

Brief Assessments of Community-Based Childhood Obesity Prevention Within the Injury Free Coalition for Kids Initiative Sites

Final Report

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Executive Summary

The Robert Wood Johnson Foundation funded eight childhood obesity prevention programs through the national Injury Free Coalition for Kids (IFCK) program, a hospital-based, community-oriented injury prevention program. The purpose of funding these obesity prevention programs within IFCK sites was to test innovative approaches to increasing access to healthy foods through programs that already promoted physical activity. The IFCK sites were awarded up to \$60,000 each for 18 months. They were asked to build on their existing partnerships to focus on environmental approaches to increase access to healthy foods, integrate the promotion of healthy eating with efforts to increase physical activity, and begin to address policy concerns.

The Foundation contracted with OMG to conduct a brief assessment of the eight programs to assess their early implementation phase and the programs' capacity to support a formal evaluation. We conducted the assessment over an eight-month period through document reviews, in-person interviews, and program observations. Our findings are based on the sites' status at the time of our visits, which occurred midway through the grant period.

Our assessment identified eight promising program strategies across the eight grantees. The criteria we used to make these determinations are: 1) potential for impact, based on logic of the design; 2) potential for impact, based on program intensity and duration; 3) innovativeness of approach(es); 4) ability to reach the target population; 5) acceptability to stakeholders; 6) feasibility of implementation; 7) potential for replication; and 8) sustainability. While none of the programs in its entirety could be considered a promising model for replication at the time of our assessment, the following program elements merit attention and further exploration of their obesity prevention potential.

Promising Program Strategies

Strategy 1: Peer Mentoring

The Diabetes and Obesity Awareness and Prevention Program (DOAPP) in Cincinnati used a peer mentoring program to educate young children in an after-school program about healthy eating, nutrition, and physical activity. The peer mentors were from a magnet high school focused on health careers. Through intensive training and a well-developed hands-on curriculum, the peer mentors were able to energize and teach the younger children. This strategy has a high potential for replication in other school settings because older students are always available and can easily connect with younger children. It is also highly sustainable since the students are volunteers. The fact that the older students delivering the curriculum can also benefit by applying what they teach to improving their own lifestyles makes this intervention an even more appealing strategy.

Strategy #2: Childcare Menu Changes and Parent Cooking Classes

The Chicago grantee hired a registered dietician to train Head Start center cooking staff on better nutrition and healthier cooking methods. The food preparation staff was visibly excited about the menu changes they had made to provide healthier meals and increased awareness about better health and nutrition was reported among teaching staff and children and even some parents. Parent engagement was further facilitated by evening cooking classes offered at the center. The training of the cooking staff in conjunction with the parent nutrition education and cooking classes could be a model to be replicated nationally in Head Start centers and childcare centers. Because the program targets a very young audience and reaches their parents, this intervention has high potential to change behavior in the long run.

Strategy #3: “Plant of the Week/Harvest of the Month” Program

In Portland, the Garden of Wonders program engages the children in healthy eating through gardening on the school’s premises, incorporating the food that is grown into the school breakfast and lunch and a classroom curriculum designed to increase knowledge of seasonal fruits and vegetables. The curriculum integrates nutrition with science and social studies, featuring plants of the week grown in the garden. Cooking demonstrations and taste tests add to students’ knowledge and enthusiasm for the curriculum. The program is promising as a best practice because it is well received by students, teachers, and parents. Although not all schools can have a garden on their premises, the idea of teaching children about locally grown foods while they are in season, and giving them an opportunity to taste them in their lunches, makes this a perfect combination of didactic and experiential approaches, strengthening its potential impact on behavior.

Strategy #4: Walking Programs

A walking program, either to school or in school, is a primary focus in at least three sites (Little Rock, Seattle, and Portland) and some element of walking is included in others. Some grantees have integrated walking programs into other curricular courses, such as math and geography. These types of programs show promise in part because they are well received and very inclusive. People at all levels of fitness can participate, and often they are activities children and their parents can do together. With adults as role models, walking programs show great potential to have significant impact on children’s long-term behavior, and on adults’ behaviors as well.

Strategy #5: Healthy Breakfast Taste Testing

The Seattle Start Strong program’s goal is to increase breakfast consumption by increasing the palatability and acceptance of the foods that are offered to children by conducting taste tests prior to introducing new food items on the menu. Children are invited to test the new foods and share their opinions through a simple rating form. The practice is very time consuming to implement because of the trial period to find the items children are most likely to eat. However, once the menu is set and properly marketed to students, it has the potential to impact breakfast consumption in a positive manner.

