Disease Control and Prevention. From Children's Defense Fund. Improving children's health: understanding children's health disparities and promising approaches to address them. Children's Defense Fund, Washington D.C. 2006.

Figure 6: Overweight: Percent Children (Ages 2-18)



Source: National Health and Nutrition Examination Survey, 1999-2000 and 2001-2002. Centers for Disease Control and Prevention. From Children's Defense Fund. Improving children's health: understanding children's health disparities and promising approaches to address them. Children's Defense Fund, Washington D.C. 2006.

SOLUTIONS AND STRATEGIES

Reducing, if not eliminating, health disparities among children requires multiple strategies.

Insurance Coverage: One of the most commonly identified approaches is ensuring that all children have health insurance. While children have experienced gains in insurance coverage in recent years (in 2002, 7.8 million children were uninsured, a decline of 1.8 million from 1999) nearly one in five children living in poverty lacked insurance coverage in 2002.[39] Children's health insurance status helps to predict whether children receive needed health care, and provides a critical means for identifying and addressing their health problems early in life. Studies consistently demonstrate that children covered by health insurance are more likely than

general complexities related to the enrollment processes, would go far toward reducing uninsurance rates among children. [43,44,45]

Limitations of Health Insurance: Health insurance is a vital link to health services, but its limitations are important to acknowledge and understand. Families face multiple "non-insurance" barriers to health care including structural factors related to the organization of the health care delivery system. While Medicaid may improve access to care for poor children who are otherwise uninsured, it does not ensure their access to the same locations and providers of care, nor the same continuity of care that other children receive. For example, poor children with Medicaid are less

Studies consistently demonstrate that children covered by health insurance are more likely than their uninsured counterparts to have better access to care, whether measured by number of physician visits, number of office-based or hospital-based visits, whether a child "enters" the health care system by using health services, or whether a child has a regular source of health care.[40,41,42]

their uninsured counterparts to have better access to care, whether measured by number of physician visits, number of office-based or hospital-based visits, whether a child "enters" the health care system by using health services, or whether a child has a regular source of health care.[40,41,42]

Lack of health insurance coverage among children is a result of several factors including declining availability of employment-based dependent insurance and the high cost of purchasing insurance. Yet, more than half of all uninsured children appear eligible for Medicaid or the State Children's Health Insurance Program (SCHIP)—the two public insurance programs responsible for providing coverage to low-income children. Overcoming the barriers to enrollment in these programs, such as the cumbersome paperwork, confusion about eligibility requirements, and

likely than non-poor children (regardless of insurance status) to receive routine care in physicians' offices, and are more likely to lack continuity of providers between routine and sick care.[46]

Immigrants and refugees face special non-insurance barriers to care, especially linguistic incompatibility with health care providers and staff and the lack of bilingual or multilingual staff, translated materials, and interpreter services.[47,48] Immigrants also cite cultural differences between themselves and Western health practitioners as a barrier to utilization.[49] Therefore, steps are required to ensure that health services are organized in ways that address the specific needs of the diverse communities, as well as afford children equal access to health care, regardless of the type of insurance they have.

Beyond Health Care: Yet, effectively reducing health disparities requires going beyond the health care system. Reflecting the broad array of factors that influence health, in September 1990, the U.S. Department of Health and Human Services launched a comprehensive initiative to improve the health of Americans called "Healthy People 2000."^[50] Among its 22 priority areas, this initiative included objectives to improve physical activity and fitness, nutrition, and environmental health, as well as objectives to improve the quality of health care services. The second generation of this initiative, "Healthy People 2010," launched in January 2000, builds on these objectives and clearly articulates two overarching goals: to increase quality and years of healthy life, and to eliminate health disparities.^[51] These comprehensive initiatives recognize that improving health care, while important, is not enough to improve the health and well-being of a population. Fundamentally, this requires addressing the socioeconomic disparities that underscore the health disparities in children related to educational opportunities,

occupational opportunities for parents, environmental pollutants that affect children's health, housing conditions, and community development, among others. While these are not necessarily within the scope of health plans to address, recognition of the limitations of health care, and the complexity of the solution, are important for achieving the ultimate goal. Beyond acknowledging the underlying causes of health disparities, health plans can show leadership in supporting the efforts of the many philanthropic organizations (and to a lesser extent) governmental agencies which are seeking resolution of these "downstream" roots of persistent health disparities.

Yet within the context of health care, health plans can offer affordable insurance products, offer subsidized products for low-income families and ensure that provider networks demonstrate cultural competency and language diversity. Current efforts being undertaken by health plans to reduce disparities are described below.

Innovative Approaches to Address Health Disparities by Health Plans

Health Plan	Program	Components	Results	Contact Information
Data Collection Approaches				
Highmark Inc. http://www.highmark.com/	Direct and indirect data collection by race and ethnicity	<ul style="list-style-type: none"> • Indirect: geocoding and surname analysis of HEDIS® data • Voluntary collection of self-identified race, ethnicity and language preference • Results of data collection are used to tie outreach programs to a certain population or geographic area 	<ul style="list-style-type: none"> • Found Black children in membership less likely to have appropriate use of controller medications for asthma • Utilized targeted one-on-one education with physicians and co-sponsors the local "Shoot for your Good Health" asthma basketball camp for children with asthma ages 8-14 and their parents 	Rhonda Moore Johnson, M.D., M.P.H. Medical Director, Integrated Clinical Services Phone: (412) 544-1027 Email: rhonda.moore.johnson@highmark.com
Provider Education				
Blue Cross and Blue Shield of Florida http://www.bcbsfl.com/	Quality Interactions: a Patient-Based Approach to Cross Cultural Care	<ul style="list-style-type: none"> • Interactive, online cultural competence training program: two-hour base course and two one-hour refresher courses • One refresher course is a pediatric module, using case studies of children to illustrate concepts in cultural competency 	<ul style="list-style-type: none"> • 90% of physicians in BCBSF's network who have used the program agreed that the information presented increased their awareness and understanding of the subject • 83% of physicians further indicated that the information would influence how they practice • Pre-test and post-test physician scores averaged 36 and 82 respectively, indicating a learning curve of 46 points 	Thomas Lampone, M.D. Corporate Medical Director Email: Thomas.Lampone@bcbsfl.com

