

GIH

Start Smart:

HEALTHY WEIGHT
IN EARLY
CHILDHOOD

ISSUE BRIEF NO. 41

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BASED ON A

GRANTMAKERS

IN HEALTH

ISSUE DIALOGUE

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FOREWORD

As part of its continuing mission to serve trustees and staff of health foundations and corporate giving programs, Grantmakers In Health (GIH) convened a group of grantmakers, researchers, and practitioners on October 16, 2012, for a discussion on healthy weight in early childhood. This Issue Brief synthesizes key points from the day's discussion with a background paper previously prepared for Issue Dialogue participants.

Special thanks are due to those who participated in the Issue Dialogue, especially the presenters: William Dietz, former director of the Division of Nutrition, Physical Activity, and Obesity at the Centers for Disease Control and Prevention; Ray Baxter of Kaiser Permanente; Elsie Tavares of Harvard Medical School; Jeanne Christensen Lindros of the American Academy of Pediatrics; Kristin Rowe-Finkbeiner of MomsRising; Debbie Chang of Nemours; Jeanette Betancourt of Sesame Workshop; Jennifer MacDougall of BlueCross BlueShield of North Carolina Foundation; Susan Brenner of Bright Horizons; Linda Geigle of the Association for Family Child Care; Judy Williams of Early Learning Ventures; Bonnie DeVinney of Greater Rochester Health Foundation; Laura Fasano of YMCA of Greater Rochester; Marco Beltran of the Office of Head Start at the Administration for Children and Families; Richard Garcia of the Colorado Statewide Parent Coalition; and Karrie Kalich of Keene State College.

Lauren LeRoy, then president and CEO of GIH, and Faith Mitchell, then vice president for program and strategy, moderated the Issue Dialogue. Emily Art, former GIH program associate, and Osula Rushing, then program director, planned the program, wrote the background paper, and synthesized key points from the Issue Dialogue into this report. Leila Polintan, communications manager, provided editorial assistance.

The program and publication were made possible by grants from The Colorado Health Foundation and the Maternal and Child Health Bureau of the U.S. Department of Health and Human Services' Health Resources and Services Administration.

EXECUTIVE SUMMARY

START SMART:

Healthy Weight in Early Childhood

The statistics are stark. More than half of obese children are overweight by age two, and approximately one in five is overweight or obese by their sixth birthday. Recognizing that a focus on the first five years of a child's life holds great potential, innovators are working to ramp up and replicate promising solutions that focus on the period of life before school, and possibly even before birth (CDC 2010).

WHAT WILL IT TAKE TO ACCELERATE PROGRESS?

In 2011 the Institute of Medicine released *Early Childhood Obesity Prevention Policies*. The report recommends actions that should be pursued by health care providers, child care providers, federal programs, and other institutions that affect children's lives. Their recommendations touch on the following:

- Growth Monitoring
- Physical Activity
- Healthy Eating
- Marketing and Screen Time
- Sleep

SNAPSHOTS OF FOUNDATION STRATEGIES

Foundations and corporate giving programs are investing in an impressive array of early childhood obesity prevention efforts.

- ***Beginning in the Perinatal Period*** – Kaiser Permanente's pediatric members mirror national statistics: 35 percent are overweight or obese. Kaiser Permanente has put an intense focus on breast feeding and using body mass index (BMI) as a vital sign, recording it at every visit and using it to track weight gain and progress over time. Kaiser Permanente also invests in a wide variety of community interventions, including the use of live theater and dance in preschool and early school settings to get messages to children about healthy eating and active living.
- ***Reaching out to Kids*** – Since 2007 the HNHFoundation in New Hampshire has supported the Early Sprouts Gardening and Nutrition Experiences for the Young Child curriculum model. Preschool children learn to garden and prepare seasonal produce, and become familiar with healthy choices through multiple exposures.
- ***Engaging Parents*** – Engaging parents in raising healthy children is one of The Colorado Health Foundation's key funding strategies. It supports the Baby Bear Hugs (BBH) home visitation program, for example, to teach families about eating healthy foods and incorporating activity both indoors and outdoors. BBH connects trained visitors to families as early in the pregnancy as possible, providing support, education, and connection to community resources.
- ***Supporting Health Care Providers*** – The Greater Rochester Health Foundation's Childhood Healthy Weight is a 10-year, four-part strategy to bring 85 percent of Monroe County children ages 2 to 10 into the healthy weight category as measured by BMI. The initiative's intermediate results show promise: the 26 pediatric practices participating in a physician's learning collaborative were more likely to measure BMI and discuss the child's weight status with parents than other practitioners.
- ***Partnering with Head Start*** – Some of the Greater Rochester Health Foundation's most exciting achievements have occurred in child care programs. One striking example of improvement was in ABC Head Start, which provided the I Am Moving, I Am Learning 1+2+3 curriculum in five sites. Among 396

three-year-olds enrolled in Head Start between 2009 and 2010, there was a statistically significant increase in the percentage of children in the healthy weight category, from 59.3 percent to 65.7 percent.