Strategy #6: Increasing Physical Activity in Classrooms

The New York and Little Rock IFCK sites developed exercise breaks in the classroom to incorporate more physical activity into the school day in the face of time and space limitations. In New York, “transition exercises,” promoted by the IFCK team, vary in intensity, from stretching and yoga to jumping/shaking. The Little Rock program staff developed materials to provide teachers with ready ideas for short, fun activities that get children moving. Both programs were implemented as a way to comply with new state policies that require additional time spent on physical activities during the school week. The practice shows promise because it does not require setting aside dedicated periods to engage in physical activity since it is included in the class time. Also, teachers report benefits in terms of students’ attention and concentration during class after the brief period of physical activity.

Strategy #7: Curriculum Integration

The Little Rock and Portland programs integrate the healthy eating and exercise activities within other areas of school curriculum such as science, geography, math, and reading. Curriculum integration is a promising strategy because incorporating nutritional and physical activity concepts into mandatory school subjects allows lessons to be reinforced from a variety of perspectives and learning styles. Furthermore, providing curriculum support, development, or materials where none exists can further strengthen partnerships with schools and other community institutions such as churches and recreation centers, which are important sources of educational and environmental influences for children. Although this strategy is highly replicable, it is important to allow for creativity and flexibility on how the lessons are organized and delivered to students.

Strategy #8: Farmers’ Markets

A few sites are operating or are considering the development of farmers’ markets. We did not have the opportunity to observe these, so it is difficult to say whether these practices would hold promise as implemented. However, this strategy has gained increased attention as an environmental approach that provides easy access to healthier foods while benefiting local farmers. New York is the one site where a farmers’ market is already under way. Farmers’ markets hold promise for several reasons. In low-income urban settings, it is not easy to find fresh fruits and vegetables at affordable prices, making them available in local schools eliminates this obstacle. For rural areas, the produce is easily available from local providers that operate close to small communities. By eliminating middlemen, the cost of fruits and vegetables is lowered and both families and growers benefit. Markets also offer choices for families, especially if the items available cater to their cultural food preferences. Because of their visibility on school grounds, well-run farmers’ markets generate a lot of business from families whose children do not attend the school and, thus, become a community resource. If the sales generate a profit, the market can also become self-sustaining. Finally, the opportunity to impact the entire family’s food consumption is a very attractive feature of this promising practice.

Despite their appeal, farmers' markets are very time consuming to set up and to run, requiring heavy investment of staff time and support from volunteers to keep them going. This makes the practice not as easy to replicate by programs that are not well staffed.

Other Findings

The Foundation's use of pilot grants was well suited to the goal of identifying promising practices to address the pressing problem of childhood obesity. The above strategies are evidence of this success. However, the pilots' design included too many ambitious goals that could not be accomplished in the short time frame, with the limited funds allocated to these grants. Grantees were stretched too thin in many cases to fully and satisfactorily implement all of the intended components.

One of the grant requirements that challenged most grantees was the expansion and/or adaptation of their existing injury-focused partnerships to address issues related to childhood obesity. The effort required more time than was anticipated in view of the many other program requirements. Furthermore, the skills needed to negotiate the development of shared outcomes, roles, and responsibilities were not always part of the grantees' assets. As a result, some of the reconfigured partnerships were not sufficiently prepared and/or engaged to effectively support and facilitate the work of the grantee.

Finally, although all grantees had a solid research foundation based on their academic experience, their ability to transfer these research skills to evaluate the impact of a program operating under the constraints of the "real world" was tested by the pilots. Most grantees faced challenges related to instrument development and data collection. Unclear expectations regarding the pilots' evaluations further compromised the grantees' capacity to produce solid designs and methodologies. As the pilots evolve and grantees narrow their focus, they will be better positioned to make improvements in their evaluations.

Recommendations

Based on the findings of the brief assessment, we offer the following recommendations to enhance the Foundation's grant-making strategy around childhood obesity prevention. Along with the design recommendations, we offer suggestions on how to support grantees to be more effective in their work.

1. **Short-term pilot grants should have few discrete goals with short-term outcomes that can be measured during the grant period.**
2. **A theory of change developed at the beginning of the initiative would help clarify the purpose and expectations for all stakeholders involved.**
3. **An explicit planning period included as part of the grant would help ensure programs are ready for launching and partnerships are in place to support the work.**
4. **When selecting grantees, greater weight should be placed on the capacity to create partnerships in community settings.**
5. **Strategies to ensure cultural competency must be required of all grantees working with diverse populations on obesity prevention.**
6. **When working with schools, grant timing should be a major consideration.**

- 7. Adequate financial resources must be allocated to the implementation of pilots, especially if the goal is to create new programs, rather than expand existing ones.**
- 8. While connecting different grant-making streams creates desirable synergy, funders should consider the impact that changes in one area will have on another.**
- 9. Additional pilots focusing on obesity prevention in rural areas are needed.**
- 10. Evaluation requirements must be clear and realistic for all grantees.**
- 11. Evaluation of pilot programs in obesity prevention should focus on short-term outcomes such as knowledge and behavior changes, which may lead to changes in BMI in the longer term.**
- 12. Group approaches to the delivery of technical assistance must be supplemented with individualized strategies to improve effectiveness and relevance.**