Health Plan	Program	Components	Results	Contact Information
Treatment and Prevention				
Blue Cross of California, State Sponsored Business http://www.bluecrossca.com/	Comprehensive Asthma Intervention Program (CAIP)	<ul style="list-style-type: none"> Statewide Individual Member Interventions and Resources and Incentives for Physicians and Pharmacists County-specific pro-grams, such as the Plan/Practice Improvement Project in San Francisco and the Valley Air Quality Project in Fresno 	<ul style="list-style-type: none"> Use of appropriate asthma medication rose from 56% (2001) to 66.4% (2005) Evaluation of claims data for a group of 15,143 members continuously enrolled in the asthma management program indicated that from 2004 to 2005, asthma related hospitalizations decreased by 60% and asthma related emergency room visits by 46% 	John Monahan Senior Vice President & President, State Sponsored Business Phone: (805) 384-3511 Email: john.monahan@wellpoint.com
Molina Healthcare of Michigan http://www.molinahealthcare.com/	Shots for Shorties	<ul style="list-style-type: none"> Targeted intervention to address observed disparity in immunization rates among Black child and adolescent members From January to February 2005, 10 physician offices and 300 Black families were surveyed for their views on barriers to immunization From March to December 2005, parents of 1100 children and 3100 adolescents received immunization information including reminders, alternative immunization locations, safety, calendars and free transportation 	<ul style="list-style-type: none"> Efforts increased the childhood immunizations rate from 38.3% to 58.4% and the adolescent immunization rate from 19% to 51% Molina has incorporated a gift certificate incentive to encourage the parents of the remaining group of infants under 2 years of age to acquire their immunizations 	Marianne Thomas-Brown Director, Quality Improvement Phone: (248) 925-1726 Email: Marianne.Thomas-Brown@molinahealthcare.com Dana Brown Supervisor, Member Education Phone: (866) 449-6828, ext 155526 Email: Dana.Brown@molinahealthcare.com
Blue Cross Blue Shield of Tennessee http://www.bcbst.com/	Tennessee Blues Project	<ul style="list-style-type: none"> Four-year pilot study, with a goal of reducing infant mortality and pre-term births among Black women who are 18 years of age or younger, unmarried, or live in conditions of poverty through prenatal and postpartum education 	<ul style="list-style-type: none"> Since May 2006, a total of 317 women have continuously participated in the program and 267 babies have been born thus far The pre-term birth rate among participants is 7%, significantly less than the 18.5% rate of premature births for Black infants in Tennessee No infant mortalities have been reported among the participants 	Scott Wilson Public Affairs Manager Phone: (423) 535-7409 Email: scott_wilson@bcbst.com
Blue Cross Blue Shield of Tennessee http://www.bcbst.com/	Vanderbilt Research Project	<ul style="list-style-type: none"> Research project measuring the effectiveness of practices recommended for the prevention of premature births and infant mortality including: (1) delivery of prenatal care in the home and clinic, (2) administering prenatal progesterone shots, and (3) providing in-home visits by a postpartum nurse 	<ul style="list-style-type: none"> Since the Vanderbilt project is scheduled to begin in January 2007, outcomes data is currently unavailable 	Scott Wilson Public Affairs Manager Phone: (423) 535-7409 Email: scott_wilson@bcbst.com

Health Plan	Program	Components	Results	Contact Information
Community Focused				
Blue Cross and Blue Shield of North Carolina Foundation http://www.bcbsnc.com/foundation/	Focus area for grant funding on the health of vulnerable populations	<ul style="list-style-type: none"> • Expects to contribute approximately \$4.7 million to the focus area during 2006-2007 • Programs funded include those focused on eliminating disparities in access to care for low-income, underserved, at-risk and minority children 	<ul style="list-style-type: none"> • Outcomes from funded programs include: • A school-based health center enrolled 100% of Latino students, 85% of all Latino and uninsured students made at least one office visit, and 75% participated in at least one health promotion activity • A diabetes program served 225 children, 50% of whom were Latino and 10% Black; results included a 70% awareness of Type II diabetes, 70% increase in healthy eating, and 60% increase in physical activity 	Danielle Breslin Vice President of Operations Phone: (919) 765-4114 Email: Danielle.Breslin@bcbsnc.com
Blue Cross and Blue Shield of Massachusetts http://www.bluecrossma.com/	Latino Public Health Education Campaign	<ul style="list-style-type: none"> • Health promotion campaign targeting the Latino community, delivered in both English and Spanish, and focused on two significant issues for the Latino community, diabetes and women's health 	<ul style="list-style-type: none"> • Physicians reported increased inquiries on effective diabetes management 	Betsy Silva Hernandez Chief Diversity Officer and Vice President Phone: (617) 246-8805
Blue Cross and Blue Shield of Massachusetts Foundation http://www.bcbsmafoundation.org	Closing the Gap: Reducing Racial and Ethnic Disparities	<ul style="list-style-type: none"> • Largest grant program established by the foundation, commits \$3 million in three-year grants to 10 community-based, non-profit health care organizations 	<ul style="list-style-type: none"> • The initial planning year has permitted grantees to conduct thorough environmental scans to identify: community needs, local partners, required data to collect, and means to incorporate data elements into their collection systems. Grantees expressed the benefit of this information to create well-developed programs to effectively address disparities issues 	Celeste Reid Lee Director of Community Health Programs Phone: (617) 246-7318
Keystone Mercy Health Plan http://www.keystonemercy.com/	Healthy Hoops Program	<ul style="list-style-type: none"> • Community-based asthma education basketball program designed to teach children with asthma in underserved communities and their families how to properly take their medication and manage their asthma 	<ul style="list-style-type: none"> • Over 690 children and 400 parents participated in at least one event in 2005, and 44% of those participants were Keystone Mercy members • Of the total participants, 75% were Black, 15% were Latino and 10% White • Participants have demonstrated positive health outcomes, especially among those participating for three years - a 34% decline in the percentage of children with an emergency room visit for asthma; a 35% reduction in rescue medication use; a decrease in sleep disturbances due to asthma, lower hospitalization rates, and overall healthier lifestyles 	Meg Grant Director of Community Relations Phone: (215) 863-5688 Email: Meg.Grant@KMHP.com

HEALTH PLAN INNOVATIONS TO REDUCE DISPARITIES AND ENSURE CULTURAL COMPETENCE

Innovative programs aimed at eliminating disparities in maternal and child health care have emerged in both the public and private sectors. Since health plans decide which health services to reimburse and which programs to finance, health plans have a particularly important role because the choices they make influence health care access and delivery for women and children. Given the long-lasting effects of childhood health conditions and the impact of a mother's health on her child, greater attention is being paid to addressing maternal and child health disparities and improving the cultural competency of care delivery. Several health plan programs detailed in this section are focused on eliminating the widespread health care barriers that lead to poor health outcomes for many mothers and children within their memberships. Health plans are not only reaching out more to their individual member patients, they are also increasingly concerned with the health of women and children in the communities in which they operate, and the programs described below attest to this commitment. More collaborative relationships and initiatives have been forged between the public and private sectors, including health plans' partnerships with schools and community-based organizations, as well as health plan foundations funding universities and organizations serving vulnerable populations.