- ***Farm to Preschool*** – The W.K. Kellogg Foundation, The Kresge Foundation, and other funders are working to expand the national farm-to-school model to early childhood care and education settings. Farm to Preschool’s goals include influencing the eating habits of young children and influencing policies through a local food lens. Program components include sourcing local foods in school snacks and meals, promoting and increasing access to local foods, and offering parent workshops.
- ***Investing in Child Care Centers*** – More than 31 percent of North Carolina’s children ages two to four are overweight or considered at risk for becoming overweight. The Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC), produced by the University of North Carolina Center for Health Promotion and Disease Prevention, aims to improve nutrition and physical activity in child care settings to prevent obesity. The BlueCross BlueShield of North Carolina Foundation invested over \$240,000 in the NAP SACC pilot program from 2008 to 2009. More than 90 percent of the centers showed progress, and about half demonstrated improvement in nutrition and physical activity policies and practices.
- ***Developing Comprehensive Initiatives*** – In 2010 the BlueCross BlueShield of North Carolina Foundation launched the three-year, \$3 million Shape NC: Healthy Starts for Young Children initiative. Shape NC works with existing networks across the state to target children in child care facilities, their families, and child care professionals to increase knowledge and awareness of nutrition and the importance of physical activity.
- ***Emphasizing Systems Change, as well as Behavioral Change*** – The HNH Foundation has funded policy development, built environment, and systems change strategies, becoming more focused on supporting initiatives that consider the impact of the environment on childhood obesity. Some projects are small, like a grant to the Town of Hebron, which introduced land use planning and design concepts to facilitate walking and biking. On a larger scale, the foundation is working with its regional planning commission partners to help create healthier communities statewide.
- ***Beginning Community Dialogues*** – Recognizing that the rate of obesity in early childhood has risen dramatically in recent years, The Mt. Sinai Health Care Foundation hosted an early childhood obesity summit to begin a community dialogue on the need for effective interventions. Follow-up discussions are underway, and a blog is being created to keep the conversation going.
- ***Launching a Media Campaign*** – In 2012 The Horizon Foundation launched a media campaign in Howard County, Maryland, to convince parents not to purchase sugary drinks for family use. As part of the “Howard County. Unsweetened.” campaign, the foundation developed www.HoCoUnsweetened.org to serve as a resource. The campaign is part of a larger initiative, which includes public policy changes and coalition building.
- ***Building a National Movement*** – In 2009 Nemours and the Centers for Disease Control and Prevention (CDC) launched Healthy Kids, Healthy Future (HKHF) to promote health and prevent obesity in children ages birth to five. HKHF held a conference to bring together experts to identify innovative strategies to improve wellness policies and practices in early care and education. Since then, HKHF has contributed to the scaling and spreading of efforts to support healthy eating, physical activity, and limited screen time in early care and education settings.
- ***Advancing Policy, Practice, and Research*** – Nemours and the CDC also formed the Healthy Kids, Healthy Future Steering Committee (HKHFSC), which developed and implemented a strategic plan to advance policy, practice, and research. The HKHFSC has also provided expertise to Partnership for a Healthier America and is in the process of formulating a strategic plan for the next phase of work.

FUTURE DIRECTIONS

Experts in the field point to other opportunities for philanthropic investment.

- ***Acknowledge and Address Bias and Stigma*** – No child should be blamed, criticized, or teased about his or her weight. Invest in training programs for parents, health care professionals, and child care providers; support anti-bullying efforts; involve mental health professionals in the design of programs; and focus on health, not weight (Brown 2013).
- ***Engage the Entire Family*** – Families are essential partners in efforts to reduce children's obesity risk factors. Invite them to decisionmaking tables and develop solutions that take into account their assets, priorities, and cultural backgrounds.
- ***Link Healthy Weight Interventions to School Readiness Initiatives*** – Foundation-funded initiatives are investing in efforts that aim to simultaneously improve health and educational outcomes. Create opportunities for experts in early childhood education and early childhood development to come together and design interventions that are mutually reinforcing.
- ***Think about Dose, Spread, and Scale*** – When designing and supporting an intervention, think about the number of people it will reach, and if it is strong enough to change behaviors. Funders should ask themselves how to reach the most children in the shortest period of time with the highest impact strategies (CCHE 2012; Chang 2012).
- ***Strive toward Population-Level Intervention Strategies*** – Obesity prevention strategies that hold the most promise are those that span multiple settings (Foltz et al. 2012). No one foundation – or grantee organization – can do it all; work with strategic partners and identify shared priorities.

