

National Collaborative on Childhood Obesity Research

Who We Are, Where We've Been,
and What's Next



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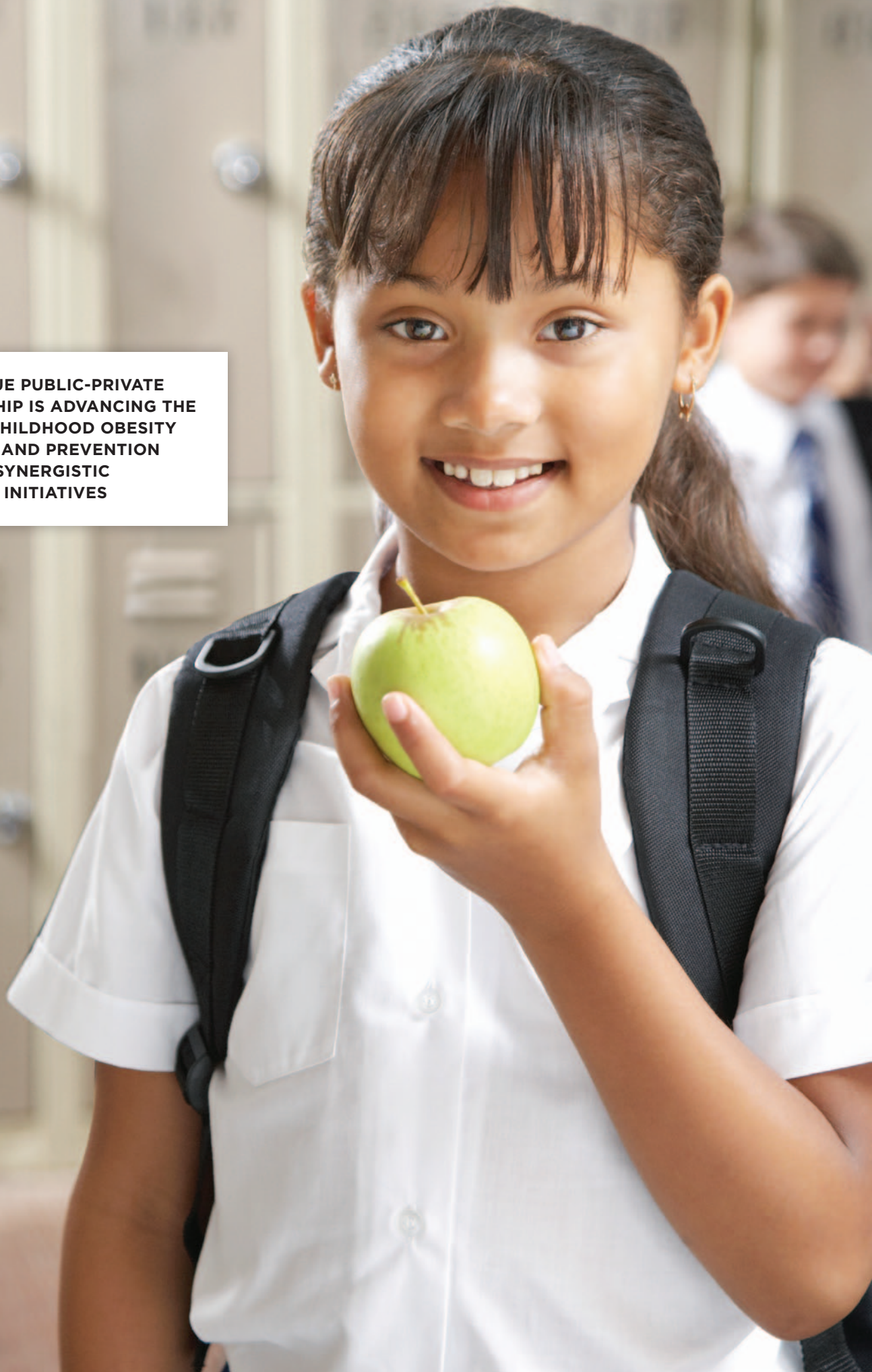
National Collaborative on Childhood Obesity Research

Who We Are, Where We've Been,
and What's Next





**THIS UNIQUE PUBLIC-PRIVATE
PARTNERSHIP IS ADVANCING THE
FIELD OF CHILDHOOD OBESITY
RESEARCH AND PREVENTION
THROUGH SYNERGISTIC
AND JOINT INITIATIVES**



EXECUTIVE SUMMARY

Childhood Obesity: An Urgent Call to Action

Today, 12.3 million children and adolescents are obese. Since 1980, the obesity prevalence rate has more than doubled among children ages 2 to 5 years, almost tripled among children ages 6 to 11 years, and more than tripled among adolescents ages 12 to 19. Obesity disproportionately affects disadvantaged populations, black children, and Mexican-American children.

If the epidemic of obesity among children and adolescents is not halted and reversed, today's generation of young Americans may be the first generation who will live sicker and die younger than the generations before them. Prevention is critical, for those who become overweight or obese during childhood or adolescence have a greatly increased risk of being obese as adults.

NCCOR Responds to the Call

The National Collaborative on Childhood Obesity Research (NCCOR) brings together four of the nation's leading research funders to address the problem of childhood obesity in America: The Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), Robert Wood Johnson Foundation (RWJF), and U.S. Department of Agriculture (USDA). By building on each other's strengths, this unique public-private partnership is advancing the field of childhood obesity research and prevention through synergistic and joint initiatives.

NCCOR's mission is to improve the efficiency, effectiveness, and application of childhood obesity research and to halt—and reverse—the current childhood obesity epidemic through enhanced coordination and collaboration. To achieve this mission, NCCOR has five goals:

- Identify, design, and evaluate practical and sustainable interventions, especially in high-risk populations and communities.
- Increase and improve national, state, and local surveillance of childhood obesity.
- Improve the ability of childhood obesity researchers and program evaluators to conduct research and program evaluation.

- Provide national leadership to accelerate implementation of evidence-informed practice and policy.
- Work with non-health partners to integrate childhood obesity priorities with synergistic initiatives (e.g., environmental design and sustainability, food systems, food marketing, disabilities, or economics).

Early History

NCCOR was formally launched on Feb. 19, 2009, with three funding organizations—NIH, CDC, and RWJF. The Collaborative's first year was focused on articulating its mission and goals, establishing an organizational framework, and beginning work in several priority areas.

NCCOR continued to develop rapidly in 2010. In February, USDA joined the Collaborative as the fourth funding organization. Projects begun in 2009 continued and several new projects were started. By October 2010, NCCOR funding organizations had jointly committed more than \$40 million and considerable scientific expertise to projects relevant to NCCOR's mission.

2011: A Productive Year

NCCOR's third year, 2011, was a busy and productive time, encompassing significant

evolution of the Collaborative itself and substantial progress on specific projects. NCCOR's projects can be grouped under five major themes.

Fostering the Development of New Ideas and New Connections

Food Marketing Research Roundtable

The 2011 Food Marketing Research Roundtable brought together more than 60 leading researchers, advocates, and policy makers in the field of childhood obesity prevention. Meeting participants identified the most pressing needs for research and policy to reduce children's exposure to unhealthy food marketing.

Childhood Obesity Research Demonstration

In a multi-setting, multilevel community-based effort, CORD aims to reduce underserved children's risk factors for obesity through an integrated model of primary care and public health approaches. NCCOR is supporting and advising this critical effort by participating on CORD's Steering Committee.

Green Health Workshop

This workshop, co-sponsored by NCCOR and the National Academy of Environmental Design (NAED) and conducted in partnership with the U.S. Green Building Council (USGBC), focused on linking environmental design, sustainability, and childhood obesity prevention. The workshop was attended by more than 60 health policy, research, design, education, and architectural professionals who together identified future avenues for growth in the field of green health.

Improving Initiatives by Broadening and Deepening Expert Input

Healthy Communities Study

The Healthy Communities Study is a five-year study designed to assess the associations between community programs and policies targeting childhood obesity and body mass index, diet, and physical activity in children. The study will include approximately 280 communities and almost 24,000 children in the United States.

Evaluation Research Forum

To make evaluation study results more directly comparable, the Evaluation Research Forum brings together leaders of major childhood obesity evaluation efforts to consider shared measures and methods for evaluating community-based and

state-based strategies. The combined evaluation efforts represent a \$75+ million investment in childhood obesity evaluation research.

Jointly Funding Key Projects and Tools to Advance the Field

The Envision Project

Envision links three modeling networks—COMNet (Collaborative Obesity Modeling Network), CompMod (Comparative Modeling), and the Statistical Network—to forecast the impact of public health policies and interventions on childhood obesity through innovative modeling approaches. A 2011 Obesity Series in *The Lancet* featuring four articles and three commentaries by COMNet highlighting global obesity trends and the need for government intervention received worldwide media attention.

Food Patterns Equivalents Database

To enhance food and nutrition surveillance, NCCOR is strengthening the process for updating the USDA Food Patterns Equivalents Database. This critical effort will facilitate research goals related to intervention, evaluation, and other forms of nutrition research at the individual and community levels.

Building Research Capacity by Developing Time-Saving Tools

Catalogue of Surveillance Systems

The Catalogue of Surveillance Systems provides one-stop access for researchers and practitioners to review, sort, and compare more than 85 publicly available data resources relevant to childhood obesity research and the evaluation of policy and environmental interventions.

Measures Registry

The Measures Registry is a web-based portfolio of more than 800 measures related to diet and physical activity. The tool allows researchers to more efficiently find and select measures that are critical to accelerating obesity prevention research. It also will help to spur the use of comparable, core measures.

Sharing Key Research Findings and Funding Opportunities

Strategic Communications

NCCOR uses multiple communication methods and social media to quickly reach, engage, and mobilize childhood obesity researchers and other

audiences. With emphases on disseminating new research initiatives and encouraging bidirectional dialogue, the Collaborative communicates using its website (www.nccor.org), blog, Twitter, monthly e-newsletter, webinars, conference sessions, and videos. NCCOR also publishes case studies of its work, and infographics to distill key findings in childhood obesity research.

Webinars

NCCOR coordinates and promotes webinars developed by its members, including sessions on the use of the Catalogue of Surveillance Systems and Measures Registry. NCCOR also has conducted the following webinars: Healthy Food Financing Initiative, Measurement of Active and Sedentary Behaviors: Closing the Gap in Self-Report Measures, and Obesity-Related Policy Evaluation.



NCCOR USES MULTIPLE COMMUNICATION METHODS AND SOCIAL MEDIA TO QUICKLY REACH, ENGAGE, AND MOBILIZE CHILDHOOD OBESITY RESEARCHERS.

Looking Ahead to 2012

Continuing Existing Projects

NCCOR partner organizations will continue to refine and strengthen existing projects, such as the Catalogue of Surveillance Systems, the Measures Registry, Envision, and the Evaluation Research Forum. Other projects, such as the Healthy Communities Study and the CORD initiative, will move from the planning stage to full-scale implementation.