- **The collection of racial and ethnic data has become an important strategy for health plans to improve the quality of care received by all patients, especially those at risk of receiving lower quality care.**

Through the collection and tracking of patient data by race and ethnicity has emerged a crucial way health plans can address and reduce disparities among their memberships. Health plans are using the data collected to evaluate whether specific patient populations, in particular, minority populations, are receiving the recommended care, or to identify high health risk populations. Many health plans are then designing interventions that will improve the quality of care for all of their member patients, especially those at risk of receiving lower quality care. There are barriers to the collection of racial and ethnic data, with no federal regulations or laws prohibiting or authorizing its collection in health care quality

improvement.[52] Most data are currently collected on a voluntary basis or indirectly through geocoding and surname analysis. In order to measure and evaluate the care received by certain groups, the collection of these data is vital. Health plans can use the data to implement provider, member and community-targeted quality improvement initiatives and outreach programs.

Highmark Inc., the largest health insurance company in Pennsylvania based on membership, and one of the largest health insurers in the United States, is currently engaging in direct and indirect data collection strategies. Highmark is committed to reducing racial and ethnic disparities in Pennsylvania and believes health insurance companies must do their part to solve this problem and improve the quality of care for all patients. Its indirect data collection strategies began in 2004, and continue today with geocoding and surname analysis of the Health Plan Employer Data and Information Set (HEDIS®) data. Highmark direct data collection strategies include the voluntary collection of self-identified race, ethnicity and language preference from members, beginning in 2006. The results of the data collection are used to tie outreach programs to a certain population or geographic area. As a result of indirect data analysis, Highmark discovered that Black children among their membership were less likely to have appropriate use of controller medications for asthma. To address this disparity, in the 3rd Quarter of 2006 Highmark utilized targeted one-on-one education with physicians found to have disparities regarding asthma care, working with them to identify ways to improve the percentage of their asthma patients on controller medication. Highmark also co-sponsors the local "Shoot for your Good Health" asthma basketball camp, which provides asthma education and basketball activities for children with asthma, ages 8-14, and their parents.

- **Health plans play a major role in improving health care delivery through the trainings offered to providers in their networks and comprehensive asthma intervention and immunization programs provided to members that have a targeted focus on decreasing maternal and child health disparities.**

■ Cultural Competency Training

Blue Cross and Blue Shield of Florida (BCBSF) is leading the effort in cultural competence training by being the first health plan in the United States to offer physicians within its network the program titled, *Quality Interactions: a Patient-Based Approach to Cross Cultural Care*. Developed by the Manhattan Cross Cultural Group and distributed by Critical Measures, *Quality Interactions* is an interactive, online training program that uses an evidence-based and case-based approach to help physicians and other health care professionals learn to communicate more effectively with culturally diverse patient populations.

Quality Interactions consists of a two-hour base course and two 1-hour refresher courses. One of the refresher courses is a pediatric module which uses case studies of children to illustrate concepts in cultural competency. The base course is accredited by Tufts University School of Medicine for 2.5 hours of Continuing Medical Education (CME) credits, while the refresher courses count for one CME credit. The program hones the skills that physicians need to relate to patients from various cultures by: (1) introducing physicians to core ideas in cultural competence to provide a theoretical basis from which to understand patients from different cultures and (2) giving physicians case studies to practice newly learned concepts. Information on various cultures, such as language, employment, education, and immigration is provided only as a supplementary tool.

The core part of the program is the case studies of patients from different cultures. In the pediatric module, the case studies are tailored to specific children's health issues, such as asthma. For each patient, the physician goes through a ten-step interaction process to diagnose the condition and propose an appropriate treatment plan. Throughout the process, the physician receives evidence-based feedback on his or her communication skills, which is displayed in the form of a line graph. The line rises and falls depending on the effectiveness of the questions asked. Another helpful feedback tool is a clock, which tracks the time that is added to a visit by asking culturally inappropriate questions. Thus, through trial and error, the physician is guided toward using the most culturally relevant ways to obtain important information from patients and develop culturally relevant treatment plans.

The *Quality Interactions* program also provides physicians with a wealth of sources for further learning. At the end of each case study is a references section with hyperlinks that connect physicians directly to PubMed where the physician can access full-text articles on the concepts conveyed

in the program. In addition, physicians can subscribe to a quarterly newsletter with updated information on culturally competent care.

Blue Cross and Blue Shield of Florida began using *Quality Interactions* in July of 2005 and recently implemented the pediatric refresher course in October of 2006. Among the physicians within the BCBSF network who have used the program, 90% agreed that the information presented in the course increased their awareness and understanding of the subject. A further 83% indicated that the information provided would influence how they practice. This perspective is affirmed by the difference between pre-test and post-test scores of the physicians, which averaged 36 and 82 respectively, representing a significant learning curve of 46 points. The National Business Group on Health has also recognized the value of *Quality Interactions* by granting their 2006 eValue8 award to BCBSF for their use of the program to reduce racial and ethnic disparities in health.

■ Comprehensive Asthma Intervention Program

Blue Cross of California, State Sponsored Business (SSB) serves a culturally and linguistically diverse, low-income population of approximately 1.18 million California Medi-Cal and Healthy Families members. Asthma ranks among the plan's top 10 diagnoses, with overall self-reported asthma prevalence at 8.8% in California. Asthma management program membership data, as of January 2006, indicates that 76% of SSB's asthma program members are less than 18 years of age, 51% are Latino, and 39% noted a first language other than English. Recognizing the severity of this problem and the unique needs of their diverse membership, SSB developed a Comprehensive Asthma Intervention Program (CAIP). CAIP draws upon the strengths of various entities by establishing partnerships with members, providers, academic institutions, public health, and communities. Program components include statewide Individual Member Interventions and Resources and Incentives for Physicians and Pharmacists, as well as county-specific programs, such as the Plan/Practice Improvement Project (PPIP) in San Francisco, and the Valley Air Quality Project in Fresno. SSB also maintains Community Resource Centers (CRCs) that help tailor SSB's asthma programs to meet local needs. CRC staff provide face-to-face service (outreach, assistance in finding a primary care physician, setting up appointments, coordinating transportation, etc.), as needed for higher risk members. They also serve as liaisons between SSB, providers, and community groups.