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WHY IS THIS IMPORTANT?

The statistics are stark. More than half of obese children are overweight by age two, and approximately one in five is overweight or obese by their sixth birthday (CDC 2010). Across the country, families, child care providers, and health care professionals are tackling this crisis head on, determined to help solve the problem of childhood obesity in a generation. Recognizing that a focus on the first five years of a child's life holds great potential, these innovators are working together to ramp up and replicate promising solutions for infants, toddlers, and preschoolers.

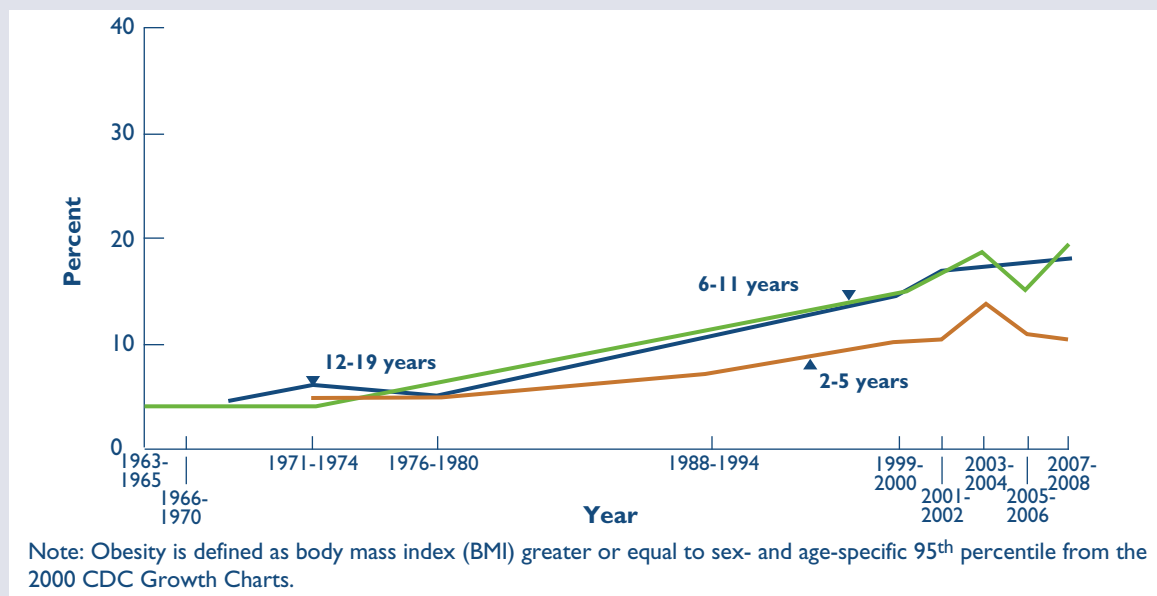
We ignore the early years at our peril if we want to do something about conquering this growing epidemic of obesity in our society.

– Jack Shonkoff, MD, *The Weight of the Nation*

Recent efforts in the field of child obesity prevention have placed emphasis on the school-age population, and with good reason. Schools present a unique opportunity to reach large groups of children on a regular basis with healthy foods and physical activity. About 10 percent of children, however, come to kindergarten already obese, up from 5 percent in 1980, indicating that more attention needs to focus on the period of life before school, and possibly even before birth (CDC 2010).

What causes overweight and obesity so early in life? Researchers have identified several preconception and prenatal risk factors for childhood obesity, including a mother's prepregnancy weight. On top of higher rates of pregnancy complications, such as pre-eclampsia and cesarean delivery, obesity among pregnant women doubles a child's risk of becoming obese during early childhood (Walters and Tayler 2009). This connection illustrates the need for women to be at a healthy weight before pregnancy; yet about 50 percent of women of childbearing age (20-44 years) are overweight or obese (Vahratian 2009). In addition, mothers who smoke

FIGURE 1. TRENDS IN OBESITY AMONG CHILDREN AND ADOLESCENTS: UNITED STATES, 1963-2008



Source: Ogden and Carroll 2010

are more likely to have babies that become obese, even though they are often small when born (Rabin 2010).

Soon after birth, early sleeping and feeding practices can influence an infant's future weight. Getting less than 12 hours of sleep a day can double an infant's chance of becoming overweight or obese compared with children who sleep more (Taveras et al. 2008).

Breastfeeding, known to protect against type 1 and 2 diabetes, heart disease, hypertension, allergies, and asthma, has been shown to reduce the risk of childhood obesity (American Dietetic

Association 2009). One reason may be that breastfeeding encourages a healthy rate of weight gain and self-regulation of caloric intake, an important trait for maintaining an appropriate weight at any age.