Carrying Out New Projects

Several exciting projects are already planned for 2012:

- A **Farm-to-Fork Workshop on Surveillance of the U.S. Food System** will review the U.S. food surveillance systems now in use—from production to purchasing and consumption.
- A **Youth Energy Expenditure Expert Workshop** will review methods of measuring and estimating youth energy expenditure and develop plans for improving an existing compendium of metabolic equivalents for youth.
- Usability testing and enhancements of the **Let's Move! Child Care Checklist** online tool developed by CDC, in collaboration with the Nemours Foundation and the University of North Carolina, Chapel Hill. The Checklist is designed to help child care programs identify ways to strengthen their nutrition and physical activity practices and policies.
- **The Johns Hopkins Global Center on Childhood Obesity:** Under the auspices of NCCOR, the Global Center will bring together basic science, epidemiology, nutrition, medicine, engineering, and environmental and social policy research, among other fields, in an unprecedented, innovative way.
- A **School Wellness Survey** will support continued work on the Bridging the Gap School Wellness Survey; create linkages between School Wellness Survey data and those of federal school health-related surveillance systems supported by USDA, NCI, and CDC; and evaluate the effectiveness of wellness-related policies adopted following the passage of the Healthy, Hunger-Free Kids Act in 2010.

Enhancing NCCOR Operations

To ensure continued effectiveness and impact of its efforts, NCCOR will undertake several new initiatives:

- An **NCCOR External Scientific Panel (NESP)** will advise NCCOR on its overall direction, provide guidance and assistance on specific projects and initiatives, and serve as a liaison between NCCOR and the extramural community.
- NCCOR will seek **new methods and approaches for developing and implementing an evaluation plan.**
- A new **Rapid Response Workgroup** will assist NCCOR members in learning about rapid-response grant mechanisms for pilot or developmental research that are used in funding opportunity announcements issued by NCCOR funding partners.
- NCCOR will expand and enhance its **communications outreach**, using more social media and other communications opportunities to promote NCCOR projects, events, accomplishments, and funding opportunities in multiple places and to multiple audiences.



SINCE 1980, THE OBESITY PREVALENCE RATE HAS ALMOST TRIPLED (6.5 PERCENT TO 17 PERCENT) AMONG CHILDREN AGES 6 TO 11 YEARS.

CHILDHOOD OBESITY: AN URGENT CALL TO ACTION

Today, 12.3 million children and adolescents are obese. Since 1980, the obesity prevalence rate has more than doubled (5 percent to 12.4 percent) among children ages 2 to 5 years, almost tripled (6.5 percent to 17 percent) among children ages 6 to 11 years, and more than tripled (5 percent to 17.6 percent) among adolescents ages 12 to 19 years.

Analyses of trends in obesity also show that obesity disproportionately affects economically disadvantaged populations, black children (20 percent among boys and 29 percent among girls), and Mexican-American children (27 percent among boys and 17 percent among girls). Moreover, prevalence rates have risen much more quickly among these groups than among white children (Figure 1).

If the epidemic of obesity among children and adolescents is not halted and reversed, today's generation of young Americans may be the first generation who will live sicker and die younger than the generations before them. Prevention is critical, for those who become overweight or obese during childhood or adolescence have a greatly increased risk of being obese as adults.

Obesity prevalence rates also vary across the country (Figure 2). Among low-income children ages 2 to 4 years, many states have prevalence rates of 10 percent to 15 percent. In 11 states, 15 percent to 20 percent of these children are obese; only two states have prevalence rates of 10 percent or less.

Prevention is only possible, however, if we understand the nature and dimensions of the childhood obesity problem, we improve the capacity of researchers and evaluators to identify effective programs and understand why they work, we put into place strategies that accelerate the implementation of successful programs, and we work collaboratively across disciplines.

FIGURE 1 ► U.S. CHILDHOOD OBESITY TRENDS

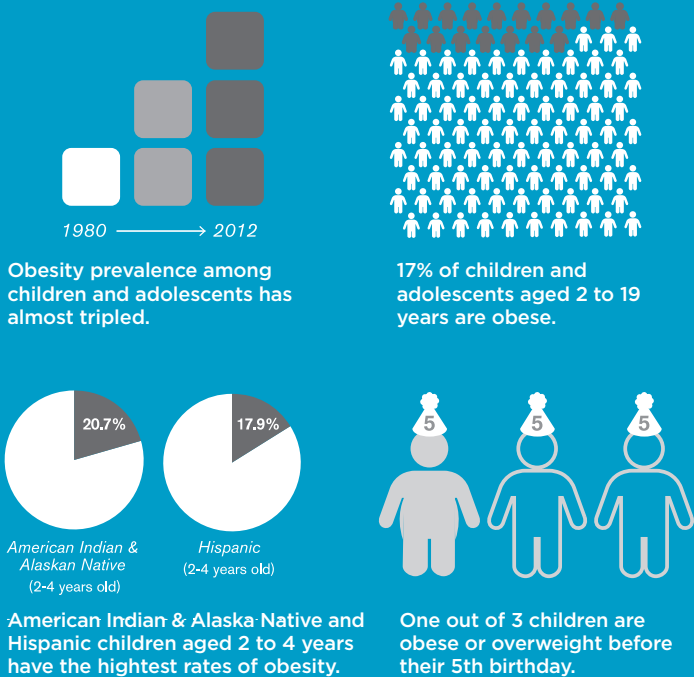
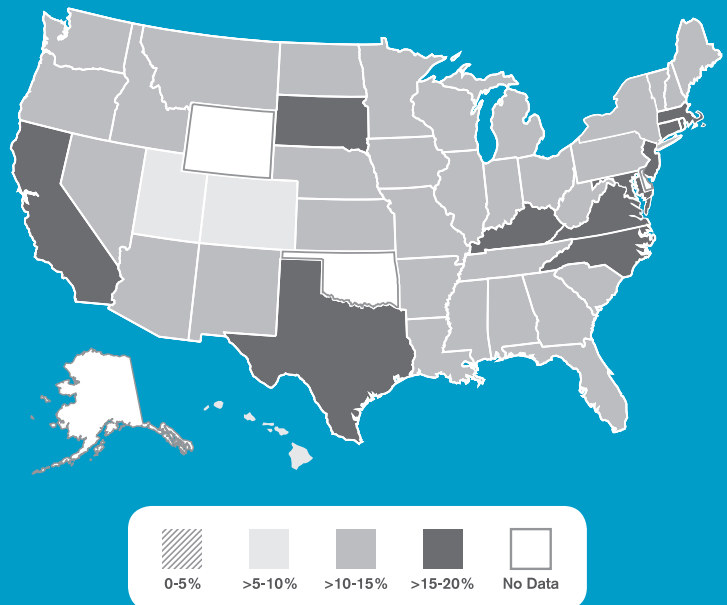


FIGURE 2 ► 2009 STATE OBESITY PREVALENCE

Among Low-Income Children Aged 2 to 4 Years



Adapted from <http://www.cdc.gov/obesity/childhood/data.html>
Adapted from <http://www.cdc.gov/obesity/downloads/PedNSSFactSheet.pdf>

Adapted from www.cdc.gov/obesity/childhood/data.html and the Pediatric Nutrition Surveillance System

NCCOR RESPONDS TO THE CALL

The National Collaborative on Childhood Obesity Research (NCCOR) brings together four of the nation's leading research funders to address the problem of childhood obesity in America (Figure 3). The Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), Robert Wood Johnson Foundation (RWJF), and U.S. Department of Agriculture (USDA) not only share a strong interest in childhood obesity through their missions to enhance the health of the nation, but they bring complementary approaches to their obesity research activities. (See *Appendix 1* for a complete list of current NCCOR members.)

Research conducted by these four funding organizations ranges from the basic and individual level up to the population and systems level, following a three-phase strategy of **discovery** to **design and development** to **delivery**. In the discovery phase, NCCOR organizations pursue basic, clinical, and applied research and surveillance. In the design and development phase, the organizations focus on applied research and development, population effectiveness, and program and policy evaluation. In the delivery phase, the organizations emphasize research synthesis, effective dissemination, and capacity development. By building on each other's strengths, this unique public-private partnership is advancing the field of childhood obesity research and prevention through synergistic and joint initiatives.

Mission and Goals

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childhood obesity epidemic through enhanced coordination and collaboration. To achieve this mission, NCCOR has five goals:

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- Provide national leadership to accelerate implementation of evidence-informed practice and policy.
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FIGURE 3 ► NCCOR FUNDING ORGANIZATIONS

CENTERS FOR DISEASE CONTROL AND PREVENTION

National Center for Chronic Disease Prevention and Health Promotion

Division of Adolescent and School Health
Division of Adult and Community Health
Division for Heart Disease and Stroke Prevention
Division of Nutrition, Physical Activity and Obesity

National Center for Environmental Health
National Center for Health Statistics

NATIONAL INSTITUTES OF HEALTH

Eunice Kennedy Shriver National Institute of Child Health and Human Development

National Cancer Institute

National Heart, Lung, and Blood Institute

National Institute of Diabetes and Digestive and Kidney Diseases

Division of Nutrition Research Coordination

Office of Behavioral and Social Sciences Research

ROBERT WOOD JOHNSON FOUNDATION

U.S. DEPARTMENT OF AGRICULTURE

Food, Nutrition and Consumer Services

Center for Nutrition Policy and Promotion
Food and Nutrition Service

Research, Education and Economics

Agricultural Research Service
Economic Research Service
National Agricultural Library
National Institute of Food and Agriculture

How NCCOR Uses “Capital” to Make a Difference

In working collaboratively toward NCCOR goals, NCCOR funding partners create and strengthen social capital, the relationships and trust that are essential to developing and implementing high-value projects. These projects leverage one another’s intellectual, managerial, and financial “capital.” For NCCOR, capital is defined as the time, resources, assets, and abilities necessary to develop and implement a project. The intellectual, managerial, and financial capital of the four funding partners and the NCCOR Coordinating Center are used in flexible configurations, with a focus on creating maximum efficiencies and maximum impact. This flexibility means that NCCOR partners can get more done more quickly by working together than by working alone.

Planning and Implementing NCCOR Projects

Ideas for potential projects can be presented to the NCCOR membership in various ways, as shown in the Pathways to NCCOR Projects illustration (Figure 4). At least two NCCOR members must support the idea for it to proceed. The capital to be provided for the project is configured in various ways depending on the nature of the project and the interests of individual NCCOR funding organizations.

Structure and Operations

NCCOR’s work is conducted through periodic meetings of members representing the four funding organizations. These meetings provide a valuable opportunity for the members to share progress on existing projects and discuss and plan future initiatives. Smaller groups responsible for specific functions or projects meet on a

FIGURE 4 ► THE PATHWAY TO NCCOR PROJECTS



regular basis between Member Meetings to carry out activities. Figure 5 illustrates NCCOR's organizational structure.

