

Obesity Prevention in Children: Synergy With the Diabetes Initiative

An RWJF National Program

SUMMARY

Through a series of synergy grants, staff from the *Diabetes Initiative*, a national program of the Robert Wood Johnson Foundation (RWJF) that ran from 2002 to 2009, extended its work to preventing or reducing childhood obesity—a disease that heightens the risk of subsequent diabetes. Originally, the *Diabetes Initiative* had 14 projects focused on self-management for adults with diabetes in primary care and community settings around the country.

Four grantees of the *Diabetes Initiative* received 18-month synergy grants from RWJF to conduct pilot projects targeting children ages 3 to 12 at greatest risk for obesity, particularly African-American, Hispanic, Native American and Asian/Pacific Islander children in low-income communities. These projects focused on promoting policy and environmental changes. The four grantees were:

- Campesinos Sin Fronteras, Somerton, Ariz.
- Community Health Center, Middletown, Conn.
- Holyoke Health Center, Holyoke, Mass.
- Marshall University School of Medicine (Department of Family and Community Health), Huntington, W.Va.

Key Findings and Results

- The four grantee organizations improved their capacity in seven categories involved in making policy and environmental changes: alliances, organizational capacity, social norms, base of support, impact, environment and policies.
- They reported a total of 436 specific actions and 69 results involving preparation (such as conducting assessments and making resource requests), promotion (such as increasing awareness of childhood obesity) and program, policy or environmental changes.

- All four grantees leveraged existing partnerships and created new ones, making an
 effort to reach beyond their existing network of health partnerships. Partners included
 school districts, city councils, local health coalitions, universities, local television
 stations, state agencies and others.
- All of the grantees held community events—such as block parties, family "fitness
 nights" and neighborhood walks—to increase public awareness and disseminate
 information about physical activity and healthy eating.

Program Management

Staff from the *Diabetes Initiative* national program office at Washington University in St. Louis managed the *Obesity Prevention in Children: Synergy With the Diabetes Initiative* program and provided technical assistance to its grantees.

Funding

In October 2005, the RWJF Board of Trustees allocated \$270,000 for 24 months.

THE PROBLEM

Childhood obesity is a critical public health problem in the United States. Over the past four decades, obesity rates have soared among all age groups, increasing more than fourfold among children ages 6 to 11. Today, more than 23 million U.S. children and teenagers, nearly one in three young people, are overweight or obese. In an even younger population, one-quarter of children ages 2 to 5 are overweight or obese. Among certain racial and ethnic groups, the rates are still higher.

Preventing obesity during childhood is critical because habits formed during youth frequently continue well into adulthood:

- Research shows that obese adolescents have up to an 80 percent chance of becoming obese adults. Overweight and obese children are at higher risk for a host of serious, often life-threatening illnesses, including heart disease and stroke, diabetes, asthma and certain types of cancer.
- Increasing numbers of children are being diagnosed with health problems once considered to be adult ailments, including high blood pressure, type 2 diabetes and gallstones.
- Obesity poses a tremendous financial threat to the nation's economy and health care system—the estimated cost is \$117 billion annually in direct medical expenses and indirect costs, including lost productivity. Childhood obesity alone carries a huge price tag—up to \$14 billion annually in direct medical expenses.

The simple explanation for the childhood obesity epidemic is that children are consuming far more calories than they burn. Today's obese teenagers consume between 700 and 1,000 more calories a day than what they need for the growth, physical activity and body functions of a normal-weight teen. Over the course of 10 years, that "energy gap" is enough to pack an average of 58 extra pounds on an already obese adolescent.

Dramatic changes to the ways Americans live, eat, work and play have created an environment that fuels obesity. In comparison to past generations, today's young people:

- Spend more than four sedentary hours per day, on average, using electronic media, including television, DVDs, video games and the internet.
- Rarely walk or bike to school—most are driven—and are not likely to have daily physical education.
- Eat more unhealthy, high-calorie, low-nutrient foods in ever-larger sizes, not only in restaurants but in their homes and schools.

CONTEXT

In response to alarming increases in obesity and obesity-related diseases, in 2002 RWJF adopted the goal of reversing the epidemic of childhood obesity. In 2007, RWJF committed \$500 million towards meeting this goal by 2015. RWJF emphasizes environmental and policy changes as its primary approaches to achieving that goal.

RWJF has developed three integrated strategies to reverse the childhood obesity epidemic:

- Build evidence. Investments in building evidence about which strategies are most
 effective will help ensure that the most promising efforts are replicated. RWJF's
 research efforts include three national programs:
 - Active Living Research supports research to identify environmental factors and policies that influence children's physical activity. See Program Results Report for more information.
 - Healthy Eating Research supports research on environmental and policy strategies to promote healthy eating among children and to prevent childhood obesity, especially among low-income racial and ethnic groups at highest risk. See Progress Report for more information.
 - Bridging the Gap: Research Informing Practice and Policy for Healthy Youth
 Behavior seeks to improve understanding of economic, policy and environmental
 influences on youth substance use, obesity and physical activity. See Program
 Results Report for more information.

RWJF also seeks to evaluate innovative approaches in states, schools and communities. *Information for Action*, an RWJF-funded project that examined the effects of legislation in Arkansas restricting the foods available in school settings, is an example of this strategy. See Program Results Report for more information.

RWJF also brings together researchers, policy-makers and practitioners to discuss measurement tools, research strategies and ways to make research useful to states and communities. For example, RWJF sponsored a national evaluation and measurement meeting on school nutrition and physical activity policies.