Although the very earliest years can start a child on the path toward obesity, the time between infancy and kindergarten is another critical period. The establishment of unhealthy behaviors, such as drinking too many sugary drinks or being too sedentary, can set the stage for obesity and its related health problems. In fact, obese children as young as three exhibit signs of inflammation, which have been linked to heart disease in adults (Skinner et al. 2010).

Children who are economically and socially disadvantaged experience the greatest prevalence of obesity. For example, about one-third of children entering Head Start, the federally funded preschool program for low-income families, are overweight or obese (Hughes et al. 2010). Racial and ethnic disparities are also apparent by preschool age because of the uneven distribution of certain early obesity risk factors. A recent study, for example, finds that African-American and Latino women are more likely to be overweight or obese when they become pregnant and that their children generally sleep less during infancy and consume more sugar-sweetened beverages and fast food than white children (Taveras et al. 2010).

It's not just about their physical appearance, and we shouldn't be interested in solving the problem because of the way we think a child looks. It's much more important than that. There are pretty significant side effects from being overweight and obese in childhood. If we don't do something to prevent it, it's going to be full-on chronic liver disease or heart disease by the time they're in their mid-thirties.

– Elsie Taveras, MD, MPH,
The Weight of the Nation

WHAT WILL IT TAKE TO ACCELERATE PROGRESS?

In 2011 the Institute of Medicine (IOM) released the report *Early Childhood Obesity Prevention Policies*. The report recommends actions that should be pursued by health care providers, child care providers, federal programs, and other institutions that affect children's lives, arguing that "the policies that influence young children's environments inside and outside their homes should make the healthy choices the easy choices for adults who care for them." Their recommendations are as follows:

Growth Monitoring

Health care providers should measure weight and length or height in a standardized way, plotted on World Health Organization growth charts (ages 0-23 months) or Centers for Disease Control and Prevention growth charts (ages 24-59 months), as part of every well-child visit.

Health care professionals should consider 1) children's attained weight-for-length, or body mass index equals 85th percentile; 2) children's rate of weight gain; and 3) parental weight status as risk factors in assessing which young children are at highest risk of later obesity and its adverse consequences.

Physical Activity

Child care regulatory agencies should require child care providers and early childhood educators to provide infants, toddlers, and preschool children with opportunities to be physically active throughout the day.

The community and its built environment should promote physical activity for children from birth to age five.

Child care regulatory agencies should require child care providers and early childhood educators to allow infants, toddlers, and preschoolers to move freely by limiting the use of equipment that restricts infants' movement and by implementing appropriate strategies to ensure that the amount of time toddlers and preschoolers spend sitting or standing still is limited.

Health and education professionals providing guidance to parents of young children and those working with young children should be trained in ways to increase children's physical activity and decrease their sedentary behavior, and in how to counsel parents about their children's physical activity.

Healthy Eating

Adults who work with infants and their families should promote and support exclusive breastfeeding for six months and continuation of breastfeeding in conjunction with complementary foods for one year or more.

To ensure that child care facilities provide a variety of healthy foods and age-appropriate portion sizes in an environment that encourages children and staff to consume a healthy diet, child care regulatory agencies should require that all meals, snacks, and beverages served by early childhood programs be consistent with the federal Child and Adult Care Food Program meal patterns and safe drinking water be available and accessible to the children.

The U.S. Department of Health and Human Services and the U.S. Department of Agriculture should

establish dietary guidelines for children from birth to age two years in future releases of *Dietary Guidelines for Americans*.

State child care regulatory agencies should require that child care providers and early childhood educators practice responsive feeding.

Government agencies should promote access to affordable healthy foods for infants and young children from birth to age five in all neighborhoods, including those in low-income areas, by maximizing participation in federal nutrition assistance programs and increasing access to healthy foods at the community level.

Health and education professionals providing guidance to parents of young children and those working with young children should be trained and educated and have the right tools to increase children's healthy eating and counsel parents about their children's diet.

Marketing and Screen Time

Adults working with children should limit screen time, including television, cell phone, or digital media, to less than two hours per day for children ages two to five.

Health care providers should counsel parents and children's caregivers not to permit televisions, computers, or other digital media devices in children's bedrooms or other sleeping areas.

The Federal Trade Commission, the U.S. Department of Agriculture, Centers for Disease Control and Prevention, and the Food and Drug Administration should continue their work to establish and monitor the implementation of uniform, voluntary national nutrition and marketing standards for food and beverage products marketed to children.

The Secretary of the U.S. Department of Health and Human Services, in cooperation with state and local government agencies and interested private entities, should establish a sustained social marketing program to provide pregnant women and caregivers of children from birth to age five with consistent, practical information on the risk factors for obesity in young children and strategies for preventing overweight and obesity.