In 2005, SSB joined a Best Clinical and Administrative Practices (BCAP) Pilot Project, facilitated by the Center for Health Care Strategies, to reduce ethnic disparities within CAIP's pharmacy asthma consultation component. Through SSB's real-time pharmacy data entry system, pharmacists are alerted through a "pop-up" message at the time a prescription is filled that the member is eligible for a pharmacy asthma consultation. The "pop-up" indicates that the member is in poor control of asthma, based on a pattern of over-reliance on asthma relief medication. Pharmacists are reimbursed as often as twice per year for these extended point-of-service consultations. Prior to the pilot, SSB noticed that there were ethnic disparities in the rate of receipt of pharmacy asthma consults. In response, the plan initiated broad education for pharmacists about the consultation program and about health disparities. As part of the BCAP pilot, SSB provided targeted, in-person outreach to eight non-chain pharmacies identified as having the highest number of missed opportunities to provide consultations to Black members during the first quarter in 2005. Pharmacists were reminded of the importance of consultations, including evidence that receipt of pharmacy asthma consults is associated with increased use of asthma controller medications. End-of-pilot findings concluded that in-person outreach to pharmacists appears to be effective. The rate of consultation to Black members at the eight targeted pharmacies increased from 0 to 15% a few months following the outreach. Following state-wide efforts to promote the pharmacy asthma consultation program, as well as the BCAP pilot, SSB's overall pharmacy asthma consult rates increased from 2003 to 2005 by statistically significant amounts for all ethnic groups, decreasing the observed ethnic disparity.

The Plan/Practice Improvement Project (PPIP) is a county-specific project within CAIP that promotes cultural competence as a key aspect of effective asthma care. Facilitated by the Center for Health Care Strategies, the National Initiative for Children's Healthcare Quality, and the California Healthcare Foundation, PPIP aims to identify and spread best asthma chronic care practices. SSB engaged five clinical practice groups in San Francisco serving diverse patient populations and encouraged them to streamline daily clinical activities, enhance their information management, and track asthma outcomes. PPIP educated participants on ways to address language barriers, cultural health care practices, and environmental asthma triggers for different income and ethnic groups. Participants shared educational patient and provider resources in a number of different languages. In addition, SSB and the San Francisco Health Plan partnered to advocate for community-wide asthma educator training supported by the San Francisco Board of Supervisors. As a result of this training, numerous professionals and para-professionals from different backgrounds are better

equipped to address asthma for diverse patient populations throughout San Francisco. Overall, PPIP has led to important partnerships and opportunities to enhance asthma care for individuals of all ethnic groups.

The Valley Air Quality Project is another county-specific component of CAIP in which SSB partners with public health, local health care leaders, and academic researchers to help identify effective community responses to air pollution affecting the entire Fresno community. By sharing data on health care service utilization, meteorological data, and information from cartographers, the Valley Air Quality Committee was able to assess the correlation between indicators of poor air quality and health service utilization on a large population across varied health care settings. The Committee's efforts led to increased public service announcements about air quality and public awareness campaigns urging residents to avoid lighting fires and "spare the air." Most importantly, SSB facilitated the implementation of the American Lung Association Asthma Friendly Flag Program within Fresno County schools by sponsoring 24 low-income schools to receive the flags. These community-wide interventions impact health plan members and non-members alike of all ethnicities throughout Fresno County.

Overall results for the CAIP program are extremely favorable to asthma outcomes of SSB members. Use of appropriate asthma medication rose from 56% (2001) to 66.4% (2005). SSB evaluated claims data for a group of 15,143 members continuously enrolled in the asthma management program for both 2004 and 2005. Data for this group indicate that from 2004 to 2005 declines were observed in asthma-related hospital and emergency room use claims. This may be due to a combination of natural trends as well as the intervention efforts. The success of CAIP has earned SSB national recognition on two occasions: 1) The United States Environmental Protection Agency (EPA) named SSB as the recipient for the 2006 National Environmental Leadership Award in Asthma Management, and 2) The National Committee for Quality Assurance awarded SSB the Culturally and Linguistically Appropriate Service Award through their Recognizing Innovation in Multi-Cultural Health Care program.

■ Immunization Programs

Shots for Shorties (SFS), was developed by **Molina Healthcare of Michigan** to reduce health disparities among Black children and adolescents living in southeastern Michigan. The specific focus of the SFS initiative is to increase

Childhood and Adolescent Immunization rates (CI and AI) for the "Combo 2 vaccination series." Combo 2 vaccines target such diseases as polio, measles, mumps, rubella, hepatitis B, and varicella. The initial goal for the pilot program was to increase the plan's current CI and AI rates from 38% and 19%, respectively, to the 2004 NCOA 75th percentile rates of 68% and 46%, respectively. Successfully achieving this goal, SFS was recognized by the National Committee For Quality Assurance's (NCQA) Innovation in Multi-Cultural Health Care program, earning them a Culturally and Linguistically Appropriate Service (CLAS) Award.

In July 2004, the Centers for Healthcare Strategies (CHCS)³ released a call for proposals to Medicaid Managed Care Plans for information about disparities among members. Molina consequently examined reports on all of their HEDIS® measures, stratified by race and ethnicity. The widest disparity was observed within immunization measures and specifically among Blacks who, in contrast to the overall immunization rate of 75%, were only achieving rates of 50%. Molina decided that a two-pronged, targeted approach was needed: 1) identify the barriers for this subgroup to achieving desired immunization rates and 2) design an intervention to overcome these barriers thereby eliminating the disparity.

With help from the Michigan Department of Community Health (MDCH), Molina identified their target population. In January 2005, surveys were sent to 10 provider offices in Southeast Michigan with 80% or greater Black enrollment to identify provider's views on barriers to immunization. The next month, 300 Black families with children less than 2 years of age or 12-13 years old were surveyed for their views on barriers to immunization. Survey results identified transportation and inadequate immunization knowledge as the greatest barriers for this population to achieve the desired immunization goals.

Southeast Michigan benefits from an existing and active Immunization Coalition comprised of Michigan Department of Community Health, Vaccines for Children and the Detroit Department of Health and Wellness Promotion Immunization Team. This team of partners, interested in decreasing disparities and improving immunizations, like Molina, brought to the table many valuable resources. To minimize duplication of efforts including coordination of care, chart review, and assessments, Molina worked with the coalition in the Shots for Shorties intervention.