Overall Management

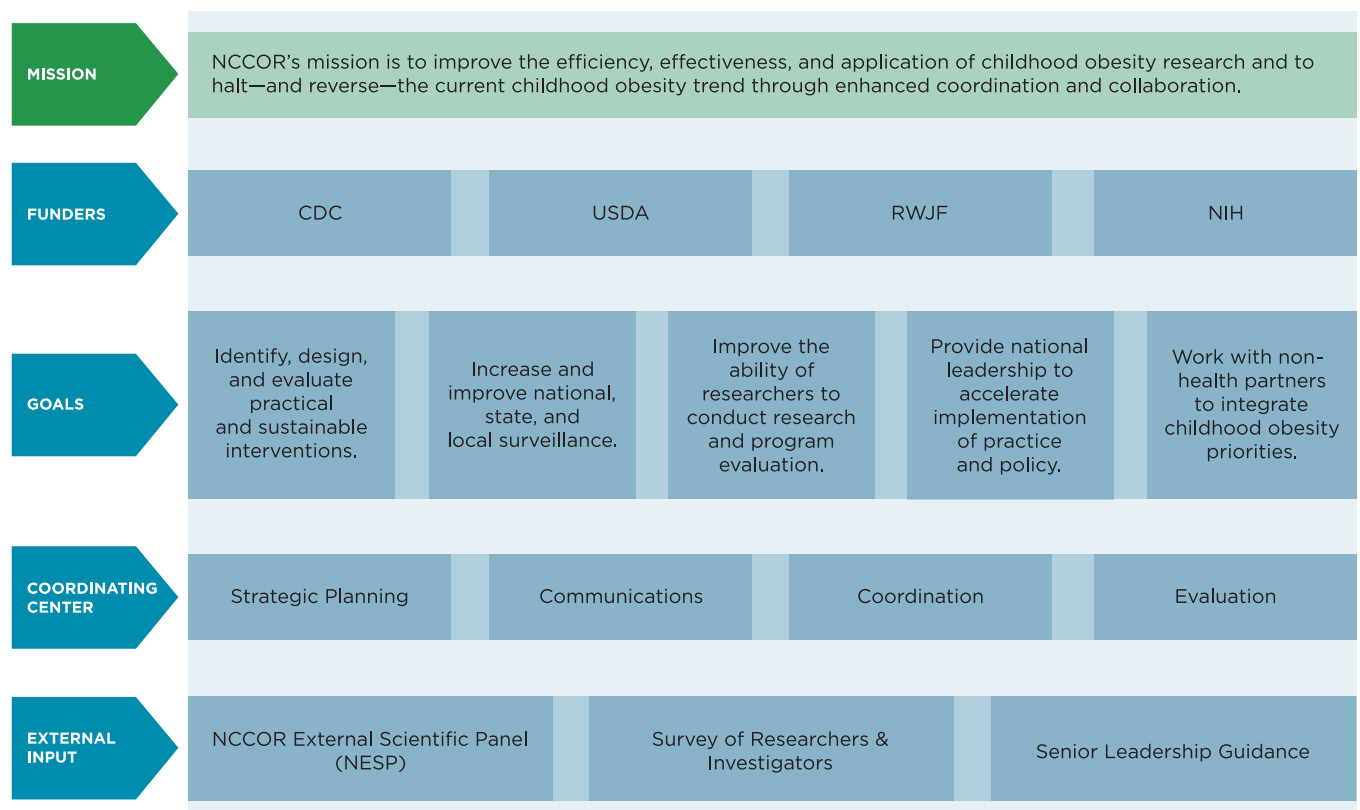
NCCOR's work is managed by a **Steering Committee**, a small group whose members represent each of the four funding organizations. The Steering Committee provides strategic guidance, obtains consensus for operational decisions, and ensures funding for NCCOR functions and activities. Steering Committee members are responsible for regularly communicating with NCCOR members within their respective agencies, securing funding for the NCCOR Coordinating Center from their agencies, providing updates to leadership of the partner organizations they represent about NCCOR activities, and guiding and managing NCCOR projects, as needed.

Internal Support and Coordination

A **Coordinating Center** provides four main services to support ongoing NCCOR operations: strategic planning; coordination (e.g., planning and supporting Member Meetings and events, workgroups, monthly calls, travel); external and internal communications; and evaluation. FHI 360, which serves as the Coordinating Center, also oversees multiple subcontractors and consultants who support NCCOR projects (Figure 6). (See *Appendix 2* for an NCCOR Financial Summary.)

Workgroups are regularly formed to convene representatives from each funder to plan and carry out NCCOR projects. Each workgroup maintains close contact with the Coordinating Center, which helps facilitate workgroup calls and records. Some workgroups are formed to plan and carry out specific projects. Others have responsibilities for NCCOR as a whole:

FIGURE 5 ► NCCOR OVERVIEW

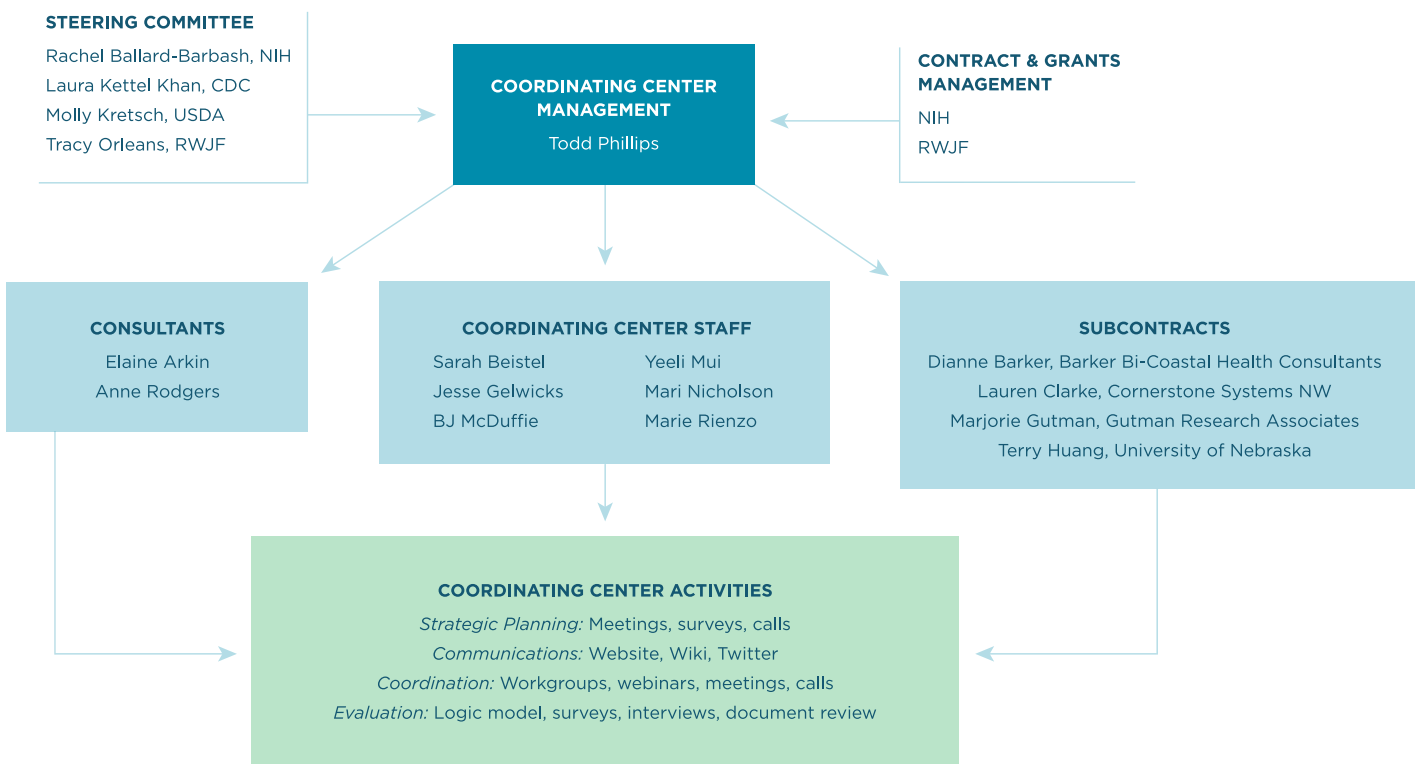


- Operations Workgroup.** The Operations Workgroup monitors and suggests improvements in NCCOR operations to ensure transparency, equitable NCCOR partner representation, and fairness in all NCCOR operations. This includes but is not limited to decision-making about NCCOR strategic planning, project selection and resource allocation, external expert panel membership, communications, and evaluation activities. This workgroup was formed in 2011.
- Evaluation Workgroup.** The Evaluation Workgroup works with NCCOR’s evaluation consultants to inform the annual evaluation process. This workgroup has assisted the evaluation consultants in creating the NCCOR logic model, developing criteria for measurement, identifying assessment strategies for gathering quantitative and qualitative data, and reviewing results and reports. This workgroup was formed in 2008.
- Communications Workgroup.** This workgroup, which includes communications staff working for the four NCCOR funding organizations, reviews external communications materials, such as press releases, and works closely with the Coordinating Center to develop a range of NCCOR communications products. This workgroup was formed in 2008.

External Expert Advice

An **NCCOR External Scientific Panel (NESP)** provides strategic advice and guidance on new science and ideas. Including outside experts from areas such as health disparities, food marketing, and policy, the Panel also serves as a valuable liaison between NCCOR and the extramural community. Planning for NESP was conducted during 2011 and it will be launched in 2012. (See *Looking Ahead to 2012* for additional detail about NESP.)

FIGURE 6 ► 2011 NCCOR COORDINATING CENTER STRUCTURE



EARLY HISTORY: 2009-2010

NCCOR was formally launched on Feb. 19, 2009 with three funding organizations—NIH, CDC, and RWJF. The Collaborative’s first year was focused on articulating its mission and goals, establishing an organizational framework, and beginning work in several priority areas.

NCCOR continued to develop rapidly in 2010. In February, USDA joined the Collaborative as the fourth funding organization. Projects begun in 2009 continued and several new projects were started. As of October 2010, NCCOR funding organizations had jointly committed more than \$40 million and considerable scientific expertise to projects relevant to NCCOR’s mission.

One focus of NCCOR’s work during these early years was strengthening the nation’s childhood obesity research tools. This area was highlighted because researchers’ use of diverse measures and methods had made it difficult to identify effective childhood obesity prevention strategies. NCCOR developed, compiled, tested, and promoted more consistent use of measures and methods with known validity and reliability across childhood obesity prevention and weight control research at the individual, community, and population levels.

Another focus was on discovering “what works” in childhood obesity research. This area was selected because of the dearth of available evidence at the individual, community, and population levels. NCCOR prioritized research evaluating promising obesity prevention and weight control interventions, including those involving multilevel and/or multi-component approaches to strengthen the capacity (e.g., knowledge, skills, tools) for research in population-level interventions. Another aspect of this work was evaluating policy and environmental changes

so as to determine their effects on preventing childhood obesity. Taking advantage of natural experiments, NCCOR accelerated rigorous evaluation of the effects of promising policy, system, and/or environmental changes—at the community, state, and national levels and across multiple settings—on children’s diet, physical activity, energy balance, and weight status.



COORDINATED, CENTRALIZED EFFORTS AMONG NATIONAL ORGANIZATIONS TO SPEED THE USE OF EFFECTIVE CHILDHOOD OBESITY PREVENTION INTERVENTIONS ARE URGENTLY NEEDED.

NCCOR also recognized that merely identifying “what works” was not enough. Rapid dissemination of effective interventions is also critical. Coordinated, centralized efforts among national organizations to speed the use of effective childhood obesity prevention interventions are urgently needed. NCCOR began to seek out ways to accelerate the adoption or application of effective interventions, programs, policy, and evaluation and monitoring systems in states, communities, and clinical practice.