Sleep

Child care regulatory agencies should require child care providers to adopt practices that promote age-appropriate sleep durations.

Health and education professionals should be trained in how to counsel parents about their children's age-appropriate sleep durations.

Source: IOM 2011

SNAPSHOTS OF FOUNDATION STRATEGIES

Foundations and corporate giving programs are investing in an impressive array of early childhood obesity prevention efforts, successfully identifying areas where philanthropic support can catalyze change. These strategies have included:

- ***Beginning in the Perinatal Period*** – Kaiser Permanente cares for over 9 million members in the United States, of whom 2 million are children. The health system’s pediatric members mirror national statistics: 35 percent are overweight or obese, and 10 percent of Latino boys and 10 percent of African-American girls are extremely obese. Kaiser Permanente has put an intense focus on breast feeding, making a major commitment that all 37 of its hospitals will meet baby-friendly standards or participate in the Joint Commission’s similar standards. Some Kaiser Permanente hospitals are already approaching 80 percent exclusive breast feeding for mothers and babies who are discharged. Kaiser Permanente also pays a great deal of attention to maternal weight gain. About five years ago, Kaiser Permanente did a study in its Southern California region that looked at 100,000 births over a 10-year period, and found a near doubling in the number of young mothers who were overweight or obese. In the clinical setting, Kaiser Permanente now uses body mass index (BMI) as a vital sign, recording BMI at every visit for every member, and using BMI to track weight gain and progress over time. Kaiser Permanente also recently added exercise as a vital sign, asking during each visit: “Are you active? Is your child active? How many times a week? How many minutes a day?” Kaiser Permanente also invests in a wide variety of community interventions, including the use of live theater and dance in preschool and early school settings to get messages to children about healthy eating and active living, and safe behaviors (Baxter 2012).
- ***Reaching out to Kids*** – Since 2007 the HNHFoundation in New Hampshire has supported the Early Sprouts Gardening and Nutrition Experiences for the Young Child curriculum model. Early Sprouts aims to expand the food preferences of young children to include healthy choices, to promote healthy eating at home, and to reduce the risks associated with childhood overweight and obesity. Preschool children learn to garden and prepare seasonal produce, and become familiar with healthy choices through multiple exposures. Family members are invited to participate in garden planting, classroom-based sensory and cooking activities, and food-based special events (Early Sprouts Program 2010).
- ***Engaging Parents*** – Engaging parents in raising healthy children is one of The Colorado Health Foundation’s key funding strategies. The foundation supports the Baby Bear Hugs (BBH) home visitation program, for example, to teach families about eating healthy foods and incorporating activity both indoors and outdoors. Using the evidence-based Eating Smart, Being Active curriculum, BBH delivers eight lessons through ongoing visits:

- Get Moving!
- Plan, Shop, \$ave
- Vary Your Veggies...Focus on Fruit
- Make Half Your Grains Whole
- Build Strong Bones
- Go Lean with Protein
- Make a Change
- Celebrate! Eat Smart & Be Active

The program connects trained visitors to families as early in the pregnancy as possible, and conducts weekly, bimonthly, and then monthly visits providing support, education, and connection to community resources. All expectant mothers and/or parents with children zero to three years old are eligible. Families receive lesson plans on how to prepare food safely and properly; learn about the “My Plate” icon; are encouraged to eat more fruits and vegetables and become more active; and learn how to choose and cook with foods that are lower in fat, sugar, and salt (BBH 2012; The Colorado Health Foundation 2012).

- **Supporting Health Care Providers** – The Greater Rochester Health Foundation’s Childhood Healthy Weight is a 10-year, four-part strategy to bring 85 percent of Monroe County children ages 2 to 10 into the healthy weight category as measured by BMI. The initiative’s intermediate results show promise: the 26 pediatric practices participating in a physician’s learning collaborative were more likely to measure BMI and discuss the child’s weight status with parents than other practitioners (Greater Rochester Health Foundation 2012a).

Health care providers have a long history of being effective advocates at the community, state, and federal levels, [for] everything from immunizations to child safety seats. How can we capitalize on that?