- **Prompt action.** RWJF's action strategy for communities and schools focuses on engaging partners at the local level, building coalitions and promoting the most promising approaches. For example:
 - The Food Trust, a Philadelphia-based organization, has brought supermarkets to underserved communities in Pennsylvania. RWJF and the Food Trust are working together to replicate that result in Illinois, Louisiana and New Jersey.
- Educate and advocate. RWJF shares results gleaned from its evidence-building and action strategies by educating leaders, investing in advocacy and building a broad national constituency for preventing childhood obesity. For example: Through Leadership for Healthy Communities, RWJF helps organizations that represent elected and appointed officials—such as the National Conference of State Legislatures, the Council of State Governments and the National Association of State Boards of Education—educate their members about ways to increase physical activity and healthy eating among children and adolescents. The goal is to help decision—makers create healthier states, counties, cities and schools.

Childhood Obesity Synergy Projects

RWJF program staff decided to leverage the expertise and momentum of existing RWJF national programs already working on issues related to childhood obesity, such as physical activity, children's health and safety, and diabetes. By expanding the focus of existing programs, instead of launching new ones, RWJF could avoid the expense of setting up new offices.

RWJF incorporated childhood obesity-prevention work into four existing programs:

- Community-Based Childhood Obesity Prevention (within the Injury Free Coalition for Kids). See Program Results Report.
- Intergenerational Programming within the Active for Life Program Sites to Reduce Childhood Obesity (Generations) (within Active for Life®: Increasing Physical Activity Levels in Adults Age 50 and Older). See Program Results Report.
- Healthy Eating by Design (within Active Living by Design). See Progress Report.

• Obesity Prevention in Children: Synergy With the Diabetes Initiative (within the Diabetes Initiative). These efforts are the subject of this report.

The *Diabetes Initiative*, based at Washington University in St. Louis, was made up of two national programs: *Advancing Diabetes Self-Management* and *Building Community Supports for Diabetes Care*. It ran from 2002 to 2009 (the website is no longer updated but still includes extensive archival information). Its 14 grantee projects focused on implementing self-management programs and community supports for adults with diabetes.

PROGRAM DESIGN

When RWJF program staff sought to leverage the experience of existing national programs in its efforts to reduce childhood obesity, the *Diabetes Initiative* was an obvious choice. Childhood obesity is a significant risk factor for subsequent diabetes.

The emphasis of the new program was to identify promising system, environmental and policy strategies that would promote healthy food, healthy eating choices and physical activity in schools, communities and primary care settings. Program goals were to:

- Produce promising models, practices and tools that can be further developed for larger-scale testing and adoption.
- Gain greater understanding of the resources, challenges and incentives that families, schools and communities have in promoting healthy eating and physical activity.
- Improve the ability of the health care system to prevent childhood obesity, especially among families at greatest risk.

The target audience was children ages 3 to 12, with special emphasis on children at greatest risk for obesity, particularly African-American, Hispanic, Native American and Asian/Pacific Islander children in low-income communities.

The national program office and RWJF issued a call for proposals on October 13, 2005 to the 14 *Diabetes Initiative* grantees. While applicants were encouraged to propose their own projects, the document suggested the following areas of emphasis:

- Access and advocacy: For example, a project might explore the influence of policies on access to healthy foods and ways to educate decision-makers and funders.
- School and community-based interventions: For example, a project could test the
 development of school-based partnerships as a way to improve access to healthy
 foods and physical activity.

• Clinical systems and protocols: For example, a project might explore ways to extend program models developed for adults in the *Diabetes Initiative* to children at risk for obesity and type 2 diabetes.

Projects were selected on the basis of their capacity to affect system, environmental or policy changes, build on the strengths and infrastructure of *Diabetes Initiative* activities, involve appropriate partners and demonstrate the potential to sustain or diffuse the project after the grant period.

THE PROGRAM

In October 2005, the RWJF Board of Trustees allocated \$270,000 for 24 months to be spent on the childhood obesity projects; the management of the program continued to be funded under the *Diabetes Initiative*.

National Program Office

Staff from the *Diabetes Initiative* national program office at Washington University in St. Louis managed the *Obesity Prevention in Children: Synergy With the Diabetes Initiative* program and provided technical assistance to its grantees. Carol Brownson, co-deputy director of the *Diabetes Initiative*, was program director, working closely with Mary O'Toole (the other co-deputy director of the *Diabetes Initiative*). Marjorie Sawicki served as program coordinator, managing the day-to-day program operations and interaction with the grantees.

There was no national advisory committee appointed for this program.

Synergy Projects

Ten grantees submitted proposals to the national program office and four were selected by a seven-member review panel comprised of national program office staff and outside experts. The four synergy projects began January 1, 2006.

- Campesinos Sin Fronteras, in Somerton, Ariz., launched its "Mobilizing Parents for Healthier Environments" project to involve parents in creating opportunities for healthier nutrition and physical activity.
- Community Health Center in Middletown, Conn., piloted its childhood obesity prevention project, "Healthy Macdonough," at Macdonough Elementary School in Middletown, in partnership with the Middletown Public School System, parents and a range of community organizations. The project targeted high-risk children ages 5 to 11 (kindergarten through fifth grade).
- Holyoke Health Center, in Holyoke, Mass., through its "Healthy Sullivan School" project, designed and tested interventions to support and change policies and

environments in local elementary schools to prevent and reduce childhood obesity among mostly Hispanic children.

• Marshall University School of Medicine (Department of Family and Community Health), in Huntington, W.Va., developed the Mt. Hope Energy Balance project in the rural West Virginia community of Mt. Hope (population 1,400), located in Fayette County. The purpose was to create a model for mobilizing communities to expand healthy lifestyle choices for children ages 3 through 12 and their caregivers.