Introduction

For several years, the Robert Wood Johnson Foundation has invested in strategies to promote physical activity among people of all ages. As obesity rates have increased significantly in recent years, the Foundation determined that it needed to add an equal emphasis to promoting healthy eating, especially among children. To halt the increase in childhood obesity, the Robert Wood Johnson Foundation (RWJF) engaged in a three-pronged approach: 1) building the evidence on what works to promote healthy eating and increased physical activity among children, 2) testing innovative approaches to spread promising models, and 3) educating leaders and investing in advocacy strategies.

The Foundation's primary strategy for testing innovative approaches has been to incorporate childhood obesity prevention efforts within other RWJF-funded child-focused programs. One assumption behind this strategy is that an integrated approach is a more efficient way to develop and disseminate childhood obesity prevention efforts in low-income communities. To foster integration, the Foundation funded childhood obesity prevention grants through nine existing national programs of the Foundation. These grants were called "synergy grants." The Foundation believed that adding childhood obesity prevention efforts to existing projects would be mutually advantageous, leading to a more substantial combined impact. One of the national programs chosen for the synergy grants was the Injury Free Coalition for Kids (IFCK).

IFCK is comprised of hospital-based, community-oriented programs, whose efforts are anchored in research, education, and advocacy. The coalition includes 40 sites located in 37 cities, each housed in the trauma center of its participating institution such as Children's Memorial Hospital in Chicago and Columbia University Medical Center in New York City. Core activities of the IFCK sites include reconstructing park and school playgrounds; initiating and supporting supervised activities in art, dance, cycling, and other athletics; and providing educational programs such as bike and street safety.

The IFCK program was selected to be part of the Foundation's childhood obesity prevention program because of its relevant work in creating safe play places and structured physical activity programs for children in low-income communities. Integrating childhood obesity prevention within IFCK was therefore in alignment with the Foundation's goal of adding healthy eating programs to its efforts to increase physical activity.

Eight IFCK community partnerships received synergy grants of up to \$60,000 over 18 months (December 15, 2005 to June 14, 2007). The pilot projects were expected to demonstrate promising policy and environmental

Obesity Prevention Grantees

**Oregon Health and Science
University School of Medicine
(Portland, OR)**

**Children's Memorial Hospital
(Chicago, IL)**

**Connecticut Children's Medical
Center (Hartford, CT)**

**Pitt Memorial Hospital Foundation
Inc. (Greenville, NC)**

**Children's Hospital Medical Center
(Cincinnati, OH)**

**University of Washington School of
Medicine (Seattle, WA)**

**Columbia University Medical Center
(New York, NY)**

**Arkansas Children's Hospital
Research Institute (Little Rock, AR)**

approaches to improving access to healthy foods while integrating these efforts with their existing IFCK physical activity initiatives. The IFCK National Program Office (NPO), located at Columbia University's Mailman School of Public Health, oversaw the pilot projects and provided technical assistance to the partnerships.

As pilot projects with a short time frame, they were intended to quickly test innovative approaches that could lead to the dissemination of successful program models that prevent and reduce childhood obesity. The funding was specifically for the pilot phase of the initiative, and the grants were not intended to be renewable. As a short-term exploratory grantmaking approach, RWJF hoped the pilot projects would quickly yield lessons that could be applied to future grantmaking programs in childhood obesity prevention.

Because of the rapid pace of change in childhood obesity prevention practice, the Foundation determined that early assessment of the pilot interventions would be an effective way to yield lessons about what works best to halt the epidemic. The Foundation contracted with several evaluators, including OMG, to conduct brief assessments of the early childhood obesity prevention grants, including both the synergy grants funded within existing national programs as well as direct grants from the Foundation. Under the early assessment initiative, there was no commitment for further study of any given intervention. The brief assessments were intended to "screen for diamonds in the rough" and identify the most promising interventions. The findings would help guide RWJF's future investments in childhood obesity prevention as well as contribute to the growing knowledge base in the field of childhood obesity prevention.

OMG's Role

In May 2006, the Foundation commissioned the OMG Center for Collaborative Learning (OMG) to conduct a brief assessment of the IFCK obesity prevention programs. In addition to conducting the assessment, OMG was contracted to provide training and consultation to the childhood obesity prevention grantees to increase their capacity to conduct self-evaluations and to contribute to a formal summative evaluation of their programs in the future, should their pilot programs be scaled up or sustained and warrant it.