FIGURE 7 ► NCCOR HIGHLIGHTS OF ACCOMPLISHMENTS – 2009-2010

DURING THIS TIME PERIOD, THE COLLABORATIVE HAS:

- | | | | |
|--|--|--|--|
| | Held quarterly meetings in Washington, DC, and at funders' sites | | Led five workgroups related to Coordinating Center functions and jointly coordinated projects |
| | Conducted monthly conference calls | | Overseen multiple subcontractors and consultants to support NCCOR projects (e.g., Mathematica, Transtria, Cornerstone) |
| | Used a wiki to facilitate collaborative work | | Been evaluated by external consultants |

TIMELINE OF KEY EVENTS:





**NCCOR FOSTERS THE
DEVELOPMENT OF NEW IDEAS
AND NEW CONNECTIONS TO
SHAPE HEALTHY ENVIRONMENTS
AND HEALTHY BEHAVIORS.**

2011: A PRODUCTIVE YEAR

NCCOR's third year, 2011, was busy and productive, encompassing significant evolution of the Collaborative itself. Through activities such as the Green Health workshop, Evaluation Research Forum, and presentations at numerous conferences and meetings, NCCOR increased its efforts to publicize its work to and engage new and external audiences. It also took steps to improve its functioning by establishing an Operations Workgroup to more clearly define the roles of the Steering Committee and Coordinating Center. Additionally, NCCOR began developing plans to update its evaluation approach to better capture the collaborative nature of NCCOR's work and its accomplishments.

NCCOR also made substantial progress on specific projects. The following pages provide highlights of a number of key initiatives, grouped under five themes that capture the nature of NCCOR's work and achievements during the year. These themes are:

- Fostering the development of new ideas and new connections to shape healthy environments and healthy behaviors
- Improving initiatives by broadening and deepening expert input
- Jointly funding key projects and tools to advance the field
- Building research capacity by offering time-saving tools and skill-building trainings
- Sharing key research findings and funding opportunities

Fostering the Development of New Ideas and New Connections to Shape Healthy Environments and Healthy Behaviors

A growing body of evidence demonstrates that changes in individual health behaviors require policies and environments that make healthy choices possible and feasible for children and their families. Therefore, the environmental factors that influence what, where, when, and how much

children eat and drink and how physically active they are must be addressed. Similarly, interventions to make healthy choices feasible must be implemented in preschool, school, and community settings where children live, learn, eat, and play. New ideas and new connections across disciplines and interests are necessary for positive action to occur. Three 2011 NCCOR projects show how these new ideas and new connections can make a difference. In each case, NCCOR convened or played a role in a gathering of experts to discuss a key issue of relevance to childhood obesity and plan next steps for research and action. These projects provided valuable opportunities for participants to discover their mutual interests in these issues, identify critical research questions that are informed by multiple disciplinary perspectives, and forge new and innovative working relationships that support and reinforce their individual and collective actions.

Food Marketing Research Roundtable

In 2006, the Institute of Medicine (IOM) released *Food Marketing to Children and Youth: Threat or Opportunity?* This seminal report concluded that youth-focused food and beverage marketing practices were out of balance with a healthful diet and contributed to an environment that placed children's lifelong health at risk. The IOM made 10 recommendations for actions that food industry stakeholders, food retailers, entertainment companies, the media, and other organizations could take to promote healthful diets to children and youth.



In 2008, RWJF launched a series of *Food Marketing Research Roundtables* to assess progress in meeting the IOM's recommendations and to bring together a diverse group of stakeholders who could address continuing concerns about the outsize impact of food marketing in influencing food behaviors and fostering childhood obesity.

On April 4-5, 2011, five years after the IOM report's publication, RWJF and NCCOR co-hosted the third of these Research Roundtables on *Food Advertising and Marketing to Children and Youth*. The Roundtable brought together researchers, advocates, research funders, federal agencies, and policy makers to update the review of progress on the IOM's recommendations and determine next steps. Vivica Kraak, Study Director of the

FOOD MARKETING AND RESEARCH ROUNDTABLE
Held in Washington, DC, April 4-6, 2011, are moderator David Britt (right), and panelists William Dietz, CDC (left), and Margo Wootan, Center for Science in the Public Interest

2006 IOM report, and Michael McGinnis, Study Chair, gave participants a detailed overview of actions taken by government, schools, the food and beverage industry, and the restaurant industry and trade associations in response to the IOM's 10 recommendations. The presentation, based on a paper that was subsequently published in the *American Journal of Preventive Medicine*, concluded that most sectors had made little to no progress and that much more work remained to be done to carry out the IOM recommendations.

This review provided a solid foundation for participants to identify policy research needed in the next 2-5 years to document and reduce children's exposure to unhealthy food marketing and its impacts and to discuss ways of strengthening and institutionalizing collaboration and networking in this area among researchers, policy makers, and advocates.

Several key conclusions emerged from the meeting:

- Food marketing to children and adolescents remains a major driver of unhealthy diets of children and adolescents, and must remain a priority in successful efforts to speed childhood obesity prevention.
- Despite the growth of digital, integrated, and racially/ethnically targeted marketing, marketers are on the defensive, and there are some signs that they are starting to change as they face mounting pressure from public health leaders, researchers, advocates, and the public. Much more effort is needed to build public and policy maker demand for changes in food advertising aimed at children and high-risk children in particular.
- Effective networks among researchers, advocates, and public health experts are beginning to be established. These networks must assess and address digital marketing and marketing targeted to specific racial and ethnic groups, and track marketing exposures and influences using measures beyond dollar expenditures. They also must expand efforts to engage parents and youth as key change agents in reducing and regulating food marketing. These efforts must be fueled by



THE POWER OF FOOD MARKETING TO CHILDREN AND ADOLESCENTS

- In 2004, advertising alone accounted for more than \$11 billion in food industry expenditures, including \$5 billion for television advertising.
- More than \$10 billion per year is estimated to be spent for all types of food and beverage marketing to children and youth.
- There is strong evidence that television advertising influences the food and beverage preferences, purchase requests, and short-term consumption of children ages 2 to 11 years and moderate evidence that it influences their food and beverage beliefs. There is insufficient evidence about these effects on youth ages 12 to 18 years.
- There is strong evidence that exposure to television advertising is associated with adiposity in children and youth ages 2 to 18 years.

IOM. *Food Marketing to Children and Youth: Threat or Opportunity?*, 2005. <http://www.iom.edu/Reports/2005/Food-Marketing-to-Children-and-Youth-Threat-or-Opportunity.aspx>

SCIENTIFIC REVIEWS OF PROGRESS ON THE IOM RECOMMENDATIONS

Kraak VA et al. Government and school progress to promote a healthful diet to American children and adolescents: A comprehensive review of the available evidence. *American Journal of Preventive Medicine* 2012;42(3):250-262.

Kraak VI et al. Industry progress to market a healthful diet to American children and adolescents. *American Journal of Preventive Medicine* 2011;41(3):322-333.

clear and actionable research evidence, including evidence from experts in the fields of marketing research and communications.

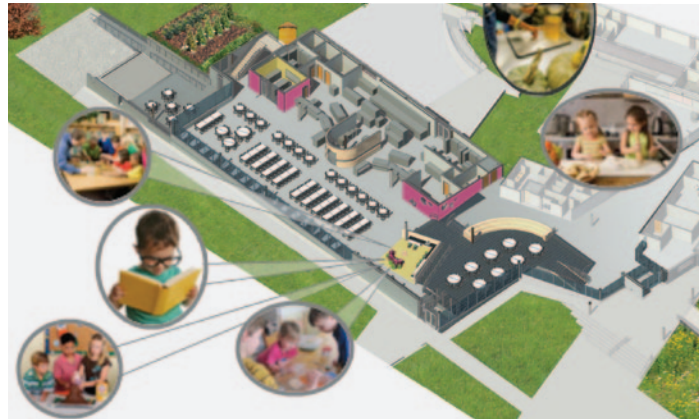
The Roundtable has already generated a number of products and impacts. A follow-up paper by Kraak et al., which reviews progress on IOM recommendations in several sectors not covered in the first paper, has been published. More broadly, the ideas, connections, and energy generated by the meeting have helped to place the issue of food marketing to children squarely in the mainstream of childhood obesity research and have provided important support for future action by private and public sector policy leaders and decision makers.

Green Health: Building Sustainable Schools for Healthy Kids

On Oct. 27–28, 2011, NCCOR and the National Academy of Environmental Design, in partnership with the U.S. Green Building Council Center for Green Schools, hosted *Green Health: Building Sustainable Schools for Healthy Kids*. This two-day workshop used an interdisciplinary case-study approach to examine how environmental design strategies at multiple scales can be better used to promote physical activity and healthy eating in school environments. The workshop also explored how childhood obesity prevention can be integrated into school-based sustainability and green building initiatives and frameworks.

Participants included designers, urban planners, public health experts, and representatives from multiple federal agencies. Through presentations and discussions, they:

- Examined how environmental design strategies at multiple spatial scales—



▲ BUCKINGHAM ELEMENTARY SCHOOL
VMDO Architects, Charlottesville, VA, 2011

neighborhood, school building, and schoolyard—can be used to promote physical activity and healthy eating

- Discussed emerging tools for health behavior assessment and environmental measurement within school-focused obesity prevention research, and examined training and capacity needs
- Identified specific opportunities for integrating childhood obesity prevention, environmental sustainability, and green building research and practice

For many of the participants, this workshop provided an opportunity to meet with experts who shared their enthusiasm for creating health-promoting environments for children and who brought to that enthusiasm an entirely different disciplinary perspective and world view. Throughout the two days of presentations and discussions, participants repeatedly expressed excitement about the potential for establishing synergistic, cross-disciplinary strategies to integrate health, green building and sustainability, and education principles.

A report summarizing the proceedings of the workshop will be released in early 2012, and a paper for the scientific literature that outlines “green health” research priorities is in development. The workshop also spurred several participants to begin exploring the possibility of informal as well as formal partnerships with participants from other disciplines around future “green health” initiatives.

Childhood Obesity Research Demonstration

In 2010, the Patient Protection and Affordable Care Act (ACA) appropriated \$25 million to CDC to conduct four-year community-based

childhood obesity demonstration projects in three communities. The target population was underserved children ages 2 to 12 years and their families who are eligible for the Child Health Insurance Program (CHIP). Rates of obesity are particularly high among minority and low-income populations, many of whom participate in CHIP. Using the Obesity Chronic Care Model as a conceptual framework, the Childhood Obesity Research Demonstration (CORD) projects build on an array of existing federal and non-federal initiatives, such as CDC's REACH and Communities Putting Prevention to Work, RWJF's Healthy Kids, Healthy Communities, the Healthy Weight Collaborative, and the National Initiative for Children's Healthcare Quality.

CORD aims to use multiple levels and settings to identify strategies that improve children's health behaviors and reduce obesity. A central element will be involving the children, their parents and other family members, and the communities in which they live. CDC has traditionally focused on funding states and communities to support interventions that lead to policy, environmental, and behavior change. Blending traditional community-based obesity interventions with individual behavioral support is a new idea that is one of the innovative aspects of CORD. Approaches will include combining changes in preventive care at doctor visits (obesity screening and counseling) with supportive changes in schools, child care centers, and community venues, such as retail food stores and parks. Community health workers will provide a bridge between families and community resources in order to inform and educate communities who may be hard-to-reach or have limited English proficiency about disease prevention (including obesity), health insurance enrollment opportunities, and disease management.