Project staff planned to replicate the Mt. Hope Energy Balance project in another rural community under a second grant (ID# 063165), but the 12-month timeframe was not long enough to develop the necessary relationships in that community. Staff members instead used the funds to expand the original Mt. Hope project.

The 16-month synergy projects began in January 2006. Three projects received nocost extensions and were completed in July 2007. Marshall University received the second, one-year grant from September 2007 through August 2008.

See Appendix 1 for contact details.

Technical Assistance

The national program staff provided technical assistance to the four synergy projects as they shifted from planning health programs, which was the emphasis of the *Diabetes Initiative*, to advocating for policy and environmental change around childhood obesity. Technical assistance included:

- Training grantees to identify needs for community environment and policy change.
- Teaching grantees about developing community partnerships and using communitybased assessment techniques to identify partners supportive of increasing access to healthy food and regular physical activity.
- Biweekly conference calls on relevant topics that allowed grantees to share experiences and resources. Among the topics addressed:
 - Working with schools
 - Grant writing
 - Involving parents in shaping a school wellness policy
- Biweekly technical assistance calls with individual grantees.
- Regular emailing of Web resources, articles and reports on policy, advocacy and environmental change.
- Three grantee meetings with expert speakers.

Checklist for Tracking Outcomes

National program office staff developed a checklist of the categories involved in making policy and environmental changes so that grantees could determine how well they were addressing each of them. Grantees provided ratings on a 0–10 scale on up to 12 statements in each of seven categories to measure their capacity over time. The categories included those that represent interim steps or infrastructure needed to bring about change and those that reflect the end goals of actually changing policy and the environment. The categories were:

- Alliances
- Organizational capacity
- Social norms
- Base of support
- Impact
- Environment
- Policies

National program staff compared baseline and post-grant scores by category for all the sites combined and then by individual project across all seven categories (see Overall Program Findings and Results).

Progress Reporting System

In order to document the actions taken by synergy project staff to create change, and to collect data on the results, national program staff employed the Progress Reporting System, which was originally designed and used by RWJF's *Active Living by Design* national program and modified for use by the *Healthy Eating by Design* national program, its synergy program. Since the synergy projects dealt with both physical activity and healthy eating, staff at the *Diabetes Initiative* national program office felt the system was useful.

The Progress Reporting System is based on "5Ps," which represent the types of actions needed to lay the groundwork for changing a community's environment and policies, in this case to prevent childhood obesity. Actions, and their results, include:

• *Preparation*—laying the groundwork for a sustainable effort through activities that include training, submitting grant proposals or other resource requests, building partnerships and assessments (such as conducting surveys). Results are measured by resources generated.

- **Promotion**—increasing awareness of childhood obesity and community involvement in solutions through media activities and other efforts to generate publicity. Results are measured by media coverage.
- **Programs**—efforts to create or expand programs that enhance healthy eating or physical activity within the community. Results are measured by program changes (such as the introduction of a nutrition curriculum into the school).
- Policy—actions to foster policy creation or change to support healthy eating or
 physical activity in schools, institutions, organizations or families. Results are
 measured by policy changes (such as a new ordinance or a new food policy in school)
 or by the creation of a community planning product (such as a business plan for a
 farmers' market).
- *Physical projects*—efforts to alter the built environment or the food environment. Results are measured by physical projects (such as building a walking trail or creating a community garden).

Grantees documented their actions and results on the Progress Reporting System, accessed through a portal on the *Diabetes Initiative* website. National program staff drew on the Progress Reporting System to report actions and results for each project, and aggregated across all four projects (see Overall Program Findings and Results).

OVERALL PROGRAM FINDINGS AND RESULTS

Checklist Findings

National program staff analyzed data from the checklist that grantees used to rate their own progress and reported findings to RWJF. Over the course of the project:

- Grantees improved their capacity in each of the seven categories involved in making policy and environmental changes, based on scores aggregated across all four sites. Scores were based on a scale of 0 (lowest) to 10 (highest).
 - Capacity was highest at both baseline and at the end of the project in three categories—alliances, organizational capacity and social norms:
 - Alliances increased from 2.6 at baseline to 7.4 at project end.
 - Organizational capacity increased from 2.6 at baseline to 7.3 at project end.
 - Social norms increased from 2.5 at baseline to 7.0 at project end.
 - Capacity in the lowest two categories at the beginning of the projects also showed substantial increases by the end:
 - Environment increased from 1.6 at baseline to 5.5 at project end.

- Policies increased from 1.0 at baseline to 3.4 at project end.
- Each grantee improved its capacity to make policy and environmental changes, when scores in all seven categories were aggregated. Two of the grantees started their grants with little capacity or support to change policy and environment:
 - At Marshall University, capacity across all seven categories rose from an average of under 1 at baseline to 5.1 by the end of the grant.
 - Holyoke Health Center rated its overall capacity just below 1 at baseline, but 4 at the end of the grant.

Two grantees reported higher baseline capacity, as well as significant improvements by the end of the grant:

- Campesinos Sin Fronteras, which had the highest baseline capacity (averaging 3.9), reported a post-grant capacity of 8.6, the highest overall capacity of the four sites.
- Community Health Center started with an average overall baseline capacity of 3.2, which rose to 6.9 by the end of the project.

See Appendix 2 for a table of checklist results.

Progress Reporting System Cross-Site Findings

National program staff reported these overall findings from the Progress Reporting System in *PRS Cross-Site Report* (unpublished).

• The four grantees reported a total of 436 actions and 69 results during the course of their projects.