– Jeanne Christensen Lindros,
American Academy of Pediatrics

- **Partnering with Head Start** – Some of the Greater Rochester Health Foundation’s most exciting achievements have occurred in child care programs. One striking example of improvement was in ABC Head Start, which provided the I Am Moving, I Am Learning 1+2+3 curriculum in five sites. Among the 396 three-year-olds enrolled in Head Start between 2009 and 2010, there was a statistically significant increase in the percent of children in the healthy weight category, from 59.3 percent to 65.7 percent. Many foundation-funded child care centers have increased physical activity during the day and adjusted their menus to incorporate more healthy foods. All of the foundation-funded child care centers that cared for 2,000 children between 2008 and 2011 now serve low-fat or skim milk, serve five fruits and vegetables each day, and provide one-half to a full hour of physical activity each day. In addition, most child care centers have eliminated sugary beverages, such as sugar-sweetened juice (Greater Rochester Health Foundation 2012b).
- **Farm to Preschool** – The W.K. Kellogg Foundation, The Kresge Foundation, and other funders are also working to expand the national farm-to-school model to early childhood care and education settings. Farm to Preschool serves the full spectrum of child care delivery: preschools, Head Start, center-based, programs in K-12 school districts, nurseries, and family home care facilities. Its goals include: influencing the eating habits of young children while their preferences are forming; creating healthy lifestyles through good nutrition and experiential opportunities, such as gardening; improving healthy food access at home and within the community; and ultimately influencing policies to address the childhood obesity epidemic through a local food lens. Program activities can take an environmental and systems change approach by serving preschoolers, teachers and child care providers, parents and family members, as well as communities. Program components include: sourcing local foods in school snacks and meals; promoting and increasing access to local foods for providers and families; offering nutrition and/or garden-based curricula; school gardening; in-class food preparation and taste testing; field trips to farms, farmers markets, and community gardens; parent workshops; implementing preschool wellness policies, which address Farm to Preschool principles; and influencing policies at the local, state, or national levels (Farm to Preschool 2012).
- **Investing in Child Care Centers** – More than 31 percent of North Carolina’s children ages two to four are overweight or considered at risk for becoming overweight. The Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC), produced by the University of North Carolina Center for Health Promotion and Disease Prevention, aims to improve nutrition and physical activity in child care settings to prevent obesity in preschool-age children. With this goal in mind, the BlueCross BlueShield of North Carolina Foundation invested just over \$240,000 in the NAP SACC pilot program for 10 North Carolina counties from 2008 to 2009. To begin, centers completed the NAP SACC survey and selected two to three key focus areas to address. Child care health consultants then provided technical assistance to improve targeted issue areas. More than 90 percent of the centers showed progress, and about half

demonstrated statistically significant improvement in nutrition and physical activity policies and practices (BlueCross BlueShield of North Carolina Foundation 2009).

- ***Developing Comprehensive Initiatives*** – In 2010 the BlueCross BlueShield of North Carolina Foundation built on this work by launching the three-year, \$3 million Shape NC: Healthy Starts for Young Children initiative. Shape NC works with existing networks across the state to target children in child care facilities, their families, and child care professionals to increase knowledge and awareness of nutrition and the importance of physical activity. The initiative’s anticipated results include:
 - A statewide policy blueprint for improving the health of North Carolina’s children will be developed.
 - Thirty communities will create partnerships and action plans for obesity prevention in young children.
 - One hundred early childhood professionals will broaden impact on healthy weight for young children by incorporating Shape NC strategies into their work with children, families, and teachers. As many as 60,000 children; 3,000 families; and 2,500 child care teachers/directors will be reached.
 - Fifteen hundred early childhood and other related professionals will implement new knowledge about outdoor learning environments and physical activities for children in child care.
 - Seven hundred and fifty children attending model Shape NC early learning programs will maintain a healthy weight.
 - Thirty-five early childhood staff in five pilot centers will model healthy behaviors as a result of participating in a health and wellness program focusing on weight management/maintenance, healthy eating, fitness, and smoking cessation (BlueCross BlueShield of North Carolina Foundation 2012).

- ***Emphasizing Systems Change, as well as Behavioral Change*** – The HNHFoundation, a key supporter of the Early Sprouts curriculum for children mentioned previously, has increasingly funded policy development, built environment, and systems change strategies at the community level in New Hampshire, becoming less focused on funding projects and initiatives that seek to influence personal behavior, and more focused on supporting initiatives that consider the impact of the environment on childhood obesity. The foundation is investing in evidence-based strategies that hold the most promise for broad and high-impact outcomes. Some projects are small, like a 2011 grant to the Town of Hebron, which introduced land use planning and design concepts to facilitate walking and biking in the town. Foundation staff hopes that such strategies can be replicated in other communities throughout the state. On a larger scale, the foundation is working with regional planning commission partners to help create healthier communities statewide. A grant to the Nashua Regional Planning Commission in 2011 helped the state’s nine regional planning commissions leverage over \$3.3 million from the federal Sustainable Communities Initiative to incorporate healthy eating and active living principles into regional sustainability planning (HNHFoundation 2012).

Historically, our focus has been on individual behavior change...I would suggest that we need to focus on policy and environmental changes. These are sustainable changes.