From March to December 2005, parents of 1100 children (12-24 months) and 3100 adolescents (12-13 years) received immunization information including reminders, alternative immunization locations, safety, calendars and free

transportation. In addition, the Michigan Care Improvement Registry (MCIR) provided monthly immunization updates for each child and adolescent. These efforts effectively *increased the CI rate from 38.3% to 58.4% and the AI rate from 19% to 51%*. Molina has incorporated a gift certificate incentive to encourage the parents of the remaining group of infants under 2 years to acquire their immunizations

Current initiatives focus on low performing areas and include 4200 children (<2 years), 3900 adolescents (12-13 years) and 120 Primary Care Physician sites. Molina staff sends monthly reminders to 8-18 month olds and quarterly reminders to 12 to 13 year olds. Parents of newborns receive a calendar indicating the specific date the child should receive immunizations and PCPs receive quarterly immunization reports. MDCH audits medical records and provides recommendations to improve immunization service delivery.

Molina Healthcare is now incorporating the Shots for Shorties initiative into their ongoing immunization program budget in order to sustain the success they have achieved. In addition, the plan is examining disparities among their Prenatal and Disease Management programs and hopes to roll out initiatives in early 2007 to eliminate disparities within these areas of operation.

- **Health plans increase access to health care among vulnerable populations of women and children served by safety net organizations.**

Most health plans have formed separate, private health philanthropies, demonstrating their commitment to dedicated funding for projects and organizations to broaden health access and coverage in their communities. The **Blue Cross and Blue Shield of North Carolina (BCBSNC) Foundation** is a separate, independent, private, charitable foundation dedicated to improving the health and well-being of the residents of North Carolina. The BCBSNC Foundation seeks to improve the health of North Carolinians through funding programs and services in response to grant requests, and by proactively creating programs and partnering with organizations to address specific needs. Since its inception in November 2000, the BCBSNC Foundation has awarded more than \$30 million in grants to organizations throughout the state. One of the focus areas for their grant funding is the health of vulnerable populations.

North Carolina has an increasingly diverse population, including a rapid increase in its Latino population over the past ten years. Blacks are the second largest racial group in North Carolina and the state has the largest American Indian population east of the Mississippi. While the health status

³ CHCS is a national non-profit organization aimed at improving the quality health services to beneficiaries of publicly financed care.

of the minority populations in North Carolina has been improving in some areas, a widening gap exists between Black and White Americans in illnesses such as asthma, diabetes, major infectious diseases and several forms of cancer[53]. To address the impact of these and other growing disparities, such as socioeconomic disparities within the state, the BCBSNC Foundation identified the health of vulnerable populations as one of three primary focus areas.

Through this focus area, the Foundation's mission is to improve health outcomes of vulnerable populations served by safety net organizations in North Carolina. They define vulnerable populations as uninsured, low-income, minority, and/or chronically ill individuals. Eligible safety net organizations have a central goal of providing care to patients regardless of their ability to pay. Examples include, but are not limited to, community and migrant health centers, rural health centers, local health departments, free clinics, hospitals, Community Care programs, health outreach workers, and school-based or school-linked health centers. The Foundation particularly is interested in funding programs that create health gains for vulnerable populations in North Carolina by linking the supply and use of health care resources.

Programs that have received funding from the BCBSNC Foundation include those focused on eliminating disparities in access to care for low-income, underserved, at-risk and minority children and adolescents. In 2004, the Graham Children's Health Services of Toe River, a non-profit community coalition, received over \$20,000 in funding for a program to provide access to health care for a special population of adolescents. Graham Health Services coordinates with health care providers at the middle schools and taps other community resources to identify and serve youth who may require assistance. The grant specifically funded preventive care for Latino and uninsured children at school-based health centers in Yancey County, North Carolina. During the one-year project, 100% of Latino students enrolled in the Student Health Center, 85% of all Latino and uninsured students made at least one office visit, and 75% participated in at least one health promotion activity.

Another grant in 2005 funded WakeMed Health and Hospitals in Raleigh, NC, for their pediatric diabetes assessment and management program. The grant of \$25,000 provided for the continuation of physical activity as a component of the hospital's pediatric diabetes program serving many low-income and ethnic minority children with pre-diabetic conditions or Type II diabetes in Wake County. The program's goal was to help children reduce their risk of developing diabetes by building lifelong, healthy attitudes about food and fitness involving the whole family. Over the one-year

grant period, the program received 1,131 referrals of children at risk for developing diabetes. A total of 381 were diagnosed with diabetes, and 266 enrolled in the program. The majority of participants were minority – 52% Blacks and 21% Latino. Those enrolled demonstrated improvements in clinical measures as well as healthy lifestyle behaviors.

Another diabetes-focused grant was awarded to Healthy Children of Rowan County for their Healthier Future of Diabetes program. The program served 225 children between the ages of 7 and 12; 50% of these children were Black and 10% Latino. Results included a 70% increase in awareness of Type II diabetes, a 70% increase in healthy eating among children, and a 60% increase in physical activity levels. Based on the success of this pilot program, the organization received a grant from another foundation to sustain and expand the program.

Additional programs targeted at increasing health care access for racial and ethnic minority children in North Carolina have been funded in 2006. Paradise Outreach Ministries received \$22,500 in funding to implement SHAPEDOWN, a family-based ten-week weight management program. The program will reach 40 children, ages 6-18, and their families annually in the economically distressed county of Beaufort. The YWCA of Winston-Salem and Forsyth County's Hispanic Youth Wellness Project was funded by the BCBSNC Foundation to continue an obesity prevention program to Latino children and their families in Forsyth County.

The BCBSNC Foundation expects to contribute approximately \$4.7 million to programs within the Health of Vulnerable Populations focus area in the 2006-2007 fiscal year.

- **Health plans fund community-based initiatives to improve health care services and reduce disparities.**

■ Public Awareness and Grant Funding Focused on Disparities

Blacks, Latinos and Asians represent 45.7% of Boston's population. However, research indicates that members of these groups, in comparison to White Bostonians, fare worse on many health indicators. In 2005, Mayor Menino and the Boston Public Health Commission released three reports: two reports detailed the problem of Boston's health care disparities and the last report, the Mayor's Task Force Blueprint, described 22 strategies for local organizations to contribute to reducing disparities. In order to effectuate the Blueprint, Mayor Menino launched a \$1 million grant program open to a variety of local organizations. In support

of the Mayor's initiative, **Blue Cross and Blue Shield of Massachusetts (BCBSMA)** provided financial resources toward the work of the Task Force and toward the consequent grant program. In addition to supporting the public sector's efforts to eliminate disparities, BCBSMA is addressing the issue independently, through both the company and the Blue Cross Blue Shield of Massachusetts Foundation.