The grantees, which include three research facilities and their clinical and community partners, were selected in September 2011. The grantees are the University of Texas Health Science Center at Houston, San Diego State University, and the Massachusetts State Department of Public Health. CDC also is making a significant investment in evaluating the project and has included a fourth grantee, the University of Houston, to conduct a cross-site evaluation that will determine successful strategies and enumerate lessons learned. When the project concludes in 2015, CDC and the grantees will synthesize the project's findings and provide recommendations to Congress and agencies about effective, cost-effective, and sustainable strategies to prevent obesity among underserved children.

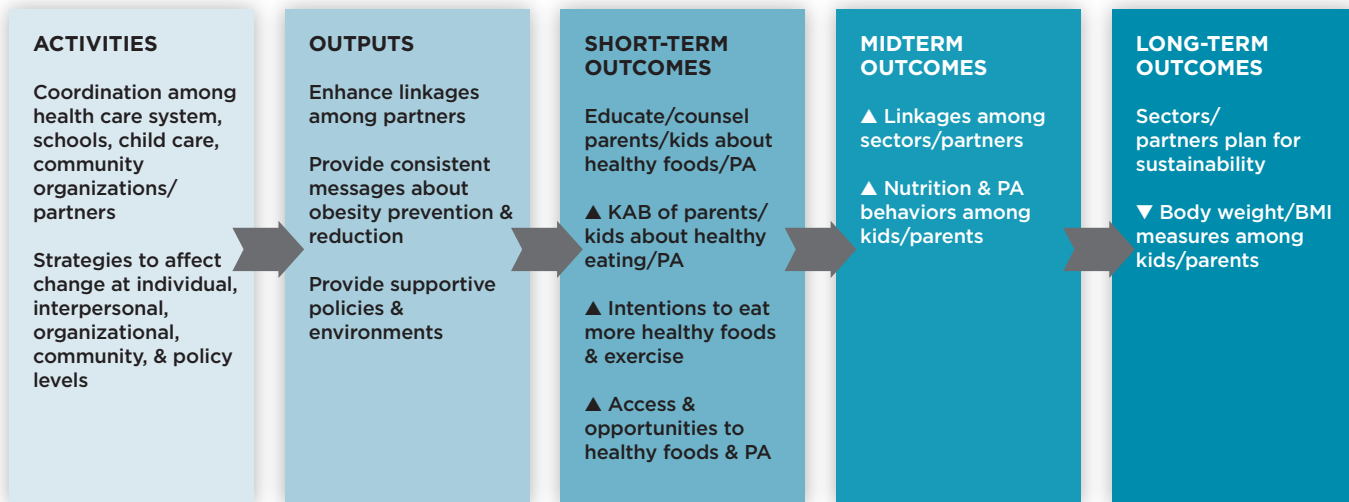
CORD has a federal steering committee with representatives from a variety of agencies concerned with health, children, and families, including the Centers for Medicare and Medicaid Services, the Health Resources and Services Administration, and the Administration on Children and Families. Using the approach used in the Healthy Communities Study (see **Improving Initiatives by Broadening and Deepening Expert Input** for a description of the Healthy Communities Study), CDC also has reached out to outside experts, including NCCOR members, for guidance and advice in planning and carrying out this intervention. The NCCOR Steering Committee provided advice on the draft funding announcement before publication and an NIH NCCOR member served as an external reviewer during the application process.

CDC anticipates that CORD's innovative features will enhance its impact. By intervening with community institutions as well as individuals, CDC hopes to provide consistent messages about healthy eating and physical activity behaviors and to change the environment in which food and physical activity decisions are made. By including a broad spectrum of expertise in its CORD Steering Committee and study workgroups, CDC also hopes to improve communication and collaboration across agencies and with outside groups, reduce



BLENDING TRADITIONAL COMMUNITY-BASED OBESITY INTERVENTIONS WITH INDIVIDUAL BEHAVIORAL SUPPORT IS A NEW IDEA THAT IS ONE OF THE INNOVATIVE ASPECTS OF CORD.

FIGURE 8 ► CORD LOGIC MODEL



Abbreviations Key: **PA**=physical activity **KAB**=knowledge, awareness, and beliefs **BMI**=body mass index

duplication of effort, and strengthen future childhood obesity efforts.

Improving Initiatives by Broadening and Deepening Expert Input

Two heads are better than one. It's a familiar maxim and one that's especially true when trying to develop solutions to a problem as complex and multi-faceted as childhood obesity. Two 2011 initiatives illustrate the fundamental NCCOR principle that projects can only be improved when diverse and complementary expertise is brought to bear on planning and implementation.

Healthy Communities Study

The need to identify promising approaches that communities can use to reduce obesity among children is urgent. Many communities are implementing programs and policies to address childhood obesity but their various approaches have not been systematically studied. Additionally, no studies have been conducted to examine the community factors, such as family sociodemographic factors, that may modify or mediate associations between communities programs or policies and childhood obesity.

In 2008, the National Heart, Lung, and Blood Institute (NHLBI) began planning for a Healthy

Communities Study that would provide scientific data to help identify community activities likely to be effective in reducing the prevalence of childhood obesity. NCCOR was integrally involved in the Healthy Communities Study from the start, as the NHLBI scientists responsible for initiating the project were NCCOR members. In addition, representatives from other NCCOR funding organizations (NIH institutes, RWJF, and CDC) supported and helped design the proposed study, contributing extensive in-kind expertise and measurement tools to the protocol, and providing some financial support. NCCOR members also serve on subcommittees that are responsible for specific aspects of the study.

Several NIH institutes and centers, including NHLBI, the National Cancer Institute (NCI), the National Institute for Diabetes and Digestive and Kidney Diseases (NIDDK), the *Eunice Kennedy Shriver* National Institute for Child Health and Human Development (NICHD), and the Office of Behavioral and Social Sciences Research (OBSSR), have provided nearly \$30 million to conduct this five-year observational study. A total of 275 communities and more than 23,000 children and their parents will participate. Eighty communities that already have promising policies and programs in place (such as *We Can!* communities) have been selected to participate. The remaining 195 communities will be randomly chosen through a national probability sample. Communities with



high proportions of Latino and African American residents will be oversampled.

During 2011, NHLBI and its partners in the study completed the initial work necessary to conduct the study, including developing and refining the study protocol and obtaining Office of Management and Budget (OMB) clearance to conduct the study. They also established an external Observational Study Monitoring Board to monitor the conduct of the study and ensure the safety of participants and they established study subcommittees.

Study planners anticipate that the Healthy Communities Study will answer important research questions about how diet, physical activity, and body mass index (BMI) are related to aspects of community programs and policies, such as their intensity and their duration, funding, and target population. They also hope to gain insights into optimal combinations of policies and programs and into program and policy factors that modify or mediate BMI, diet, and physical activity. Answers gained from this project will be a big step forward in helping NCCOR achieve its first goal: Identify, design, and evaluate practical and sustainable interventions, especially in high-risk populations and communities.

Evaluation Research Forum

Federal agencies and other organizations spend millions of dollars on evaluations, but the usefulness of these data is often limited because the evaluations are developed in isolation and the agencies do not consult with each other to develop common measures or methods or to coordinate data resources. This was especially relevant for NCCOR funding organizations in 2011 because CDC-, NIH-, RWJF- and USDA-funded researchers and evaluators were planning evaluations of approximately \$75 million in community- and state-level childhood obesity prevention interventions that emphasize policy and environmental changes with a focus on populations/communities at highest risk. These evaluations included:

- \$36 million for evaluating the \$650 million in America Recovery and Reinvestment Act (ARRA)-funded Communities Putting Prevention to Work (CPPW) demonstrations and similar childhood obesity demonstrations authorized under health reform
- Nearly \$30 million for the Healthy Communities Study

- More than \$2 million for evaluations of the RWJF Healthy Kids, Healthy Communities program, Bridging the Gap, and five state intervention evaluations
- Significant investments in new USDA research grants evaluating the community-based Healthy Food Financing Initiative

Given this significant investment in evaluation, the value of identifying common measures, complementing work across evaluations, and leveraging data and resources so that evaluators could communicate better and build evidence more rapidly was obvious. In 2010, NCCOR members began planning for an Evaluation Forum that would accomplish these goals. On June 24, 2011, approximately 50 participants met to learn about ongoing evaluations. Presenters described the Community Commons System, Transtria's work on RWJF's Healthy Kids, Healthy Communities evaluation and the Evaluation Forum System, the Community Health Task Force's work with the Community Guide, and NCCOR's Measures Registry and Catalogue of Surveillance Systems. Following these presentations, participants examined the potential benefits of increased coordination and collaboration and discussed ways to encourage the use of NCCOR's Measures Registry, Catalogue of Surveillance Systems, and other data collection and analysis capacity.

At the close of the meeting, participants formed working groups on four key issues. Their recommendations for these issues were:

- **Common Measures:** Use common measures, train investigators in them, share data, and clarify distinctions between needs of researchers versus those of community advocate.
- **Community Capacity:** Create a real-time, mutual learning facility to facilitate community work and exchange information.
- **Performance Management:** Identify alternative evaluation frameworks, possibly an evaluation resource registry; decide on immediate and long-term NCCOR goals for evaluation.
- **Building the Evidence:** Prioritize the IOM recommendations for evidence frameworks, engage NCCOR on NIH recommendations for best practices with mixed methods health research, and consider whether NCCOR could be a pilot for NIH new application processes.



THE EVALUATION FORUM RECOMMENDS CREATING A REAL-TIME, MUTUAL LEARNING FACILITY TO FACILITATE COMMUNITY WORK AND EXCHANGE INFORMATION.

The four working groups have each met twice since the Evaluation Research Forum. In addition, NCCOR member discussions about the Evaluation Forum have led to a focus on identifying opportunities for rapid response funding. NCCOR members involved in the Evaluation Research Forum also are considering developing an evaluation tool, similar to the Measures Registry and Catalogue of Surveillance Systems, that would allow researchers to learn about and compare common evaluation measures and methods.

Jointly Funding Key Projects and Tools to Advance the Field

NCCOR funding organizations and members collaborate in a variety of ways to advance the Collaborative's mission and goals. One critical avenue of collaboration is joint funding of projects. Two initiatives during 2011 show the power of joint funding to create an impact far beyond what the support of one agency can deliver, for joint funding not only represents practical support but also recognition of the importance of the work and commitment to it by the agencies behind the support.

The Envision Project

NCCOR's Envision Project coordinates and supports computational and statistical modeling efforts to understand the complex factors that contribute to the development of childhood obesity and to forecast the impact of public health policies and interventions on childhood obesity on a population-wide level and among specific subpopulations. Formed in 2009, Envision is an integral part of NCCOR's effort to build capacity for multi-level, systems-oriented, and integrated research that examines the forces that affect children's diet, physical activity, energy balance, and body weight.

Envision consists of three networks of investigators that pursue multiple modeling projects either independently or in teams. Each is jointly funded by NCCOR partner agencies at a total level of approximately \$15 million. The networks are:

- **COMNet (Collaborative Obesity Modeling Network).** Five varied projects are based in Australia, Canada, England, and the United States. COMNet is co-funded by RWJF and two NIH partners (NICHD and OBSSR).
- **CompMod (Comparative Modeling Network).** Seven computational projects focus on agent-

based modeling, system dynamic modeling, Markov modeling, and micro-simulation. CompMod is funded jointly by NICHD, OBSSR, and RWJF.

- **Statistical Network.** This network encompasses four statistical modeling projects funded jointly by the NICHD, NHLBI, OBSSR, and RWJF, with partial logistical support provided by the NCCOR Coordinating Center.