– William Dietz, MD

- ***Beginning Community Dialogues*** – Recognizing that the rate of obesity in early childhood has risen dramatically in recent years, The Mt. Sinai Health Care Foundation hosted an early childhood obesity summit to begin a community dialogue on the need for effective interventions that address primary prevention of obesity for children ages two to five. The foundation has been a strategic investor in this area,

working with partners to develop initiatives addressing early childhood obesity in the urban community, including the Jump To It preschool/school-based curriculum and the Breast for Success urban breastfeeding program. The summit was held in conjunction with Mt. Sinai's 2012 annual meeting and featured David L. Katz of the Yale University Prevention Research Center, who is an expert on nutrition, weight management, and chronic disease prevention, as well as integrative care and patient-centered care models. Some 250 early childhood and health professionals attended. Follow-up discussions are currently underway, and a blog is being created to keep the conversation going among summit participants (The Mt. Sinai Health Care Foundation 2012).

- **Launching a Media Campaign** – In 2012 The Horizon Foundation launched a groundbreaking media campaign in Howard County, Maryland, to convince parents not to purchase sugary drinks. The target audiences of the “Howard County. Unsweetened.” campaign are the parents of children ages 2 to 15, as well as teen role models who can help influence younger children (Lavoie 2012). As part of the campaign, the foundation developed www.HoCoUnsweetened.org, which allows parents search for healthy beverage choices, offers tips on how to read drink labels, and provides downloadable posters and handouts. “Howard County. Unsweetened.” is part of a larger initiative, which includes public policy changes; coalition building; special interventions with child care, primary care providers, hospitals, and the faith community; and an evaluation by the Rudd Center for Food and Policy (Vernick 2012).



Source: Howard County. Unsweetened 2013

- **Building a National Movement** – In 2009 Nemours and the Centers for Disease Control and Prevention (CDC) acknowledged that fragmented innovation in obesity prevention was occurring in early care and education settings around the country. Simultaneously, a growing body of research regarding the importance of obesity prevention for young children was being released. Recognizing an opportunity to leverage their combined experience and expertise to support healthy child development, Nemours and the CDC partnered to launch Healthy Kids, Healthy Future (HKHF), a national movement to promote health and prevent obesity in children ages birth to five. HKHF is housed at www.healthykidshealthyfuture.org, created and hosted by Nemours. The Let's Move! Child Care's Web site, an on-line hub for free tools and information that provides a checklist quiz and action plan to help providers achieve the five voluntary goals of the initiative related to healthy eating and physical activity behavior change in young children, is housed at the same Web address (Nemours 2012a).

In September 2009 HKHF held its first conference to bring together leading experts in the fields of obesity prevention and early care and education to identify innovative strategies to improve wellness

policies and practices in early care and education at the local, state, and federal levels. Since then, HKHF has contributed to the scaling and spreading of local, state, and national efforts to support healthy eating, physical activity, and limited screen time in early care and education settings. The *White House Task Force on Childhood Obesity Report to the President* was expanded to include a chapter on early childhood, which highlighted Nemours as a model for obesity prevention in child care. The Healthy, Hunger-Free Kids Act includes a number of provisions supporting obesity prevention for children in early care and education, including stronger nutrition standards for the Child and Adult Care Food Program, interagency coordination to support wellness in child care, and funding for nutrition and wellness research, to ensure that policies and practices are well informed (Nemours 2012a).