On the health plan side, BCBSMA launched a health promotion campaign targeting the Latino community. The *Latino Public Health Education Campaign*, consisting of proactive health management messages, was launched in the fall of 2005. The campaign used specific messages centered on culturally-sensitive care, community health education, prevention, chronic disease care and health system navigation to encourage patients to visit their doctor's office for regular testing and preventive screening.

Local community research revealed two significant issues for the Latino community: diabetes and women's health. Using Boston area community members and physicians, the campaign was delivered in both Spanish and English, and included messages on eating right, the benefits of exercise, controlling diabetes, and the importance and benefits of health insurance. The campaign also featured Shirley, a Latina woman who lost her first pregnancy due to the complications of gestational diabetes. In this second pregnancy, Shirley is shown to be an active participant in her health by eating right, exercising, and taking better care of herself. Participating physicians reported increased inquiries on effective diabetes management demonstrating the success of the campaign in reaching and educating local Latina women.

Blue Cross and Blue Shield of Massachusetts Foundation

"Closing the Gap: Reducing Racial and Ethnic Health Care Disparities" is the largest grant program established by the **Blue Cross and Blue Shield of Massachusetts Foundation**. The program commits \$3 million in three-year grants to ten community-based, non-profit health care organizations across the state. Activities funded by the grants must focus on reducing racial and ethnic health care disparities in Massachusetts, specifically by improving access and reducing barriers to quality, equitable services and medical treatment for targeted minority groups. Each grant recipient receives a total of \$300,000: \$50,000 to fund one year of program planning and two years of program implementation (\$125K each). Successful initiatives must meet the following key selection criteria: target health disparity and population; describe systemic, provider and patient-focused solution; demonstrate cultural competence; and positive potential for replication. The grantees were announced in October

2005. Four of the ten initiatives funded specifically targeting women and children are described below.

- **The Alliance for Inclusion and Prevention** used its grant to launch an initiative aimed at addressing the high levels of untreated mental health problems and the pervasive presence of traumatic stress among Black, Latino and Somali youth in the Grove Hall neighborhood of Dorchester and surrounding areas of Boston.
- **The Boston Medical Center** aims to reduce infant mortality by addressing health care disparities that affect pregnant and postpartum Black women in Boston's inner city neighborhoods.
- **The Greater Lawrence Family Health Center**, using intensive nurse case managers, comprehensive patient action plans, and strong community partnerships, will address the disproportionate prevalence of asthma among Latino adults and children in Lawrence.
- **The Tufts–New England Medical Center, Inc. (NEMC)**, in collaboration with two Boston Public Schools in Chinatown, is creating a comprehensive initiative that addresses the extremely high incidence of asthma among Asian-American children.

Grantees are not required to provide outcomes data for funding renewal. Instead, at the end of Year 1, grantees must submit a clear and cogent project implementation plan, including names of local partner organizations and indicators by which program performance will be measured. One year later, all of the grantees have expressed their appreciation for the initial planning year. The planning exercise has permitted them to conduct thorough environmental scans to identify critical needs to be addressed, relevant local partners, required data to collect and ways to incorporate these into their data collection systems. These considerations will lead to additional well developed programs with a greater chance to effectively address disparities issues within a local context.

■ Partnering with Community Organizations

Asthma is the most common chronic illness among children in the United States. To combat the particularly high incidence of asthma among Black children in its West Philadelphia membership, **Keystone Mercy Health Plan** created the Healthy Hoops program in 2003, in partnership with the Healthy Hoops Coalition. Healthy Hoops is an innovative, community-based, asthma education basketball program

designed to teach children with asthma in underserved communities and their families how to properly take their medication and manage their asthma. Since 2003, the program has expanded to the Latino community of North and Northeast Philadelphia, the Philadelphia suburb of Chester, PA, and nationally, to Charleston, South Carolina, through Keystone Mercy's sister company, Select Health of South Carolina, Inc. Healthy Hoops originally targeted children ages 7 to 15, and as of 2005, expanded in scope to include younger asthmatic children ages 3-6.

Using basketball as a platform, Healthy Hoops teaches both kids and their families how to manage asthma through appropriate medication usage, proper nutrition, monitored exercise and recreational activities. The goals of Healthy Hoops are to reinforce asthma management; to provide asthma prevention and health awareness information to school nurses, community nurses, gym and health instructors and coaches; and to incorporate exercise and fitness programs into the lives of those families who have been in the program more than two years.

The program utilizes health screenings, educational sessions, an Asthma Walk, and a full day basketball camp led by celebrity basketball coaches to reach out to underserved children and families and improve their management of asthma. A coalition of over 30 organizations supports Healthy Hoops and assists in recruiting families to enroll in the basketball camp programs. Additional recruitment includes mailing over 12,000 flyers to social service agencies and schools. A hotline based at Keystone Mercy provides information about the programs and collects information from callers, which is followed-up by a letter and phone call to the interested party. Over 500 children signed up for and attended the most recent all-day basketball camp event in Delaware County and West Philadelphia. High participation in the programs is the result of thorough planning by dedicated Coalition members, including such practical efforts as providing chaperoned buses to transport participants to the events from their communities.

Over the past few years, the program has produced positive health outcomes, especially among those participants who have taken part in the program for three years. Continued improvement has included a 34% decline in the percentage of children with an emergency room visit for asthma; a 35% reduction in rescue medication use; a decrease in sleep disturbances due to asthma, lower hospitalization rates, and overall healthier lifestyles. Over 690 children and 400 parents participated in at least one event in 2005, and 44% of those participants were Keystone Mercy members. Of the total participants, 75% were Black, 15% were Latino and 10% White.

In addition to the support of Keystone Mercy, key Coalition members AstraZeneca Pharmaceutical, Crozer-Keystone Health System and STEPS to a Healthier Philadelphia sponsor the current Healthy Hoops program in Philadelphia. The program has received local and national recognition as an innovative outreach and multi-cultural health care program. Healthy Hoops has received the following awards: National Committee for Quality Assurance (NCQA)'s 2006 *Recognizing Innovation in Multi-Cultural Health Care Award*, Public Relations Society of America (PRSA) Health Academy's 2005 *Innovation Award for Excellence in Community Relations*, and the Philadelphia PRSA Pepperpot 2003 and 2004 second place for *Special Public Relations Program*.