OMG's assessment had three primary goals:

- Clarify the national IFCK obesity prevention initiative's goals, objectives, and outcomes, and connect them to the activities undertaken by grantees.
- Assess the programs' early implementation successes and challenges, and determine progress made toward achieving stated program outcomes using a theory of change approach.
- Assess the grantees' capacity to support a more formal evaluation in the future, including:
a) how well the measures, identified through the theory of change process, reflected the program's reality, b) whether reliable data sources existed for the identified measures,

c) the frequency with which the measures needed were collected, and d) how the information was used by the grantees.

This report presents the findings of the brief assessment that was conducted between May and December 2006. It is divided into three sections: Section I describes our assessment methodology. Section II presents findings from our cross-site analyses. Section III provides a summary of findings and recommendations. The report includes an appendix of individual site reports (Appendix A).

I. Methodology

Theory of Change Development

Initially, OMG used a theory of change (TOC)¹ and pathway mapping process to help the IFCK National Program Office (NPO) articulate its intent and design for the childhood obesity prevention work. OMG also solicited the input of the RWJF childhood obesity prevention program staff to ensure that the draft theory of change reflected their understanding of the program's design. The pathway map articulating the theory of change for the IFCK childhood obesity prevention initiative — as conceptualized by the Foundation and the NPO — is represented in Figure 1, on the next page.

Following the development of the theory of change for the NPO, OMG worked collaboratively with each site to develop its theory of change. This work occurred through document reviews and interviews, and then individual sites reviewed the drafts. The TOC documents were finalized jointly with the individual sites. Through development of the pathway maps, program staff members were able to analyze their goals and assumptions and critically explore possible connections and gaps between program activities and expected outcomes. The TOC documents were revised as needed as the work evolved. The pathway maps articulating each site's theory of change are included in Appendix A.

¹ The TOC is an organization's belief about how to positively change conditions or behavior. A pathway map is the visual depiction of the links between desired outcomes and strategies while also articulating and challenging the assumptions that one is making about the ways that they plan to impact change.

Injury Free Coalition for Kids: Obesity Prevention Initiative THEORY OF CHANGE

Target Population: Low-income children ages 3-12 years

Contextual Background

Over the past 3 decades, rates of obesity in the US have more than doubled among children ages 2-5 and more than tripled among 6- to 11- year olds

Obesity rates are higher for children and adults in low-income communities

Adding obesity prevention to IFCK sites produces an economy of scale that builds on what has already been done and taps into existing resources

Involving a child's family in obesity prevention programs is a challenge, especially in low-income communities where money and time are scarce

In some schools funding cuts have resulted in the elimination of physical education classes

Schools often offer poor nutritional choices to children

Many poor communities do not have adequate and safe open spaces for children to play and exercise

Different demographic groups may respond differently to obesity prevention programs, so what works in one group may not work for another

Preventing obesity requires lifelong lifestyle changes that are difficult to attain and maintain

The short duration of the initiative is not conducive to long-term outcome evaluation, so the focus should be on short-term outcomes

Assumptions

There are some community interventions out there that may have powerful effects in the prevention and reduction of obesity

Non-policy environmental strategies must be coupled with policy changes in order to impact obesity rates

Environmental and behavioral approaches are necessary to impact obesity rates

Comprehensive approaches to obesity prevention, using a mixture of strategies that have worked, will be more effective than any single strategy

Focusing on children is a way to introduce changes that will benefit the health of the entire family

Local models that use local data, local coalitions, local education, and local approaches are better because the community can take ownership of the initiative

Promising strategies identified from local approaches can be effectively reproduced in other communities/environments

Increased awareness in schools and communities about the rising incidence of childhood obesity and its negative health consequences is needed and it is achievable

Working with community partnerships in the prevention of childhood obesity is more effective than trying to do this alone

Partners with nutrition and food policy expertise can influence decisions in the community and affect change

Experienced physicians concerned with obesity can use their leadership to influence their peers and put pressure over the political structure to influence policy at the national and local levels

Pediatricians are best positioned to test obesity prevention interventions because they have access to children, they collect necessary data and they disseminate the findings of their research among other health professionals

IFCK sites already have positive working relationships and status as trusted partners in their communities, which will help their obesity prevention work

Being part of IFCK gives the OP grantees a broad perspective – beyond healthy eating and physical activity -- on what it takes to impact obesity rates among children

Strategic Focus:
 Identify promising strategies that halt the growth of childhood obesity through policy and non-policy community interventions that lead to healthy eating and increased physical activity

➤ Promising strategies are: those that are accepted and adopted by the community, reach short-term outcomes, have capacity to track BMIs,

Approaches

- ABC model of prevention
- Diverse local solutions
- Broad-based coalitions (hospitals, universities, community groups, elected officials, parents, schools)
- Hospital based (MD led)
- Synergy with Injury Free