Actions: Analysis of the reported actions yielded the following:

- Preparation. More than half of all actions reported (221 actions) were preparation. The most frequent actions were assessments (53, mainly in the first six months) and forming or nurturing partnerships (117, mainly during the second six months). Trainings (22) took place in the first nine months and resource requests (29) were ongoing.
- *Promotion*. Actions (79) to increase awareness of childhood obesity and increase community involvement in solutions continued throughout the project period.
- *Program*. These actions (96) increased over time (almost half occurred after the end of the original 16-month grant period).
- Policy and environmental change. Less than 10 percent of actions were aimed specifically at policy or environmental change (22 actions). According to program staff: "This clearly demonstrates the extent to which preparation and

- programmatic changes are necessary before one can hope to affect policy or change the environment."
- *Physical projects*. Grantee took 18 actions targeted at physical projects.
- *Results:* Analysis of the reported results yielded the following:
 - Funding. Three grantees received external funding from community, federal and foundation sources. Most of the remaining resources generated (a total of 27) were in-kind donations of manpower and supplies.
 - Media coverage. One grantee accounted for 17 of the 19 media coverage entries.
 This grantee proactively asked newspaper editors to send reporters and photographers to specific events.
 - *Program changes*. Grantees reported few program changes (3).
 - Policy changes. The 15 policy changes began occurring at least six months into the projects and continued throughout the grant period. Three community planning products were produced.
 - Physical projects. Grantees reported completing two physical projects, both in the final grant period: a school walking trail and acquiring a building for a youth and family wellness center.

National program staff identified the following common practices and themes in the *PRS Cross-Site Report*:

- Assessments. The grantees used focused assessments of the physical and social
 environment of their communities to guide the development of their programs.

 Interviews and focus groups with key stakeholders helped them assess relevant school
 policies. Needs assessments helped each grantee identify gaps, create a vision for
 change and develop feasible work plans.
- Partnerships. All four grantees leveraged existing partnerships and created new ones, making an effort to reach beyond their existing network of health partnerships. The grantees sought partners who had resources to close gaps identified in community assessments. This brought partners to the effort that typically would not have been asked to collaborate on childhood obesity.
 - See Key Site Activities and Results for examples of meaningful collaborations with community partners.
- Public awareness. All of the grantees held community events to increase public
 awareness and disseminate information about physical activity and healthy
 eating. Events such as block parties, family "fitness nights" and neighborhood walks
 typically offered some combination of exercise, healthy food, education and training
 to help community members become advocates for healthy change.

KEY SITE ACTIVITIES AND RESULTS

The following were reported to RWJF by the grantees and the national program office:

Campesinos Sin Fronteras (Somerton, Ariz.)

Key Activities

- Project staff created a shared vision of the Mobilizing Parents project with members
 of its existing community coalition, the Special Action Group. Staff then recruited 15
 parents to participate in discussions encouraging them to become agents of change
 promoting better nutrition and physical activity for their children.
- Campesinos Sin Fronteras collaborated with an array of partners including the
 Somerton City Council, which provided a vacant police station for Campesinos
 programs; STEPS to a Healthier Arizona, which supported efforts at Campesinos to
 promote physical activity and healthy lifestyles; Western Growers Insurance; and
 Somerton school nurses who became key contacts in local schools. (STEPS is a
 partnership with the Arizona Department of Health Services, the state Department of
 Education, the University of Arizona and local community-based organizations.)
- Campesinos staff involved with other agency projects, such as one to prevent cardiovascular disease in pregnant women, and their diabetes management project, also contributed to the Mobilizing Parents initiative.

- Project staff developed a six-module obesity prevention curriculum targeted at Hispanic children of Mexican descent. An intern from the University of Arizona College of Public Health and other partners helped to develop the curriculum, based on results of a 12-parent focus group and a community needs assessment. The curriculum was piloted with 10 families and then revised.
- Campesinos Sin Fronteras opened the Somerton Youth and Family Wellness
 Center to offer wellness and exercise activities for children and parents in the
 community. The City of Somerton donated space and the Yuma YMCA donated
 exercise equipment. Local youth and adults refurbished the space with donated
 construction supplies.
- Parents became more engaged in school activities and board meetings and felt more empowered to raise their concerns and advocate for physical activities and improved school nutrition. The school board began providing simultaneous translation into Spanish at their meetings to facilitate parents' participation. According to project staff, the project "laid the groundwork for future policy and environmental changes to prevent obesity in children by empowering parents, engaging them in the policy process and increasing awareness locally and statewide."
- A local elementary school began offering two walking clubs.

Community Health Center (Middletown, Conn.)

Key Activities

- A Wellness Committee at Macdonough Elementary School helped to plan, implement, evaluate and sustain "Healthy Macdonough," which advocated for policy changes at the elementary school and within the Middletown, Conn., school district. Committee members included school system representatives, parents, health care providers, community activists and city government officials.
- Project staff members participated in key obesity-related coalitions in Middletown.
 These included committees and task forces focused on wellness policies in the school district, obesity among preschool children, hunger-related issues and developing grassroots leadership.
- Project staff conducted more than 10 key informant interviews and a needs assessment/parent survey. Results from the 60 completed parent surveys (of 240 distributed) indicated that almost all parents thought obesity was a problem and that the community should be involved in responding to it. Almost all parents also said they have resolved to eat healthier and be more active, although only 20 percent served the recommended four to five daily servings of fruits and vegetables (and 15 percent served none or just a single serving).