■ Health plans fund research on the cost-effectiveness and impact on quality of their current efforts to reduce disparities

BlueCross BlueShield of Tennessee (BCBST) has demonstrated remarkable commitment to reduce disparities in infant mortality in Tennessee, which ranks 48th in the nation for this measure. Two major initiatives supported by BCBST deserve specific attention: the Tennessee Blues Project and the Vanderbilt Research Project.

The Blues Project, a four-year pilot study, began in May of 2006 with the goal of reducing infant mortality and pre-term births among Black women who are 18 years of age or younger, unmarried and live in conditions of poverty. The women enrolled in the Blues Project were provided with both prenatal and postpartum education. The Blues Project is particularly unique in that it aims to follow through with the postpartum education all the way until the infant reaches two years of age. Despite only being in its first phase, the Blues Project has already demonstrated resounding success.

The success of the Blues Project can be attributed, in part, to the careful consideration given to the design of the prenatal and postpartum courses, which are notable for both their convenience and comprehensiveness. Both classes are scheduled as part of the women's prenatal or pediatric visits and classes are delivered at these care sites. The coupling of classes with clinical visits makes the courses convenient for the women to attend. The content of the courses encompasses a broad range of maternal health topics, including labor, delivery and breastfeeding, but also includes useful information on health conditions that many of the women suffer, such as diabetes, hypertension, and HIV/AIDS. Additional topics addressed through the courses involve the social factors that often undergird adverse health outcomes for infants. For example, the courses help women to complete

At present, a premature infant typically spends about 20 days in the Neonatal Intensive Care Unit (NICU) and incurs a cost of about \$94,000 during this time. Investing in prenatal and postpartum classes costs only a fraction of this amount.

their education, find jobs, and deal with substance abuse or postpartum depression.

Since May 2006, a total of 317 women have sustained participation in the program and 267 babies have been born thus far. Only 18 of the 267 babies were born prematurely. Thus, the number of premature births in this group of women was only 7%, which is significantly less than the 18.5% rate of premature births for Black infants in Tennessee. None of these infants have died, demonstrating a 100% success rate for infant mortality. Moreover, the women themselves reported being positively impacted by the Blues Project. A common refrain heard among the enrollees was, "I did not know that," which validates the Blues' efforts in trying to ensure that vulnerable patients are given both the knowledge and the means to care for their children and themselves. The second phase of the Blues Project, which will incorporate recommendations for change from the first phase, as well as modify the design into a randomized control trial, is due to begin in July 2007.

The second initiative supported by BCBST involves a \$2.48 million, four-year grant awarded by the **BCBST Foundation** to select departments at the Monroe Carell Jr. Children's Hospital and the Tennessee Connections for Better Birth

Outcomes. The grant will fund a translational research project that measures the effectiveness of three practices frequently recommended for the prevention of premature births and infant mortality: (1) delivery of prenatal care in the home and clinic, (2) administering prenatal progesterone shots, and (3) providing in-home visits by a postpartum nurse. The program expects to enroll 300 mothers by January 2007 and will provide the above services to these women for a period of two years.

Since the Vanderbilt project is scheduled to begin in January 2007, outcomes data are currently unavailable. However, successful results would build support for such prevention measures and would likely encourage other groups to make efforts to diminish disparities in pre-term births and infant mortality. Successful results would also have a huge impact on the costs of maternal health care. At present, a premature infant typically spends about 20 days in the Neonatal Intensive Care Unit (NICU) and incurs a cost of about \$94,000 during this time. Investing in prenatal and postpartum classes costs only a fraction of this amount. As Dr. Patricia Temple, Professor of Pediatrics and the project director, rightly asks, "If we can prevent a \$250,000 hospital admission for a 24-week old baby, and it only costs \$5,000 to prevent it, why aren't we doing it?"

SUMMARY AND CONCLUSION

Health disparities among children, as with adults, are prominent by socioeconomic status as well as by race and ethnicity. There are a number of reasons to establish the reduction of childhood health disparities as a common social goal. Among these are the facts that children who experience health problems are more likely to miss school, to have lifelong health problems and to incur high costs for medical care. Childhood health disparities also have social implications in terms of productivity in adulthood, as well as costs associated with health care. Health disparities are also an issue of equity; all children deserve the opportunity to be healthy and thrive.

While reducing and ultimately eliminating health disparities is a complex undertaking given the social, environmental and political factors that underlie its existence and persistence in this country, health plans can contribute to improving children's health status and mitigating health care disparities that exist within their memberships and their communities. Nationwide, health plans are showing leadership in this area by implementing programs and efforts that work toward reducing the barriers preventing children from accessing quality, culturally appropriate care, and many of the programs are producing positive results for children on the local level. Much remains to be done, however, and health plans can learn from each other and, by partnering with others working in this arena, to work toward an ultimate goal of eliminating all health disparities among children.

APPENDIX

Selected Resources on Maternal and Child Health Disparities

Organization	Web Site	Description
Professional Organizations		
America's Health Insurance Plans (AHIP)	www.ahip.org and http://www.hablamos-juntos.org/resources/pdf/AHIP_CommunicationsResources_to_Close_the_Gap_%20may2006.pdf	AHIP is a national association of about 1,300 health insurance plans. In 2005, AHIP produced a report titled "Tools to Address Disparities in Health: Data as Building Blocks for Change." The report provides detailed and useful information for health professionals, health insurance plans, and health care organizations to learn how to collect, analyze and use data on race, ethnicity, and primary language.
American Medical Association (AMA)	www.ama-assn.org	The AMA is the largest physician group in the United States. Their website contains diverse resources to aid physicians in reducing health disparities. The AMA and the National Medical Association co-chair the Commission to End Health Care Disparities, a task force aimed at building physician capacity to eliminate health disparities.
American Public Health Association (APHA)	http://www.apha.org/	APHA represents more than 50,000 public health professionals from diverse areas of practice. APHA sponsored the creation of the publicly accessible and fully searchable "Health Disparities Community Solutions Database."
Association for Maternal and Child Health Programs (AMCHP)	http://www.amchp.org/	AMCHP is a national organization representing directors of state maternal and child health programs as well as other individuals and organizations working to improve maternal and child health. Their website contains a variety of informational resources on reducing maternal and child health disparities.
CityMatCH	http://www.citymatch.org	CityMatCH is a national membership organization of city and county health departments' maternal and child health (MCH) programs and leaders representing urban communities in the United States. CityMatCH established an Undoing Racism workgroup to address the impact of racism on health, and information related to this workgroup and additional resources on undoing racism and addressing health disparities can be found on their website.
National Association of County and City Health Officials (NACCHO)	http://www.naccho.org	NACCHO, a national organization representing local health departments, is committed to achieving health equity. Reports, guidance tools, a video, and project descriptions are available on their website.
Federal Agencies		
Agency for Healthcare Research and Quality	http://www.ahrq.gov/research/minorix.htm	The Agency for Healthcare Research and Quality has many resources on minority health available on their website, such as evidence reports, fact sheets, workshop summaries and speeches and testimony.