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Obesity Pathway Map

Obesity Prevention Initiative Theory of Change

**Short-Term Outcomes
(18 months)**

NPO Activities

- 1- Fund eight (8) demonstration sites
- 2- Capacity Building for grantees – technical assistance (TA) and information sharing (peer learning conference, e-mail chain, obesity website, guidance on data collection tools)
- 3- Track progress; provide oversight to grant
- 4- Facilitate integration of obesity prevention work with IFCK
- 5- Participate in evaluability assessment and identify and disseminate promising strategies
- 6- Facilitative sustainability – advocate for grantees, support in gaining additional funding



- Increased knowledge among grantees about obesity prevention strategies
- Increased grantee capacity to work in partnerships around obesity prevention
- Promising strategies are refined based on knowledge gained through pilots
- Increased grantee capacity to evaluate the effectiveness of their strategies and support a more rigorous evaluation
- Increased opportunities for physical activity and to access healthy foods among children who participate in the pilots
- Strategies backed by preliminary evidence of increased physical activity and increased access to and palatability of less calorie-dense foods are identified
- Obesity prevention efforts are fully integrated into IFCK
- Needed policy changes are identified, and initial steps are taken towards policy change
- Sustainability plan is developed for sites who choose to continue

**Intermediate Outcomes
(2-5 years)**

- Promising obesity prevention strategies are rigorously evaluated
- Other practitioners and funders implement and support the replication of the promising strategies
- Knowledge base of what works in obesity prevention is built/strengthened (field building).
- Partnerships working on obesity prevention are well established at the community level
- The benefits of the synergy with IFCK continue to strengthen the comprehensive approach to obesity prevention
- Increased physical activity and healthy food consumption for children in the target population
- Sites who choose to continue their obesity prevention work secure other sources of funding



**Long-Term Outcomes
(5 years plus)**

- Promising strategies are sustained and replication continues
- Effective individual strategies are combined for a more comprehensive approach
- Partnerships guide obesity prevention policy at the community level and inform national policy
- Decreased obesity rates (BMI) among children 3 to 12 years old.
- Changes are sustained and there is institutionalization of successful policies and practices



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Pathway Map

Interviews and Site Visits

In the fall of 2006, OMG conducted site visits and phone interviews with representatives from each of the eight IFCK childhood obesity prevention grantees. Prior to the site visits, the coordinator or principal investigator at each site identified from one to four key partners in their work for OMG to interview by phone. The partner interviews provided helpful context that further informed our observations and questions during the site visits.

Subsequent to the sites' partner phone interviews, a team of two OMG staff visited each site for 1 ½ - 2 days. The site visits included interviews with key program staff, service providers, principal investigator(s), and partners, as well as observations of program activities. We also reviewed data collection tools and program materials. Through these site and phone interviews, OMG gathered staff and key stakeholders' views of what made their program unique; of partnership challenges and successes; and of the program's most important elements, perceived impacts, and challenges and gaps. OMG also gathered information on the program's data collection and evaluation capacity.

Data from each site were analyzed and brief memos were developed on the findings for individual sites. Each memo was shared with the appropriate site, and each site was given opportunities to comment and provide feedback on the memos. Site feedback was incorporated into the final memos, which were shared with the NPO and the Foundation program officer for the assessment. The site profiles in Appendix A of this report are derived from the site memos.

Following the development of the individual site memos, we analyzed the data across all of the sites to determine cross-site themes and differences within the framework of the overall initiative's theory of change. Results of these cross-site analyses are presented in the next section of this report. These findings are based on our observations during our site visits and phone interviews conducted from October 1 to December 1, 2006. At that time, grantees were about halfway through their grant period and most of them had not yet fully implemented all aspects of their work.

II. Findings: Cross-Site Themes

In this section, we present findings in the following areas: 1) plausibility and design, 2) program implementation, 3) partnerships, and 4) evaluation capacity. Under Plausibility and Design, we discuss the Foundation's intentions for this initiative and how the Foundation's and the National Program Office's expectations for the initiative informed the implementation of the pilots. In the Program Implementation section, we present the broader context that the programs were operating in as they implemented the pilots; an overview description of the pilot projects; summaries of the promising strategies that emerged in the sites, highlighting program elements that hold promise and warrant further exploration; an overview of the policy efforts under way; and some of the challenges that the sites experienced in conducting the pilots. The Partnerships section summarizes the sites' experiences with using a partnership model for this work. The Findings section closes with a discussion of the sites' capacity for evaluation — for self-evaluation of the pilot projects as well as for supporting an external summative evaluation of the work down the road.