- An average of 100 to 200 parents and children attended each of four Healthy Block parties hosted by Healthy Macdonough between March 2006 and April 2007. These free, evening events offered fun and healthy activities (such as rock climbing, tug-of-war and the video game Dance Dance Revolution, which engages players in dance routines), healthy snacks and dance demonstrations by Vinnie's Jump and Jive, a local community dance organization. Local organizations provided volunteers and information about community resources.
- Vinnie's Jump and Jive presented Recess Rocks, a 10-week dance program scheduled during school recess. Launched in December 2006, Recess Rocks provided all 240 children at Macdonough School with a weekly 25-minute class that included Nia (a combination of yoga and martial arts), break dancing and swing dancing. Vinnie's replicated Recess Rocks in a second elementary school and planned a third, and the program is ongoing.
- Macdonough School began offering a school lunch program for the first time, in collaboration with the Community Health Center and the Hartford, Connabased Community Renewal Team, an antipoverty agency. Fifteen children were served five days a week in the summer of 2006. The program expanded the following summer to provide lunch to between 15 and 50 children and both breakfast and lunch to an additional 38 children enrolled in a free summer camp.

- Macdonough School established policies allowing children and parents access to
 the school during recess and nonschool hours to participate in school-supported
 programs that promote healthy eating and physical activity. These include the
 Healthy Block parties and Recess Rocks.
- Wesleyan University's Sociology Department partnered with Community Health Center to offer a community service learning course that engaged college student teams in community health projects combined with academic study. Teams working on Health Macdonough projects:
 - Researched best practice models for classroom and after-school healthy eating and physical activity programs.
 - Assisted in planning and implementing Girls on the Run, an afterschool program combining Dance Dance Revolution with other physical activities.
- Healthy Macdonough helped the local group Middletown in Motion to create a one-mile walking trail beginning and ending at Macdonough School. An event inaugurating the trail was held in September 2006.

Holyoke Health Center (Holyoke, Mass.)

Key Activities

• The Sullivan Elementary School in Holyoke formed a wellness committee, headed by the school nurse and including two parent representatives. A number of outside groups participated, including representatives from the YMCA, the Holyoke Food and Fitness Council and the Massachusetts Public Health Association, and the fitness director from Holyoke Community College. The committee developed a mission statement and a set of guiding principles.

- The Wellness Committee sponsored two annual "Family Fun Fitness" nights that offered a range of physical activities for children and their families.
- Students from Holyoke Community College, located across the street from Sullivan Elementary School, designed and conducted a physical fitness program for students arriving early to school. The college students earned education credits and stipends for their work.
- YMCA and another nonprofit organization worked with the Wellness Committee to develop a school gardening program at Sullivan School. The wellness committee also involved other partners in the project:
 - WGBY, the local television station, provided funds to rebuild an old greenhouse at the school.

- Massachusetts Public Health Association provided staff to engage housing project residents in rebuilding the greenhouse.
- Nuestras Raices, a community organization that works with the Puerto Rican population, involved its youth group and their parents in planting seeds on Family Fun Fitness night.
- Holyoke Health Center instituted or considered new policies designed to improve patients' health. While these may not have resulted directly from RWJF funding, "policy-focused funding has the potential to plant seeds of change within the organization," according to national program staff. For example, the center:
 - Began requiring health care staff to collect body-mass index (BMI) data on all of its pediatric patients.
 - Established a protocol to monitor a target population of pediatric patients for overweight.
 - Reconfigured space to allow staff to breastfeed and express breast milk, which reinforced the importance of breastfeeding.
 - Explored ideas to increase access to healthier food at staff events and in vending machines.
- Holyoke Health Center became the fiscal agent of the Holyoke Food and Fitness Policy Collaborative, a network of eight agencies, which began its work in April 2007 funded by a grant from the W.K. Kellogg Foundation. The collaborative is charged with creating system-wide change around food and fitness issues in the city of Holyoke. According to project staff, the RWJF synergy grant served a catalytic role in the process since the relationship-building with the school system and the outreach to other organizations helped prepare the center and its partners for the proposal to Kellogg. The community organization Nuestras Raices provides programmatic leadership.

Marshall University School of Medicine (Huntington, W.Va.)

Key Activities

- Project staff brought together community health center staff, the elementary school principal, the county school nutrition director, the mayor and other key individuals to form the Mt. Hope Children's Health Council.
- The Mt. Hope Children's Health Council conducted the Fayette County Energy Balance Assessment. Among the key findings in each of four areas:
 - Community needs: Mt. Hope had the lowest education and income levels in the county and the highest minority population.

- School policy: The Mt. Hope Elementary School lacked consistent nutrition education and opportunities for students to be physically active and did not have a policy-making process in place for nutrition of physical activity.
- Student knowledge and behaviors: Students did not know or follow nutritional recommendations, and did not recognize the relationship between nutrition and health.
- Lay outreach knowledge and behaviors: Families in the community did not cook, did not value physical activity and needed help stretching food stamp budgets.

- The Mt. Hope Children's Health Council created a universal feeding policy at Mt. Hope Elementary School, allowing all students to be served breakfast, lunch and after-school snacks at no charge to parents, regardless of family income. The program, called EATS (Everyone at the Table is Served), was funded by county and state Department of Education nutrition programs, local businesses, churches and the school.
 - Data from the two-year pilot program will be used to inform school wellness policy in West Virginia's most needy communities.
- With funding from West Virginia University Extension, the Mt. Hope Children's Health Council extended the breakfast and lunch program into a summer feeding and reading enhancement program called "Energy Express." Children receive breakfast, participate in a morning reading program and then have lunch.
- The Mt. Hope Children's Health Council established a Mt. Hope Walking Committee to create a walkable community master plan that included walking routes to school. In partnership with the city, the committee developed the Building a Walk-able Mt. Hope Initiative that:
 - Built a one-quarter mile, paved walking trail at Mt. Hope Elementary School.
 - Designed a network of sidewalk walking routes—marked with safety and mileage markers—that link key destinations, such as the elementary school, community center, park and football stadium with two public housing complexes and other residential areas in Mt. Hope.
 - Created the *Passport to Fitness* Physical Activity Challenge, which encourages children to record their physical activities, especially their use of the new walking routes, in a Passport to Fitness booklet. Children can earn prizes for their participation.
- Accent Education, Mt. Hope's after-school tutoring program, incorporated regular physical activity into its activities. All Accent Education students spend about 20 minutes on the walking trail after school is over and before the after-school

tutoring program begins. Tutoring staff have reported that the children are more ready to sit and learn when they come back to the classroom.