Each network has an expert steering committee drawn from the modeling teams and members of NCCOR's funding organizations to guide and review the work and assist with interpretation of results. Through the Envision Project, NCCOR hopes to achieve:

- Greater understanding of the complex etiology of childhood obesity
- Comparative evaluations of energy balance models
- Comparative evaluations of models projecting the impact and cost-effectiveness of different policy and environmental changes
- Comparative evaluation of different modeling approaches to childhood obesity



THE LANCET OBESITY SERIES

Swinburn BA et al. The global obesity pandemic: Shaped by global drivers and local environments. *Lancet* 2011;378(9793):804-814.

Wang YC. Health and economic burden of the projected obesity trends in the USA and the UK. *Lancet* 2011;378(9793):815-825.

Hall KD et al. Quantification of the effect of energy imbalance on bodyweight. *Lancet* 2011;378(9793):826-837.

Gortmaker SL. Changing the future of obesity: Science, policy, and action. *Lancet* 2011;378(9793):838-847.

Visit the *Lancet* website to read the papers and associated commentaries (<http://www.thelancet.com/series/obesity>).



- Virtual testing of the effects of different combinations and sequences of childhood obesity interventions
- Continued collaboration, cooperation, and strategic networking among modeling groups
- Development and dissemination of scientific papers, presentations, and reports

Envision's work already has borne significant fruit. On July 15, 2011, members of the CompMod network presented on their work at a mini-symposium organized by OBSSR. The presentation was entitled "Harnessing systems science methodologies to inform public policy: System dynamics modeling for obesity policy in the Envision Network."

On Aug. 26, 2011, the British medical journal *The Lancet* published four papers and three commentaries resulting from the work of Envision's COMNet members. This Obesity Series describes the reasons behind the worldwide obesity pandemic and the economic and health burdens of obesity, and discuss the changes that are needed in obesogenic environments to reduce obesity rates in the future. The series has received extensive media coverage in the United States, Britain, Canada, and Australia, with more than 630 stories published to date.

Food Patterns Equivalents Database

Dietary databases constitute the basic infrastructure for all types of dietary studies. They translate the foods reported into quantities of dietary constituents of interest. The National Health and Nutrition Examination Survey (NHANES) dietary intake data use two USDA databases—the Food and Nutrient Database for Dietary Studies (FNDDS) and the Food Patterns Equivalents Database (FPED, formerly known as the MyPyramid Equivalents Database, or MPED). The FNDDS provides information on nutrients (e.g., calories, calcium, sodium), while the FPED provides information on guidance-based food groups (e.g., cups of fruit, milk cup equivalents, total grains). Both are available free to users.

FNDDS data releases have occurred two years after each NHANES dietary data survey period since the 2001-2002 cycle. However, FPED data releases have occurred only for the 2001-2002 and 2003-2004 NHANES survey periods, and both releases occurred four years after the end of NHANES data collection.

In April 2011, a request to provide funding support for FPED was brought to NCCOR members. The support would be used to retool FPED so that updates could be more timely, the process could be more self-sustaining, and new food groups of interest could be included. Specifically, NCCOR members were asked to consider contributions that would allow USDA to conduct FPED data releases for one or both of the 2005-2006 and 2009-2010 NHANES dietary data survey periods. Supporting both releases was optimal because it would facilitate trend analysis (such as tracking changes in the sugar content of breakfast cereals) and because the two survey periods relate to other NHANES tools important in assessing childhood obesity (e.g., food frequency questionnaires and accelerometry data in NHANES 2005-2006 and screener data in NHANES 2009-2010).

NCCOR members responded positively and rapidly to this request because they recognize that FPED plays a central role in examining diets in relation to current dietary guidance. Ensuring a robust future for FPED helps NCCOR achieve one of its five goals—Increase and improve national, state, and local surveillance of childhood obesity. At the October 2011 NCCOR Members Meeting, it was announced that members had contributed \$400,000 to FPED, an amount sufficient to cover FPED data releases for both the 2005-2006 and 2009-2010 NHANES survey periods.

Building Research Capacity by Developing Time-Saving Tools

When asked about the usefulness of the NCCOR Measures Registry, one newly minted investigator admitted that had she had access to the Registry during her graduate training, she would have completed work on her degree a year earlier.

THE ONLINE TOOL lets users rapidly compare surveillance systems' characteristics.

	California Health Interview Survey (CHIS)	Diary Supplement Independent Database (DSID)	National Center for Educational Statistics Common Core of Data (NCES/CED)	Nelson Stenback
Level				
Individual	✓	✓		
Household				
School			✓	
Community				✓
Macro/Policy				
Other				
Scope				
Local	✓			
State	✓	✓		
National			✓	✓
Key Variables				
Weight related	✓	✓	✓	✓
Diet related	✓	✓	✓	✓
Physical activity related	✓	✓	✓	✓
Geocode/Linkage	✓	✓	✓	✓
Age Groups				

THE CATALOGUE OF SURVEILLANCE SYSTEMS AND THE MEASURES REGISTRY HAVE BEEN WIDELY PROMOTED THROUGH PRESENTATIONS AT PROFESSIONAL MEETINGS, WEBINARS, AND LINKS ON GOVERNMENT, PROFESSIONAL, AND ACADEMIC WEBSITES.

See *Appendix 3. Dissemination Efforts for the Catalogue of Surveillance Systems and the Measures Registry* for details of these outreach efforts.

Two NCCOR research tools launched during 2011—the Catalogue of Surveillance Systems and the Measures Registry—have had an immediate and positive impact on the field of childhood obesity research by providing one-stop access to vital research tools.

Catalogue of Surveillance Systems

Interest in childhood obesity determinants has grown to encompass social, environmental, and policy issues. However, research on childhood obesity has traditionally focused on individual-level factors, and much less is known about its organizational, community, and macro-level determinants. Knowledge of all the publically available data resources that can shed light on these various factors is relatively limited, especially for those new to the field. Few researchers, therefore, have taken full advantage of available data systems. When deciding on which data resources to use in their research, investigators often use familiar systems, ask their colleagues for advice, or go to Internet search engines.

NCCOR's Catalogue of Surveillance Systems (www.nccor.org/css) provides a solution to this barrier. Launched in February 2011, the Catalogue collects and summarizes publically available data resources relevant to childhood obesity in one convenient web-based location. It provides access to data related to health behaviors, outcomes, and determinants of obesity as well as systems that track environmental and policy factors. It currently includes 87 systems with national, state, and local data resources maintained by federal, state, academic, and private sector institutions. Each system includes data that are relevant to childhood obesity, collected within the past 10 years, publically available, and gathered in the United States. New systems are continually being added.

The Catalogue provides a separate, seven-page profile for each system. The first page provides an At-a-Glance summary of the system. Other pages provide information on sampling design, key variables, data access and cost, geocoding and other linkage variables, selected publications, and resources. The Catalogue is a valuable and flexible tool that allows users to:

- Identify and locate surveillance systems of interest
- Search by topic
- Easily compare different systems
- Access detailed information on each system
- Access non-surveillance system resources, such as the Child Trends Data Bank, USDA Food Environment Atlas, as well as federal nutrition program information and legislative databases

The Catalogue already is demonstrating its popularity and usefulness. It averages more than 1,000 unique visitors every month and has had around 500,000 hits to date. Anecdotal information suggests that professors are using the Catalogue in their nutrition and research methods classes with great success. For the first time, researchers and practitioners have a tool that allows them to assess the range of childhood obesity resources and see possible gaps. For example, it is clear from the Catalogue that many more individual-level systems exist than do systems at outer rings of the socio-ecological framework. Moreover, only one true policy surveillance system appears to exist—the Bridging the Gap State Snack and Soda Tax Data system. Knowing the gaps will allow the research community to begin to fill those gaps. In addition, NCCOR hopes that the Catalogue will encourage multilevel research by providing increased awareness of linkage variables, and this in turn, will contribute to efforts to increase knowledge and lower rates of childhood obesity.

Measures Registry

A key priority for NCCOR is promoting the use of common measures across childhood obesity prevention and research. Measures are tools and methodologies to assess individual diet and physical activity behaviors and the environments in which these behaviors occur. Measures can include questionnaires, instruments, diaries, logs, electronic devices, direct observations, protocols, and analytic techniques. Standard measures are needed to describe and evaluate interventions to prevent childhood obesity, particularly those projects that address policies and environments.

In 2010, NCCOR began to develop an online, searchable repository of measures relevant to childhood obesity. Project team members conducted comprehensive literature searches of articles published between 2004 and 2010, examined an extensive best-practices review, contacted subject matter experts to supplement lists of measures, and used a tailored abstraction tool to collect data for each measure. In April 2011, the Measures Registry (www.nccor.org/measures) was launched with nearly 750 measures categorized into four domains:

- Individual dietary behavior
- Individual physical activity behavior
- Food environment
- Physical activity environment

Each measure includes information about the domains measured, validity and reliability, protocols on the use of the measure, settings, geographic areas, and populations for which the measure had been used. Users can search or browse for measures, access specific details on each measure, link to other measures registries and related resources, find measures in development, and submit new measures for inclusion in the registry.

Similar to the Catalogue of Surveillance Systems, the Registry averages more than 1,000 unique visitors every month and has had 300,000 to 400,000 hits to date. In the short term, the Registry is increasing the awareness and use of measures resources by researchers. As a result, it is helping to decrease redundancy, improve productivity, and build research capacity. In the longer term, NCCOR hopes

that the Registry will help the research community think more broadly and comprehensively about measures-related issues, such as validity, reliability, standardization and harmonization, which ultimately will enhance the effectiveness and innovation of childhood obesity research.

Sharing Key Research Findings and Funding Opportunities

NCCOR uses a variety of tools to disseminate information about the Collaborative's activities and accomplishments. These tools include:

- **NCCOR website.** The website is NCCOR's primary connection to the external world. It provides a forum for the Collaborative to share its goals, describe projects and products, and discuss others' products supported by NCCOR.
- **NCCOR e-Newsletter.** The e-Newsletter is a monthly subscription-based resource that describes recent findings, news about the Collaborative, funding opportunities/awards, latest publications by NCCOR members and other childhood obesity researchers, and news related to childhood obesity policy, regulation, and government activities. The e-Newsletter currently has more than 1,800 subscribers.
- **Media outreach.** The Collaborative has conducted press events and other media outreach activities to publicize NCCOR events and accomplishments. During 2011, coverage of *The Lancet* Obesity Series was a major media outreach activity (for more details on this activity, see the description of the Envision project).
- **Meeting and call summaries.** These internal tools allow NCCOR members to chronicle what happened during activities, track progress, and highlight action items and next steps.



JAN. 1 - DEC. 31, 2011: NCCOR WEBSITE MAKES ITS PRESENCE KNOWN

- Unique visitors: about 40,600
- Hits: 767,288 (12.89 Hits/Visit)



A MAJOR OBJECTIVE IS TO BRING IN EXTERNAL VIEWPOINTS TO BROADEN AND DEEPEN THE POINTS OF VIEW AND EXPERTISE THAT ARE BROUGHT TO BEAR ON NCCOR.



LOOKING AHEAD TO 2012

In the coming year, NCCOR will continue to work in its five goal areas and make progress in each. A major objective for all activities is to bring in external viewpoints to broaden and deepen the points of view and expertise that are brought to bear on NCCOR's operations and projects. The focus of work in 2012 will be on continuing existing projects, carrying out new projects, and enhancing NCCOR operations.