1. Plausibility and Design

The IFCK childhood obesity prevention projects were designed as short-term exploratory pilots to test innovative approaches to the prevention of childhood obesity. The original call for proposals (CFP), issued by the National Program Office, asked potential grantees to submit proposals for pilot projects that would: 1) improve access to healthy foods in their targeted schools or neighborhoods; 2) include policy and environmental strategies to increase access to healthy foods in community and/or school settings; and 3) integrate this new work with existing IFCK strategies to improve the health of children by addressing both physical activity and healthy eating. The CFP stated that the IFCK funding will continue to support structured physical activity programs and the creation of safe places to play, while the childhood obesity prevention funding will support efforts to increase access to healthy foods among low-income children. This reflected the Foundation's notion that policy and environmental changes to support healthy eating would be *added to and integrated with* existing physical activity efforts of the IFCK programs, rather than creating new programs that encompass both from scratch. This is the synergy approach.

Overall Initiative Design

The initiative's multifaceted strategy, combined with the short time and limited resources available, led some grantees to go in too many different directions simultaneously to meet the grant's expectations. The resulting dispersion of grantee efforts weakened some areas of implementation. As described above, the Foundation set out to add an emphasis on healthy eating to existing physical activity programs to impact both sides of the energy balance equation, as both are needed to combat obesity. To promote healthy eating, the Foundation chose to focus on environmental changes to increase access to, and the palatability of, healthier foods such as changing the offerings in the school cafeteria. However, in the theory of change for the initiative, articulated by the NPO with the Foundation program staff's input, a key assumption is that environmental *and* behavioral approaches are necessary to impact obesity rates. This makes sense and understandably some of the grantees tried to affect both the demand

for healthy food as well as the supply. Regarding policy, the Foundation indicated that environmental interventions could focus on “policy or non-policy levers for change.” The CFP issued by the NPO as well as the theory of change included the expectation for the identification of needed policy changes and initial steps toward policy change in the short term.

The expectation that the grantees would address healthy eating and physical activity; implement programs and advocate for policy changes; and impact both behavior and the environment was a lot to undertake given the grant size and limited time. This was especially true for three of the grantees (Hartford, Greenville, and Seattle) that were starting childhood obesity prevention programs from scratch. In several cases, trying to accomplish a diverse set of goals hindered grantee capacity to deliver quality programs across all the required strategies. For example, the core effort in Hartford was the implementation of a curriculum to teach elementary school students about healthy eating and exercise and to reward them for behavior changes in both areas. However, efforts to affect the supply of food at local markets and to assess the menus in the schools took time away from the coordinator’s ability to focus on successfully implementing the curriculum and incentive program, and they were too limited to have a real impact. Even in a few of the cases where grantees were building on existing programs (Cincinnati, Chicago, and Portland), the additional components undertaken to satisfy this project’s goals were not as well attended to at the point of our assessment.

The ambitious goals also led some grantees to stagger the implementation of their work, which meant that some project components were not yet under way midway through the pilot period. At the time of our assessment, a few of the grantees were planning to undertake components of the project, such as policy endeavors or programmatic efforts to affect the supply of food, but were delaying implementation of these pieces until other program elements were under way because of limited staffing and resources. While this made sense for the programs, it meant that different programmatic elements had more time to produce evaluation results than others. Ultimately, some strategies were just getting under way as the pilot period drew to a close. Depending on the availability of other funds, these strategies may never have enough time to be truly tested, even as pilots.

Although the multifaceted approach did create a situation in which some of the efforts were diffuse and/or staggered, it allowed the emergence of several successful program elements — possible “diamonds in the rough,” which are described later under promising strategies. While grantees concentrated on their promising program pieces, the policy work received less attention in most of the sites.

Grantee’s expertise in injury prevention and safety policies acquired through their IFKC work did not give them an advantage in the area of nutrition policy. Many of the sites were new to this issue and were unsure how to approach it. Several of the sites struggled to identify a policy topic on which to work and postponed implementation of policy-related activities, choosing instead to concentrate their time and resources on program development activities. At the time of the assessment, a few sites had just started working on policy issues, mostly focusing on improvement of school lunch menus. Changes to the lunch menus were being pursued in several of the grantees’ states as a means of improving the diets of school-age children and grantees took advantage of this opportunity to meet the grant’s policy expectations.

The theory of change envisioned an integrated approach that encompassed the promotion of physical activity and access to healthy foods. However, in reality, some of the sites struggled to balance the focus on nutrition and physical activity in the short period of time. The original CFP was for projects that would increase access to healthy foods for children, “while continuing their efforts to increase opportunities for safe physical activity.” The CFP stated that the pilots were expected to “identify how integrated IFCK and Community-based Childhood Obesity Prevention strategies can address both physical activity and healthy eating.” However, only two of the sites (Cincinnati and New York City) were integrating their obesity prevention work with existing IFCK physical activity efforts. Four of the other sites (Portland, Greenville, Little Rock, and Chicago) had not yet made substantial progress developing programs that fully integrated both physical activity and healthy eating. At the time of our site visits, these four sites had a much greater focus on one over the other, typically the healthy eating over the physical activity.