EVALUATION: BRIEF ASSESSMENTS

In August 2006, RWJF funded researchers at Wake Forest University Health Sciences, Winston-Salem, N.C., to conduct brief assessments of the four childhood obesity synergy projects.

Project Director Scott D. Rhodes, PhD, called the brief assessments a "pre-evaluation reality check." According to Rhodes, the qualitative assessments looked at:

- Project goals and objectives.
- The extent to which local partners agreed on those objectives.
- The extent to which project resources and activities were aligned with the objectives.

In addition to providing grantee organizations with mid-stream recommendations for improving their projects, the brief assessments were designed to guide RWJF in determining where and how to focus additional resources for obesity prevention initiatives. RWJF hoped to mine the exploratory assessments for "nuggets of gold," promising programs, tactics or strategies related to childhood obesity prevention that warranted rigorous, in-depth evaluation.

Evaluators prepared a brief assessment for each of the four synergy projects, as well as a cross-site report that identified themes across all four projects and the four synergy projects in Generations, a program associated with RWJF's *Active for Life* national program. Generations sites aimed to increase physical activity and healthy eating among children and improving public policy and neighborhood physical environments so they could better accommodate healthy living. For more about the methodology, and a list of cross-site observations resulting from the brief assessments of the two programs see Appendix 3.

COMMUNICATIONS

The program coordinator, Marjorie Sawicki, presented on the synergy projects at the 2008 AcademyHealth Public Health Systems Research Interest Group Meeting in Washington. See the Bibliography for details.

Grantees made presentations about their projects at the following meetings:

• 2007 Society for Behavioral Medicine conference in Washington (Campesinos Sin Fronteras, Somerton, Ariz.; Community Health Center, Middletown, Conn.; and Marshall University Medical School, Huntington, W.Va.).

- RWJF 2007 childhood obesity grantee meeting in New Orleans (Marshall University was a panelist, Community Health Center and Holyoke Health Center, Holyoke, Mass., made poster presentations).
- Weitzman Symposium, a conference on clinical care for vulnerable patient populations, at Wesleyan University, June 2009 (Community Health Center, in a presentation entitled "Stopping Childhood Obesity").

CHALLENGES

Project staff faced a number of challenges in engaging stakeholders:

- Many parents work long hours and had little time to participate in project activities. For example, the majority of school children served by Campesinos Sin Fronteras have parents who are farm workers. To accommodate them, project staff members were flexible, offering educational sessions in the afternoon, on Saturdays and even in the home, if work schedules or transportation issues prevented parents from traveling to the Somerton Youth and Family Wellness Center.
- Parents were often reluctant to get involved. For example, while parents in Middletown, Conn., recognized obesity as a problem and exhibited interest by attending the Healthy Block parties, project staff at the Community Health Center found it difficult to recruit parents for the Wellness Committee. To overcome this obstacle, staff distributed surveys at a block party to obtain the names of parents who were interested in becoming become more involved.
- Local officials did not always support project goals, at least initially. For example, the Fayette County (W.Va.) Board of Education did not recognize that the federal requirement to develop a school wellness policy could be an opportunity to address obesity goals, and the policy's language did not encourage schools to raise their standards. By developing model policy improvements at Mt. Hope Elementary School, Mt. Hope Energy Balance project staff hoped to influence, by example, other schools to strengthen their policies.
- Schools are overwhelmed with dropout issues, meeting academic testing standards, health problems among students, demands by state and federal agencies and other concerns. It is a challenge to get a school to invest in yet another idea. Two examples illustrate this challenge:
 - In Holyoke, the Sullivan School, which had been identified as having poor results under the federal No Child Left Behind Act, initially viewed the Holyoke Health Center's project as "just another burden." Health center staff eventually got the project underway by involving other partners, including the Holyoke Community College.
 - The Community Health Center in Middletown, Conn., already operated schoolbased health centers in Middletown schools. Without those established

- relationships, the Community Health Center may have not garnered the attention of Macdonough Elementary School for the Healthy Macdonough project.
- Coordinating many different stakeholders is complex. Historical tensions over the roles and focus of different organizations interested in obesity complicated coordinating efforts in some cases. For example, while staff at the Middletown Community Health Center engaged to some extent with all key partners, they concentrated on a smaller number that offered immediate opportunities for action, such as the community service partnership with Wesleyan University and the Community Renewal Team summer lunch program.