Continuing Existing Projects

NCCOR partner organizations will continue to refine and strengthen existing projects, such as the Catalogue of Surveillance Systems, the Measures Registry, Envision, and the Evaluation Research Forum. Other projects, such as the Healthy Communities Study and the CORD initiative, will move from the planning stage to full-scale implementation.

Carrying Out New Projects

Several exciting projects are already planned for 2012:

- In January, NCCOR will host a two-day **Farm-to-Fork Workshop on Surveillance of the U.S. Food System**. This workshop will review the U.S. food surveillance systems now in use—from production to purchasing and consumption. This workshop will lay the groundwork for a new effort to assess strengths and gaps in current farm-to-fork food surveillance systems and will serve as a springboard for a series of follow-on NCCOR meetings designed to address the most critical surveillance gaps.
- In April, NCCOR will host a two-day **Youth Energy Expenditure Expert Workshop**. The workshop will review methods of measuring and estimating youth energy expenditure and to develop plans for improving an existing compendium of metabolic equivalents (METs) for youth. The workshop also will explore the need for a repository of youth energy expenditure data. The adult METs compendium has enhanced the comparability of physical activity measurements in diverse studies, and NCCOR hopes that this workshop and its subsequent activities will contribute to the NCCOR goal of fostering comparable measures on youth for research and evaluation.
- **Let's Move! Child Care Checklist** is an online tool developed by CDC, in collaboration with the Nemours Foundation and the University of North Carolina, Chapel Hill. The Checklist is designed to help child care programs identify ways to strengthen their nutrition and physical activity practices and policies. Users are taken through an online quiz, followed by a customized action plan to set goals and procedures for achieving a health-promoting child care environment. To maximize its value and effectiveness in the field, NCCOR will support this effort by conducting usability testing of and enhancing the online tool to create a better user experience.
- Under the auspices of NCCOR, the new **Johns Hopkins Global Center on Childhood Obesity** will bring together basic science, epidemiology, nutrition, medicine, engineering, and environmental and social policy research in an unprecedented, innovative way. The \$16 million NIH cooperative agreement grant was awarded to the Johns Hopkins Bloomberg School of Public Health in September 2011. The Center also has received approximately \$4 million institutional support from Hopkins and the Center's key international partners. The Center will:
 - Involve more than 50 investigators from 15 domestic and international institutions, including faculty from five Johns Hopkins schools

- Study the drivers of the childhood obesity epidemic and relevant environmental and policy interventions
 - Emphasize the integration of geospatial analysis with a systems science and transdisciplinary approach to childhood obesity, bringing together basic science, epidemiology, nutrition, medicine, engineering, and environmental and social policy research in an unprecedented, innovative way
 - Provide rapid-response grants to investigators in the field worldwide to obtain time-sensitive data on environmental and policy changes relevant to childhood obesity
 - Provide a research and training infrastructure for building capacity for integrating systems science into obesity and chronic disease research
- NCCOR funding partners will be supporting the ongoing monitoring and analysis work being conducted by the Bridging the Gap (BTG) **School Wellness Survey**. This new initiative will create linkages between School Wellness Survey data and those of federal school health-related surveillance systems supported by USDA, NCI, and CDC and it also will evaluate the effectiveness of wellness-related policies adopted following the passage of the Healthy, Hunger-Free Kids Act in 2010. The School Wellness Survey, the only survey of its kind, has collected and analyzed the wellness-related policies of more than 2,000 school districts. Continuing support for this work is central to NCCOR's goal of providing national leadership to accelerate implementation of evidence-informed practice and policy.



TO ENSURE CONTINUED EFFECTIVENESS AND IMPACT OF ITS EFFORTS, NCCOR IS UNDERTAKING SEVERAL NEW INITIATIVES

Enhancing NCCOR Operations

To ensure continued effectiveness and impact of its efforts, NCCOR is undertaking several new initiatives:

- An **NCCOR External Scientific Panel (NESP)** will advise NCCOR on its overall direction and provide guidance and assistance on specific projects and initiatives. The Panel also will serve as a valuable liaison between NCCOR and the extramural community. It will inform the Collaborative on new science and ideas and help in forming connections to extramural research, practice, and policy. Further, it will contribute to the ongoing refinement of NCCOR's strategic plan, including helping to establish key performance indicators and other metrics associated with evaluating the impact of the Collaborative. Panel members have been recruited and it will hold its first webinar in February 2012.
- During its initial planning and early phases, NCCOR evaluation activities have included expert interviews, web-based evaluation surveys, and document reviews. Due to the growth of the Collaborative, NCCOR is seeking **new methods and approaches for developing and implementing an ongoing evaluation plan**. This new approach will be designed to measure short- and long-term outcomes of the Collaborative's

influence on NCCOR member organizations and activities, and its impact on the broader field of obesity prevention research, policy, and practice.

- A new **Rapid Response Workgroup** will assist NCCOR members in learning about rapid-response grant mechanisms for pilot or developmental research that are used in funding opportunity announcements issued by NCCOR funding partners. The workgroup also will explore a range of mechanisms that can be used to fund various types of new NCCOR projects.
- Moving forward into 2012, NCCOR will expand and enhance its **communications outreach**, using more social media and other communications opportunities to promote NCCOR projects, events, accomplishments, and funding opportunities in multiple places and to multiple audiences. Through these efforts, NCCOR aims to expand its reach and become a vibrant conduit for childhood obesity research information and collaboration. Communications plans for 2012 include:
 - Redesigning the NCCOR website homepage and subpages to include a blog format, bold features, daily updates, and opportunities to create bidirectional dialog between NCCOR and its audiences.
 - Establishing a Twitter feed, which will allow NCCOR to reach more audiences and spur discussion on recent news and events.
 - Developing infographics to distill information about childhood obesity research and NCCOR projects. These will be posted to the website and available for download and embedding.
- Producing NCCOR videos to explain and demonstrate NCCOR's work, such as videos of presentations from the NCCOR Green Health workshop. Videos also will be developed to direct audiences' attention to issues of particular importance to NCCOR, such as examples of food marketing on television.
- Publishing case studies to describe NCCOR successes and strategies.



APPENDICES

Appendix 1. NCCOR Members

Appendix 2. NCCOR Financial Summary

*Appendix 3. Dissemination Efforts for the
Catalogue of Surveillance Systems and the
Measures Registry*

*Appendix 4. Descriptions of 2009-2011
NCCOR Projects*



APPENDIX 1

NCCOR MEMBERS

CENTERS FOR DISEASE CONTROL AND PREVENTION**National Center for Chronic Disease Prevention and Health Promotion***Division of Adolescent and School Health*

Allison Nihiser, M.P.H.

Howell Wechsler, Ed.D., M.P.H.

Sarah M. Lee, Ph.D.

Seraphine Pitt Barnes, Ph.D., M.P.H., CHES

Division of Adult and Community Health

Alyssa Easton, Ph.D.

Amy Holmes-Chavez, M.P.H.

H. Wayne Giles, M.D.

Leandris Liburd, Ph.D., M.P.H.

Rebecca Bunnell, Sc.D., M.Ed.

Robin Soler, Ph.D.

Shannon Griffin-Blake, Ph.D.

Division for Heart Disease and Stroke Prevention

Shifan Dai, M.D., Ph.D.

Division of Nutrition, Physical Activity and Obesity

Bettylou Sherry, Ph.D., R.D.

Beverly S. Kingsley, Ph.D., M.P.H.

Candace Rutt, Ph.D.

Casey Hannan, M.P.H.

David Freedman, Ph.D.

Deborah Galuska, Ph.D.

Heidi Blanck, Ph.D.

Janet Fulton, Ph.D.

Latetia Moore, Ph.D.

Laura Kettel Khan, M.I.M., Ph.D.

Laurence Grummer-Strawn, Ph.D.

Meredith A. Reynolds, Ph.D.

Rosanne Farris, Ph.D.

Stephen Onufrak, Ph.D.

Susan A. Carlson, M.P.H.

Suzanne Hurley

Terry O'Toole, M.Div., Ph.D., FASHA

William Dietz, M.D., Ph.D.

National Center for Environmental Health

Andrew Dannenberg, Ph.D.

National Center for Health Statistics

Brian K. Kit, M.D., M.P.H.

Cynthia Ogden, Ph.D.

NATIONAL INSTITUTES OF HEALTH***Eunice Kennedy Shriver* National Institute of Child Health and Human Development**

John McGrath, Ph.D.

Layla Esposito, Ph.D.

Marianne Glass Miller

National Cancer Institute

April Oh, Ph.D., M.P.H.

Britni Belcher, Ph.D., M.P.H.

David Berrigan, Ph.D., M.P.H.

Denise Buckley, ELS

Eboneé Butler, M.P.H.

Emilee J. Pressman, M.P.H.

Frank M. Perna, Ed.D., Ph.D.

Heather Bowles, Ph.D.

Heather Patrick, Ph.D.

Jill Reedy, Ph.D., M.P.H., R.D.

Linda Nebeling, Ph.D., M.P.H., R.D., FADA

Matthew J. Trowbridge, M.D., M.P.H.

Paige Miller, Ph.D., M.P.H., R.D.

Rachel Ballard-Barbash, M.D., M.P.H.

Rebecca Ferrer, Ph.D.

Robin A. McKinnon, Ph.D., M.P.A.

Russ Glasgow, Ph.D.

Sameer Siddiqi

Susan Krebs-Smith, Ph.D.

Tanya Agurs-Collins, Ph.D., R.D.

Tiffany M. Powell M.D., M.P.H.

National Heart, Lung, and Blood Institute

Charlotte Pratt, Ph.D., R.D.
 Dana Alexis Phares, Ph.D.
 Karen Donato, S.M., R.D.
 Mark H. Roltsch, Ph.D.
 S. Sonia Arteaga, Ph.D.
 Susan Dambrasuskas

National Institute of Diabetes and Digestive and Kidney Diseases

Christine Hunter, Ph.D.
 Leslie Curtis, M.A.
 Mary E. Evans, Ph.D.
 Mary Horlick, M.D.
 Matthew Rechler, M.D.
 Robert J. Kuczmarowski, Dr.Ph.
 Susan Yanovski, M.D.

Division of Nutrition Research Coordination

Margaret A. McDowell, Ph.D., M.P.H., R.D.
 Pamela E. Starke-Reed, Ph.D.
 Rachel Fisher, M.S., M.P.H., R.D.
 Van S. Hubbard, M.D., Ph.D.

Office of Behavioral and Social Sciences Research

Ann Benner
 Deborah Olster, Ph.D.

ROBERT WOOD JOHNSON FOUNDATION

Elizabeth Goodman
 Laura Leviton, Ph.D.
 Tracy Orleans, Ph.D.

U.S. DEPARTMENT OF AGRICULTURE**Food, Nutrition and Consumer Services***Center for Nutrition Policy and Promotion*

Robert Post, Ph.D.

Food and Nutrition Service

Steven Carlson

Research, Education and Economics*Agricultural Research Service*

Alanna J. Moshfegh, Ph.D.
 David M. Klurfeld, Ph.D.
 Joanne Holden
 John W. Finley, Ph.D.
 Molly Kretsch, Ph.D.
 Pamela R. Pehrsson, Ph.D.

Economic Research Service

Jay Variyam, Ph.D.
 Laurian Unnevehr, Ph.D.