Although the Foundation did not include a planning period for the childhood obesity prevention pilots, the grant’s December starting date placed it midway through the school year and some grantees decided to delay the start of implementation until the beginning of the following school year in September. These grantees used the first nine months of the grant for planning. Other grantees chose to start working in schools right away. Therefore, they did not benefit from a planning period. The grants were issued in December 2005 and scheduled to end in June 2007; all but one of the programs operated in elementary schools. In the summer of 2006, several of the sites were still working through logistical details, partnership agreements, and evaluation tools, while others had already been at work for six months. The different starting dates of program implementation will certainly play a role in the capacity of these grantees to develop promising strategies in the short period of the grant.

Synergy with IFCK

Awarding the childhood obesity prevention grants to a selected group of existing IFCK grantees facilitated the implementation of the pilots in many ways. The local IFCK programs and the hospitals within which they are housed provided resources that enabled the childhood obesity prevention programs to accomplish more than they would have done alone. IFCK staff contributed time and expertise to the obesity prevention work. The hospitals leveraged significant in-kind resources for the programs. For example, medical and public health students assisted with data gathering; hospital research staff served as data analysts; and other hospital program staff provided expertise to design data collection tools, to help administer surveys, and assist with other efforts. The existing IFCK work was generally well known and respected in the local communities, lending credibility to the childhood obesity prevention work. Similarly, the credibility of the well-respected pediatric hospitals facilitated establishment of partnerships with schools and other community institutions.

However, the nutrition aspect of childhood obesity prevention was not so clearly linked to the original IFCK mission of reducing preventable injuries, and this caused some outside stakeholders to question the new scope of work and the grantee’s credentials to accomplish it. As previously mentioned, despite the design’s intentions to overlay access to healthy foods with the existing physical activity efforts of the IFCK sites, only two of the sites (New York City

and Cincinnati) integrated the obesity prevention work with existing IFCK physical activity promotion efforts. For the rest of the grantees, the obesity prevention work was distinct from ongoing IFCK efforts. When asked about the connections between these two aspects of their work, however, a few sites articulated that in combating obesity they could also prevent injury, since overweight children and adults tend to be more prone to fall-related injuries. Portland and New York used the more holistic concept of wellness to link obesity with injury prevention in the context of a healthier lifestyle for children.

2. Program Implementation

After an overview of the contextual factors supporting the pilots' implementation, this section discusses the types of programmatic approaches used in the obesity prevention programs and highlights promising strategies. We then provide an overview of the policy approaches undertaken by the sites. We explore challenges to implementation. Finally, this section addresses issues of future program feasibility and sustainability.

Contextual Factors Supporting the Childhood Obesity Prevention Work

The sites are operating in a fertile national policy environment focused on childhood obesity prevention. In the past few years, the United States has begun to recognize childhood obesity as a major public health epidemic with significant social, physical, emotional, and financial costs. Increased political, public, and media attention to the childhood obesity problem has paved the way for and reinforced the work of the obesity prevention grantees.

Federal, state, and local policy changes often supported the work of the grantees. In 2001, the United States Surgeon General issued the *Call to Action to Prevent and Decrease Overweight and Obesity* to facilitate the creation and development of targeted actions and agendas to combat this public health problem. In 2002, Congress charged the Institute of Medicine (IOM) with developing a prevention-focused action plan to decrease the number of obese children and youth in the United States.² As a result, a number of policy changes ensued at the federal level, such as the development of new nutrition standards for foods and beverages sold in schools.

Policy change initiatives were also initiated at the state and local levels. For example, Arkansas Act 1220 of 2003 requires that all public school students have an annual body mass index (BMI) screening. The act also calls for increased access to healthier foods in schools and local communities. The state requirements supported the work the Little Rock SPORT program planned to do in its partner school. In North Carolina, the state Board of Education, in direct consultation with a cross-section of local directors of child nutrition services, established statewide nutrition standards for school meals, a la carte foods and beverages, and items served in the after-school snack programs. The nutrition standards promoted gradual changes to increase consumption of fruits, vegetables, and whole grain products, and decrease consumption of foods high in total fat, trans fat, saturated fat, and sugar. These nutrition standards were implemented initially in elementary schools, and all elementary schools are expected to achieve a basic level

² Institute of Medicine, <http://www.iom.edu/CMS/22593.aspx>, accessed 2/16/2007.

by the end of the 2007-2008 school year, followed by middle schools and then high schools. As part of Greenville's *Healthy Choices* program, menus at eight local schools were to be assessed for compliance with the standards, and the program planned to work with the schools to develop action plans for further change as needed.

Media attention to the childhood obesity problem also supported the work. Stories about the extent and seriousness of the childhood obesity problem in the United States appear in newspapers, on television, and on the Internet almost daily. This widespread media exposure means that most of the general public has at least a minimal awareness of the childhood obesity problem.