Organization	Web Site	Description
Federal Agencies (continued)		
Centers for Disease Control and Prevention: Office of Minority Health	http://www.cdc.gov/omh	The Office of Minority Health at the Centers for Disease Control and Prevention has various resources on health disparities, such as fact sheets, annual reports, publications, executive orders from the White House and references of other sources.
Department of Health and Human Services: Indian Health Services	http://www.ihs.gov/index.asp	Indian Health Services is an agency within the Department of Health and Human Services that is dedicated to improving the health of American Indians and Alaskan Natives. Fact sheets and information on nationwide programs that address American Indian health can be located on their website.
Department of Health and Human Services: Office of Minority Health	http://www.omhrc.gov	The Office of Minority Health in the Department of Health and Human Services offers many resources ranging from statistical data to information on core topics in health disparities.
Department of Health and Human Services: Office on Women's Health	http://www.4woman.gov	The National Women's Health Information Center is housed within the Office on Women's Health and provides current information on a host of women's health topics, including a special section on minority health.
Health Resources and Services Administration	http://www.hrsa.gov/culturalcompetence/	The Health Resources and Services Administration has developed a website dedicated to cultural competence resources for health care providers. Resources available include: assessment tools, culture/language specific information, disease/condition specific information, health professions education and training curricula.
The National Institutes of Health: National Center for Minority Health and Health Disparities	http://ncmhd.nih.gov	The National Center for Minority Health and Health Disparities is a major center for health disparities research in the U.S. Their website includes descriptions of the Center's current projects, opportunities for funding other research, and annual reports.
Other Organizations and Resources		
The Alliance for Health Reform: Racial and Ethnic Disparities in Health Care	http://www.allhealth.org/	The Alliance for Health Reform is a nonpartisan, non-profit group that provides information on a range of health issues to inform policymakers. The Alliance periodically produces issue briefs that contain contact information of experts on the issue. A brief on Racial and Ethnic Disparities in Health Care is available on their website.
Center for Health Care Strategies, Inc.	http://www.chcs.org/	The Center for Health Care Strategies, Inc. (CHCS) is a national non-profit organization devoted to improving the quality of health services for beneficiaries served by publicly financed care, especially those with chronic illnesses and disabilities. One of the main goals of CHCS is to reduce racial and ethnic disparities, and information on their many initiatives, publications, and other resources is available on their website.
Children's Defense Fund	http://www.childrensdefense.org/	The Children's Defense Fund, a child advocacy and research group, has a Child Health Division dedicated to helping all children gain access to comprehensive, quality, health care services. They recently released a report, "Improving Children's Health: Understanding Children's Health Disparities and Promising Approaches to Address Them," highlighting many community programs that reduced disparities for selected health conditions in children.
Closing the Health Gap	http://www.healthgap.omhrc.gov	Closing the Health Gap is a national campaign aimed at reducing racial and ethnic disparities in health. Information on their three main initiatives as well as on health topics, cultural competency, and minority populations can be found on their website.

Organization	Web Site	Description
Other Organizations and Resources (continued)		
The Commonwealth Fund	http://www.cmwf.org	The Commonwealth Fund is a private foundation that aims to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, minority Americans, young children, and elderly adults. The Fund supports independent research and makes grants to improve health care for underserved populations, and many publications on this topic area are available on their website.
Grantmakers in Health (GIH)	http://www.gih.org/	GIH is a non-profit, educational organization dedicated to helping foundations and corporate giving programs improve the health of all people. Their Resource Center on Health Philanthropy offers publications and other resources to support foundations in their efforts to eliminate disparities.
Institute of Medicine	http://www.iom.edu/CMS/3740/4475.aspx	The Institute of Medicine (IOM) is a component of the National Academies and provides science-based advice on biomedical, medical, and health issues. In 2002, the IOM produced a landmark report, "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care," which served as the catalyst for many efforts to reduce racial and ethnic disparities.
Kaiser Family Foundation	http://www.kff.org	Kaiser Family Foundation is an independent philanthropic foundation focusing on national health care issues, including reducing racial and ethnic disparities in health.
National Business Group on Health	http://www.businessgroup-health.org	The National Business Group on Health is a national non-profit organization devoted to representing the perspective of large employers and providing practical solutions to its members' most important health care problems. Their Center for Prevention and Health Services has a Health Disparities Initiative, providing information and a toolkit to employers on health disparities.
National Center for Cultural Competence, Georgetown University Center for Child and Human Development	http://gucchd.georgetown.edu/nccc	The mission of the National Center for Cultural Competence (NCCC) is to increase the capacity of health and mental health programs to design, implement, and evaluate culturally and linguistically competent service delivery systems. The NCCC translates evidence into policy and practice for programs and personnel concerned with health and mental health care delivery, administration, education and advocacy through research studies, technical reports, and sources of collected data (such as the Census and other surveys), all of which are available on their website.
The National Health Plan Collaborative	http://www.chcs.org/NationalHealthPlanCollaborative/index.html	The National Health Plan Collaborative is a group of nine health insurers that have partnered to implement and test strategies to reduce inequalities in the delivery of health care. The group is currently in their second phase of implementation. Results from the first phase have been published in a report that is available on their website.
National Institute for Health Care Management (NIHCM) Foundation	http://www.nihcm.org/finalweb/default.htm	NIHCM Foundation has conducted research and educational initiatives on maternal and child health for over ten years. Specific topic areas of focus include reducing disparities among women and children, and a recent webinar conducted on this topic is available on their website.
National Minority Health Month Foundation	http://www.nmhmf.org/content.php?page=2&title=About_Us	The National Minority Health Month Foundation uses evidence-based, data-driven initiatives to eliminate the disproportionate burden of premature death and preventable illness in racial and ethnic minorities.
The Robert Wood Johnson Foundation	http://www.rwjf.org/	The Robert Wood Johnson Foundation is the nation's largest philanthropy dedicated to improving health and health care. One of their interest areas is the health of vulnerable populations, and they support promising new ideas that address health and health care problems that intersect with social factors—housing, poverty and inadequate education—and affect society's most vulnerable people, including low-income children and their families, frail older adults, adults with disabilities, the homeless, those with HIV/AIDS, immigrants and refugees, and those with severe mental illness.

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