National Agricultural Library

Cathy Alessi, R.D.
 Sara Wilson, M.S., R.D.

National Institute of Food and Agriculture

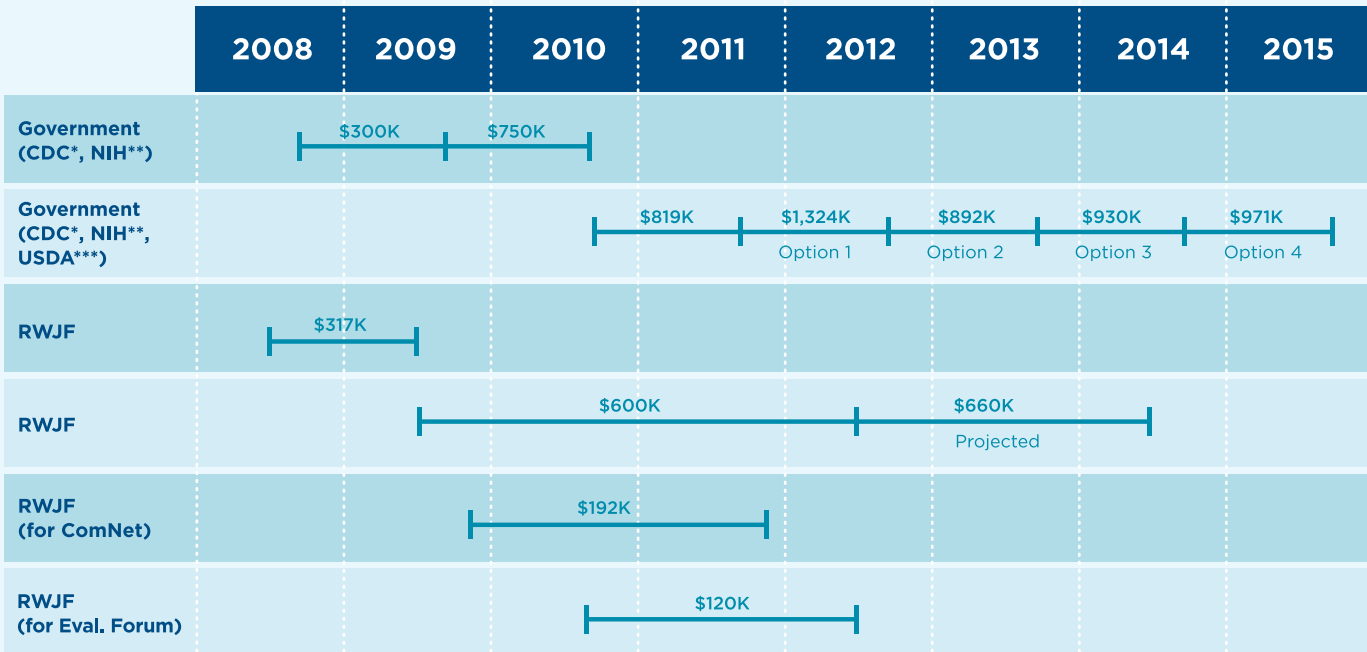
Aida Balsano, Ph.D.
 Cynthia Reeves-Tuttle, Ph.D., M.P.H.
 Dionne Toombs, Ph.D.
 Helen Chipman, Ph.D., R.D.
 Jane Clary, Ph.D., R.N., M.S., M.C.H.E.S.
 Paul J. Chapman II
 Saleia Afele Faamuli, Ph.D., M.P.H.
 Stephanie Blake
 Suzanne Le Menestrel, Ph.D.

FHI 360

Amy Lazarus Yaroch, Ph.D.
 Anne Brown Rodgers
 Bertha (BJ) McDuffie, M.A.
 Dianne C. Barker, M.H.S.
 Elaine Arkin, M.S.
 Jesse Gelwicks, M.A.
 Mari Nicholson, M.H.S.
 Marie Rienzo, M.A.
 Marjorie Gutman, Ph.D.
 Sara R. Gordon, M.S.W.
 Terry T-K Huang, Ph.D., M.P.H.
 Todd Phillips, M.S.
 Yeeli Mui, M.P.H.

APPENDIX 2 NCCOR FINANCIAL SUMMARY

NCCOR Coordinating Center Funding



* CDC funding has come from three divisions in one Center.
 ** NIH funding has come from six institutes/offices/divisions.
 *** USDA funding has come from two agencies within one department.

Funds are rounded to the nearest thousandth.
 Options 2-4 are funding projections.

APPENDIX 3

DISSEMINATION EFFORTS FOR THE CATALOGUE OF SURVEILLANCE SYSTEMS AND THE MEASURES REGISTRY

2011 Conference Presentations (both tools)

- Healthy Eating Research, Feb. 2-4, 2011
- Active Living Research, Feb. 22-24, 2011
- Society for Behavioral Medicine, April 27-30, 2011
- Society for Prevention Research, May 29-June 1, 2011
- ISBNPA Annual Conference, June 15-18, 2011
- Sixth Biennial Childhood Obesity Conference, June 28-30, 2011
- The Obesity Society, Oct. 1-5, 2011
- APHA Annual Meeting, Oct. 29-Nov. 2, 2011

Selected Other Presentations

- Institute of Medicine Workshop on Measurement Strategies for Accelerating Progress in Obesity Prevention, March 2011 (following invitation to present on both tools)
- NHLBI Childhood Obesity Prevention and Treatment Research (COPTN) Network, May 2011 (on both tools)
- Robert Wood Johnson Foundation Catalogue of Surveillance Systems (via webinar), May 2011
- Robert Wood Johnson Foundation Measures Registry (via webinar)
- CDC Nutrition and Obesity Prevention Research and Evaluation Network (NOPREN) (via webinar), March 2011 (just Catalogue)

Webinars (NCCOR-run)

- Catalogue of Surveillance Systems Webinar, May 2011, approximately 300 participants
- Measures Registry Webinar, May 2011, approximately 300 participants

Links from Member and Other Organizations

- USDA: <http://www.ers.usda.gov/Briefing/DietQuality/links.htm>
- CDC: <http://www.cdc.gov/obesity/data/resources.html>
- RWJF: <http://www.rwjf.org/pr/product.jsp?id=72392>
- RWJF Healthy Eating Research: <http://www.healthyeatingresearch.org/research-tools-mainmenu-5/datasets-mainmenu-43/283>
- NIDDK: <http://www2.niddk.nih.gov/Research/Resources/ObesityResources.htm>
- National Association of County & City Health Officials <http://www.naccho.org/toolbox/tool.cfm?id=2305> (Catalogue) and <http://www.naccho.org/toolbox/tool.cfm?id=2492> (Registry)

Reviews/Coverage

- <http://www.genengnews.com/best-of-the-web/nccor/2632/>
- BioTechniques 2011;51(4):227
- NCI Cancer Bulletin 2011;8(3) <http://www.cancer.gov/ncicancerbulletin/020811/page8>
- Salud America! <http://www.salud-america.org/sites/www.salud-america.org/files/upload/SAE-NWinter2010-11.pdf>
- The WHO News Daily (Links shared on Twitter to create an online newspaper): <http://paper.li/whonews/-list?page=7>
- Kansas "Public Health Connections" 2011;11(3); Bureau of Local and Rural Health http://www.kdheks.gov/olrh/PH_Connections/Connect03-11.pdf
- Colorado Clinical & Translational Sciences Institute, February 11, 2011 http://cctsi.ucdenver.edu/CO-PACT/Documents/Friday%20imPACT%20Archive/Friday%20imPACT%202_5.pdf
- Active Living Research Quarterly Newsletter

Social Media

- Twitter
- Facebook

APPENDIX 4

DESCRIPTIONS OF 2009-2011 NCCOR PROJECTS

HEALTHY COMMUNITIES STUDY

Healthy Communities Study is a five-year study designed to assess the associations between community programs and policies targeting childhood obesity and BMI, diet, and physical activity in children. The study will include approximately 280 communities and almost 24,000 children in the United States.

ENVISION

Envision links three modeling networks—COMNet (Collaborative Obesity Modeling Network), CompMod (Comparative Modeling), and the Statistical Network—to forecast the impact of public health policies and interventions on childhood obesity through innovative modeling approaches. Receiving worldwide coverage was the recently published Obesity Series published in *The Lancet*, which features four articles and three commentaries by COMNet highlighting global obesity trends and the need for government intervention.

CATALOGUE OF SURVEILLANCE SYSTEMS

In February 2011, NCCOR launched a free online resource to help researchers and practitioners more easily investigate childhood obesity in America. NCCOR's Catalogue of Surveillance Systems provides one-stop access for users to review, sort, and compare more than 85 public data resources relevant to childhood obesity research and the evaluation of policy and environmental interventions.

MEASURES REGISTRY

The Measures Registry is a web-based portfolio of more than 800 measures related to diet and physical activity. The tool allows researchers to more efficiently find and select measures that are critical to accelerating obesity prevention research. It also will help spur the use of comparable, core measures.

EVALUATION RESEARCH FORUM

To make evaluation study results more directly comparable, the Evaluation Research Forum brings together leaders of major childhood obesity evaluation efforts to consider shared measures and methods for evaluating community-based and state-based strategies. The combined evaluation efforts represent a \$75+ million investment in childhood obesity evaluation research.

GREEN HEALTH WORKSHOP

This workshop, co-sponsored by NCCOR and the National Academy of Environmental Design (NAED) and conducted in partnership with the U.S. Green Building Council (USGBC), focused on linking environmental

design, sustainability, and childhood obesity prevention. The workshop was attended by more than 60 health policy, research, design, education, and architectural professionals who together identified future avenues for growth in the field of green health.

FOOD PATTERNS EQUIVALENTS DATABASE

To enhance food and nutrition surveillance, NCCOR is strengthening the process for updating the USDA Food Patterns Equivalents Database. This critical effort will facilitate research goals related to intervention, evaluation, and other forms of nutrition research at the individual and community levels.

FOOD MARKETING RESEARCH ROUNDTABLE

The 2011 Food Marketing Research Roundtable brought together more than 60 leading researchers, advocates, and policy makers in the field of childhood obesity prevention. Attendees at the meeting identified the most pressing needs for research and policy to reduce children's exposure to food marketing.

CHILDHOOD OBESITY RESEARCH DEMONSTRATION

In a multi-setting, multilevel community-based effort, CORD aims to improve underserved children's risk factors for obesity through an integrated model of primary care and public health approaches. NCCOR will have the opportunity to support and advise this critical effort by participating on CORD's Steering Committee.

STRATEGIC COMMUNICATIONS

NCCOR uses multiple communication methods and social media to quickly reach, engage, and mobilize childhood obesity researchers and other audiences. With emphases on disseminating new research initiatives and encouraging bidirectional dialogue, the Collaborative communicates using its website (www.nccor.org), blog, Twitter, monthly e-newsletter, webinars, conference sessions, and videos. NCCOR also publishes case studies of its work, and infographics to distill key findings in childhood obesity research.

WEBINARS

NCCOR coordinates and promotes webinars developed by its members, including sessions on the use of the Catalogue of Surveillance Systems and Measures Registry. NCCOR also has conducted the following webinars: Healthy Food Financing Initiative, a six-session series on the measurement of active and sedentary behaviors, and a four-part series on obesity-related policy evaluation.



NOTES

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