LESSONS LEARNED

Lessons Related to Policy and Environmental Change

- 1. Understand that policy and environmental change require much more time and groundwork than developing and implementing a new program. Be sure to have realistic timeframes for measuring the accomplishments of a change-oriented initiative. Adequate time also allows for results to be documented and a stronger case made for policy change (Program Director and Project Director, Marshall University, Huntington, W.Va.)
- 2. Ensure that program staff has plenty of support when asked to change focus to address policy and the environment. People who do program planning are able to change focus but can not do so overnight. They need not just a different set of skills, but a different viewpoint. (Program Director)
- 3. Try as many strategies as you can, when attempting policy and environmental change. "You can't tell what will work," said Holyoke Health Center (Holyoke, Mass.) Project Director Judy Sopenski.
- 4. **Define projects broadly—as community-wide resources, as opportunities to engage families and as strategies to set the stage for policy change.** A more dynamic and flexible approach creates more opportunity than a narrowly defined project with a fixed curricula. (Project Director, Community Health Center, Middletown, Conn.)
- 5. Use pilot programs to start, expand and keep a conversation going about obesity that may lead to constructive policy change. Eighteen months is too short a timeframe to expect major policy change, but future policy changes may be more creative, visible and well-supported after an initial conversation is started and community consensus is established. (Project Director, Community Health Center)

Lessons Related to Working with Partners for Policy and Environmental Change

- 6. Collaborate with others when working to effect policy and environmental changes. Involve people who have the trust of the community, who can bring others to the table, who fill gaps and who have resources. Partnerships allow a project to leverage resources and power for a stronger and more successful result. Non-traditional partnerships are particularly useful for bringing fresh ideas and enthusiasm to the table. (Program Coordinator)
- 7. **Ask people involved in the issue: "Who else should I be talking to?"** That helps build a base of relationships and resources to draw upon as the project proceeds. (Program Coordinator)
- 8. Engage a community policy advocate—a "policy champion"—to move things forward. In the synergy projects, it took the work of a policy champion within each organization to bring the necessary stakeholders to the table. Such a person is critical. (Program Coordinator)
- 9. Engage people's attention by helping them feel their contribution is important to make things happen. In Mt. Hope, "The Children's Health Council is an amazing group that focused on this tiny community that is so poor," said Nonie Roberts, project co-coordinator at Marshall University. "The council is the favorite meeting of the month for people because things happen here."
- 10. Understand that even if you are doing a good thing, you will still be stepping on someone's toes. "Not everyone will be happy. In community development in a small town, one person bothered is a bigger deal," said Nonie Roberts, project cocoordinator at Marshall University.
- 11. Be realistic about the amount of time it takes to develop the relationships needed to mobilize a community. "If we had had 24 months instead of 12 for our second grant we could have developed the relationships needed to replicate the model in another community," said Richard Crespo, project director at Marshall University.

Lessons Related to Engaging Parents and Schools in Childhood Obesity Prevention

- 12. **Get buy-in from parents.** That takes time and should ideally happen before a project begins. Once a project has buy-in, a true partnership forms that can be sustained without funds. "When the grant ended, the parents stayed involved," said Campesinos Sin Fronteras (Somerton, Ariz.) Project Director Floribella Redondo. "One parent leader is now providing the curriculum to community members. Another is now an aerobics instructor."
- 13. Address parents' depression and self-esteem issues. These problems, which can be widespread in a community, can inhibit parents from dealing with day-to-day lifestyle issues. (Project Director, Campesinos Sin Fronteras)

- 14. **Schedule meetings around parents' availability in order to increase their participation.** This can be complicated when parents have unpredictable work schedules, as do the migrant workers served by Campesinos Sin Fronteras. (Project Director, Campesinos Sin Fronteras)
- 15. Know your audience and adjust the conversation as appropriate when talking about obesity, healthy eating and physical activity. In some contexts it may be appropriate to talk about the dire consequences of the obesity epidemic. However, Community Health Center project staff found that emphasizing feeling one's best and having fun with food and fitness are more likely to engage kids and families in action for change. (Project Director, Community Health Center)
- 16. When working for policy change in schools, build on an established base of operations that is already known and trusted by parents. In the case of the Healthy Macdonough program, the Community Health Center was able to build on its school-based health center, which already had credibility as a provider of health, mental health and dental services. (Project Director, Community Health Center)

AFTERWARD

The synergy projects were a pilot program and concluded at the end of the grant period. However, individual projects have continued in varying ways:

- Campesinos Sin Fronteras in Somerton, Ariz., continued its synergy project through
 a three-year grant from the federal Office of Minority Health (U.S. Department of
 Health and Human Services), using an obesity prevention curriculum it modified
 based on lessons learned.
 - According to project staff, "Mobilizing Parents laid the groundwork for us to involve the greater community in working together to improve policies and environments that promote healthy behavior. The parents that are involved in this program are now completely engaged, and they are recruiting additional parents."
- *Community Health Center* in Middletown, Conn., leveraged its synergy grant into two additional grant-funded programs:
 - Food Smart and Fit in Meriden, Conn., funded by a grant of \$148,000 from the federal Office of Women's Health (U.S. Department of Health and Human Services), is a program for young minority women that focuses on food and fitness for lifelong health.
 - Food Smart and Fit in New Britain, Conn., with \$250,000 grant from the Healthy Tomorrows Partnership for Children (a program funded by the Maternal and Child Health Bureau of the federal Health Resources and Services Administration, in partnership with the American Academy of Pediatrics), addresses both individual and environmental dimensions of risk for obesity.

- *Holyoke Health Center's* work with the Holyoke Food and Fitness Collaborative (Holyoke, Mass.) continues with Kellogg funding.
- *Mt. Hope Energy Balance* in West Virginia continues its Energy Express summer eating and reading program and has developed new initiatives designed to keep both children and adults moving and eating healthy foods. The project has received grants from the U.S. Department of Agriculture to provide fresh fruits and vegetables to elementary school students during the school day.