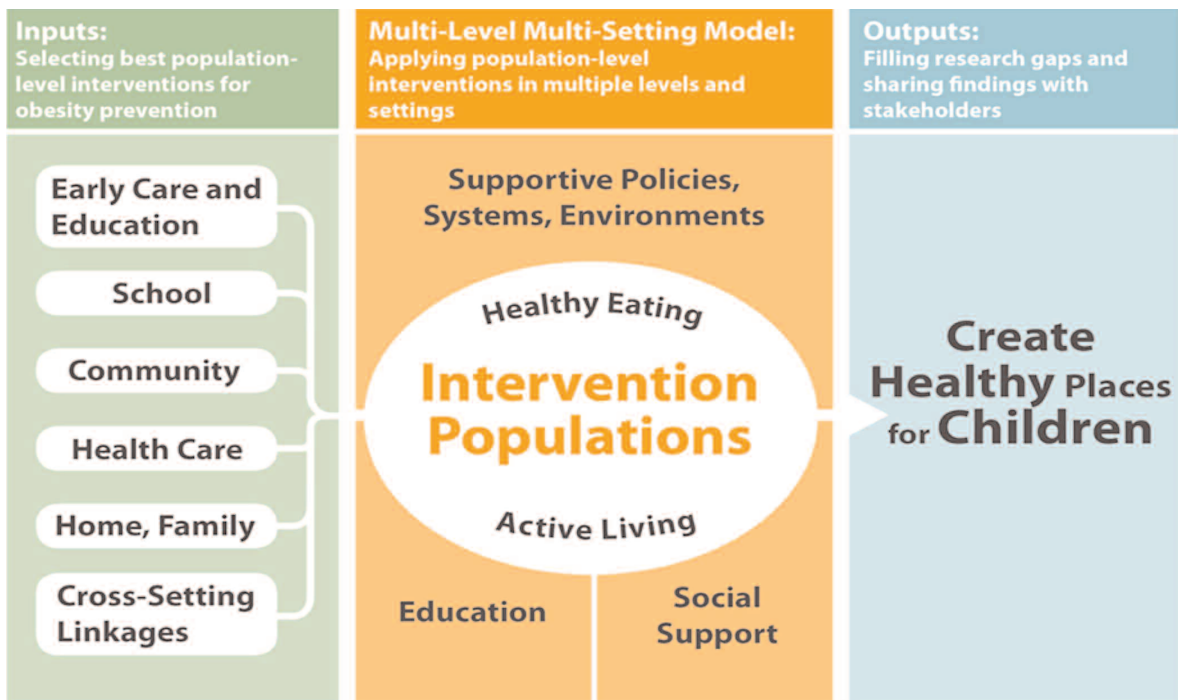
- ***Advancing Policy, Practice, and Research*** – To support ongoing collaboration among experts in the obesity prevention and early care and education fields, Nemours and the CDC formed the Healthy Kids, Healthy Future Steering Committee (HKHFSC), an expert group of approximately 40 national leaders from the obesity prevention and early care and education fields. Together these experts developed and implement a strategic plan to advance policy, practice, and research. The HKHFSC leverages the expertise of its members to advance the field. Two noted accomplishments include: acknowledgment from the U.S. Department of Agriculture that the HKHFSC is a key stakeholder in implementation of the Child Nutrition Reauthorization Act, and the spread of promising practices through Let's Move! Child Care. The HKHFSC continues to work to advance policy, practice, and research and is in the process of formulating a strategic plan for the next phase of work (2012 to 2015) in obesity prevention in early care and education settings (Nemours 2012b).

In September 2012 Nemours received a five-year cooperative agreement from the CDC to support healthy lifestyles for young children in child care. The funding, \$4.2 million in the first year, will be used to assist early care and education (ECE) providers in six states—Arizona, Florida, Indiana, Kansas, Missouri, and New Jersey—in adopting nutrition, breastfeeding support, physical activity, and screen time policies and practices aligned with Let's Move! Child Care and Preventing Childhood Obesity. Working with national and state partners, Nemours will use a structured approach to training ECE providers adapted from the Institute for Healthcare Improvement's Breakthrough Series model to positively impact children birth to age five (Nemours 2012b).

FUTURE DIRECTIONS

Early interventions are integral to the prevention of childhood obesity and its harmful consequences. At the same time, these efforts should also be valued for their natural role in the healthy development of all children, regardless of weight. In addition to the guidance offered by the Institute of Medicine’s *Early Childhood Obesity Prevention Policies* and the snapshots provided previously, experts in the field point to additional opportunities for philanthropic investment.

- **Acknowledge and Address Bias and Stigma** – No child should be blamed, criticized, or teased about his or her weight. Invest in training programs for parents, health care professionals, and child care providers; support anti-bullying efforts; involve mental health professionals in the design of programs; and focus on health, not weight (Brown 2013).
- **Engage the Entire Family** – Families are children’s first teachers and are essential partners in efforts to reduce children’s obesity risk factors. Invite them to decisionmaking tables; speak to them as equals; and develop solutions that take into account their assets, priorities, and cultural backgrounds.
- **Link Healthy Weight Interventions to School Readiness Initiatives** – From local programs like the Pottstown Early Action for Kindergarten Readiness, which has become a statewide model in Pennsylvania, to nationwide efforts like the Campaign for Grade-Level Reading, which works to ensure that more children in low-income families succeed, foundation-funded initiatives are investing in efforts that aim to simultaneously improve health and educational outcomes. Create opportunities for experts in early childhood education and early childhood development to come together and design interventions that are mutually reinforcing.
- **Think about Dose, Spread, and Scale** – When designing and supporting an intervention, think about the number of people it will reach, and if it is strong enough to change the behavior of those it reaches. In the case of early childhood obesity prevention program and policies, funders should ask themselves how



Source: Foltz et al. 2012

to reach the most children in the shortest period of time with the highest impact strategies (Center for Community Health and Evaluation 2012; Chang 2012).

- ***Strive toward Population-Level Intervention Strategies*** – There are many settings that support children throughout their days, and the obesity prevention strategies that hold the most promise are those that span multiple settings (Foltz et al. 2012) (see figure above). No one foundation—or grantee organization—can do it all; work with strategic partners and identify shared priorities.

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