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APPENDIX 1

Funded Projects in *Obesity Prevention in Children: Synergy With the Diabetes Initiative*

(Current as of the time of the grant; provided by the grantee organization; not verified by RWJF.)

Campesinos Sin Fronteras (Somerton, Ariz.)

ID# 056563 (January 2006 to July 2007): \$59,407

Contact: Project Director: Floribella Redondo

(928) 627-6677

floribella@campesinossinfronteras.org

Community Health Center (Middletown, Ct.)

ID# 056566 (January 2006 to July 2007): \$60,000

Contact: Project Director: Jayme Hannay

(860) 347-6971, ext. 3661

hannayj@chc1.com

Holyoke Health Center (Holyoke, Mass.)

ID# 056565 (January 2006 to July 2007): \$60,000

Contact: Project Director: Judy Sopenski

(413) 420-2108

judy.sopenski@hhcinc.org

University Physicians and Surgeons (Marshall University) (Huntington, W. Va.)

ID# 056564 (January 2006 to April 2007): \$57,249

ID# 063165 (September 2007 to August 2008): \$50,000

Contact: Project Director: Richard Crespo, PhD

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APPENDIX 2

Checklist Results

(Current as of the time of the grant; provided by the grantee organization; not verified by RWJF.)

National program staff compared scores reported by four sites at baseline and at the end of the project in each of seven categories involved in making policy and environmental changes. Results were analyzed by category for all sites combined, and by individual project across all seven categories. S.D. is the standard deviation plus or minus from the mean score.

Grantee Policy and Environmental Changes by Category		
Category	Baseline (Mean ± S.D.)	Project End (Mean ± S.D.)
Alliances	2.6 ± 2.0	7.4 ± 1.0
Organizational Capacity	2.6 ± 1.4	7.3 ± 1.9
Social Norms	2.5 ± 1.7	7.0 ± 1.6
Base of Support	2.0 ± 1.9	5.6 ± 2.8
Impact	2.0 ± 1.6	4.8 ± 3.0
Environment	1.6 ± 1.9	5.5 ± 2.6
Policies	1.0 ± 1.3	3.4 ± 3.3

Overall Policy and Environmental Changes by Grantee		
Grantee	Baseline (Mean ± S.D.)	Project End (Mean ± S.D.)
Campesinos Sin Fronteras, Somerton, Ariz.	3.9 ± 1.0	8.6 ± 1.0
Community Health Center, Middletown, Conn.	3.2 ± 1.1	6.9 ± 1.7
Holyoke Health Center, Holyoke, Mass.	0.9 ± 1.5	4.0 ± 2.7
Marshall University, Huntington, W.Va. (project in Mt. Hope, W.Va.)	0.6 ± 0.9	5.1 ± 3.1

APPENDIX 3

Brief Assessments' Methodology and Cross-Site Observations

Methodology

Wake Forest University Health Sciences researchers conducted brief assessments of the four childhood obesity synergy projects by:

- Reviewing written documents provided by sites and the national program office.
- Visiting each site for two days between November 2006 and March 2007, including taking "windshield tours" of neighborhoods and communities.
- Interviewing stakeholders during the site visits using an interview guide developed by the researchers and the RWJF evaluation officer.
- Developing logic models through dialogue with project staff who later provided revision suggestions. These logic models allowed partners to view their projects systematically by identifying the project's underlying hypotheses, required resources and expected outcomes.

According to RWJF Special Advisor for Evaluation Laura C. Leviton, PhD, the decision to use brief assessments was made because:

- "These projects were pilots and did not merit the resources for evaluation that a national program would require, being limited themselves in resources, time and scope."
- "The idea was to find out whether these programs could retrofit to address the new RWJF priority on childhood obesity. That did not require formal evaluation."
- "If the assessments revealed particularly promising practices, RWJF childhood obesity team members agreed that they would decide whether to proceed with formal evaluation and possible expansion of the promising innovation."

Evaluator Observations

Evaluators made the following observations across the four *Diabetes Initiative* and four *Active for Life* synergy projects:

- The role of the site director and site coordinator varied across the sites.
- Sites established well-articulated goals and used logical tactics to meet them.
- All sites were heavily focused on targeting children at risk for obesity through "intervention activities" (such as classroom activities or a gardening curriculum) and less focused on policy change.
- Some sites reported needing support to work with the media.

- Sites that seemed most successful (based on this qualitative review) brought together a variety of community partners who then dedicated individual and agency resources to the effort.
- Some sites partnered with a local university, which seemed invaluable for comprehensive, detailed and multi-level projects with a wide scope.
- Many sites used an ecological model that integrated the individual child, institution, community and policy levels to effect change.
- Where the project coordinator was implementing multiple projects, less seemed to happen with the project being assessed.
- Sites uniformly found the national program office to be invaluable and appreciated national program staff support, creative thinking and access to resources, guidance and technical assistance.
- Sites reported that the RWJF name added credibility to their efforts in local communities.
- Few sites developed measurable objectives to help guide their project.
- Sites reported not having as much opportunity to learn from one another as some would have liked.
- Sites had concerns related to sustainability, although sites with university partners appeared less worried about sustainability.
- Uniformly, sites found it difficult to engage parents in projects.
- Project coordinators across all sites served as "community organizers," assessing the
 environment, identifying potential partners, building a team, strategically planning
 next steps, sparking action and concurrently planning for sustainability. Because
 obesity prevention may require a broad base of support to tackle the problem at
 various levels, this might be an important focal point for program development,
 implementation and evaluation efforts.

The assessments confirmed "that there was no point in conducting more extensive evaluation" of these projects according to Leviton. This brief assessment methodology continues to be used to study other initiatives at RWJF, she said.

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