Some grantees were able to use existing resources developed by the Centers for Disease Control and other public and private sources to supplement their work. In particular, the grantees made use of informational materials developed by national obesity prevention efforts. For example, Greenville drew from existing materials provided by the CDC and *Prevention's* VERB campaign to develop informational materials to share with parents and to support their partner schools with ideas for implementing the new state standards for nutrition and physical activity in the schools. The Hartford team used the SPAN (School Physical Activity and Nutrition) monitoring system developed by the University of Texas-Houston School of Public Health for a state obesity prevention initiative in Texas as its tool to assess students' attitudes and behaviors pre- and post-intervention. Hartford also planned to assess school menus using the CDC's School Health Index Self-Assessment and Planning Guide.

Sites with strong preexisting relationships and partnerships had an easier time with program implementation. Making significant progress in their childhood obesity prevention work was much more difficult for those sites that had to develop new partnerships. For example, Little Rock benefited from its preexisting strong relationship with Martin Luther King Jr. Elementary School as a "Partner in Education." Many of the program staff had already worked in the school in other capacities. The fact that they were already known, liked, and respected in the school facilitated implementation of the SPORT program. In Cincinnati, one of the principal investigators had already begun the peer mentoring program prior to receipt of the childhood obesity prevention grant. Thus, a critical component of the obesity prevention work was already under development when the grant period began. In New York, *Healthy Lifestyles* was developed as a fully integrated component of a broader health and wellness school-based program (*Healthy Schools, Healthy Families*) that was already in existence. Therefore, the obesity prevention program was able to utilize and build upon the partnerships and infrastructure that were already in place. Portland's work in the Abernethy School was able to take advantage of the existing Garden of Wonders.

Conversely Greenville experienced some difficulties in its outreach work to the Wilson community, in part, because it had no strong relationships with Wilson. The program coordinator was cultivating a relationship with the local YMCA director, but had yet to thoroughly engage health care providers or other community partners in Wilson. Similarly, in Hartford the new partnership between the Connecticut Children's Medical Center and the Hartford Food System was slow to develop, and the challenges of developing the relationship and coordinating the efforts of the two organizations meant that the component of work, which was under the

partnership, was delayed. Seattle also worked hard to develop a new partnership with the nonprofit responsible for the physical activity part of their grant.

Site Characteristics

The chart below summarizes some important characteristics of the obesity prevention sites. In summary, most of the obesity prevention programs were located in urban areas. Many of the programs were based in elementary schools (kindergarten through eighth grade), or at least had important school components. Most targeted children in kindergarten through fifth grade. One program worked in a preschool and another planned to add educational work with childcare providers later in its implementation. Several programs hoped to impact parents and other family members in addition to children, expressing the hope that the children would be the ones to educate their parents to make healthier food choices.

Most of the programs incorporated both nutrition and physical activity strategies in their childhood obesity prevention work. However, only half had a balanced approach. Three of the sites emphasized nutrition activities strongly over physical activities and one site emphasized physical activity efforts heavily over nutrition. “Program Emphasis” in the chart reflects which area was receiving the most attention at the time of the site visit. For example, the focus in Little Rock had been primarily on increasing physical activity in its partner school. However, staff in Little Rock was also working with school personnel to provide healthy foods. At the time of our site visit to Little Rock, significantly more emphasis had been placed and progress had been made on the physical activity goals.

To varying degrees, all of the sites combined environmental, didactic or educational, and experiential strategies in conveying their obesity prevention messages. *Environmental* interventions focus on making changes to the environment in which children operate. Examples include renovating a playground to make it safer, or removing vending machines with sugary snacks from the school setting. *Didactic or educational* approaches focus on trying to change individual children’s attitudes, knowledge, and behavior through lessons or whole curriculum. *Experiential* approaches invite students to practice what they learn through formal instructional methods. Most programs combined two or more of these strategies.

Implementation Overview								
	Chicago	Cincinnati	Greenville	Hartford	Little Rock	New York	Portland	Seattle
Location	Urban	Urban	Rural	Urban	Small Urban	Urban	Urban	Urban
Target Population	Children ages 0-5 and their families	Children in grades K-8	Children ages 3-17 and their families	Children ages 6-7	3 rd & 4 th grade children	Children in grades PK-5, parents, school staff	Children in grades K-5	Children ages 4-12 and their families
School or Community Based	Community	School	Both	Both	School	School	School	School
Working in Childcare Centers	Yes	No	Yes	No	No	No	No	No
Program Emphasis*	Nutrition	Both	Nutrition	Both	Phys. Activity	Varied by school	Nutrition	Both

* All sites were expected to work on both **increasing access to healthy foods** (new) and **physical activity** (through existing IFCK work). Program emphasis reflects the area(s) that had received the most attention as of the time of OMG site visits.

Promising Strategies in Obesity Prevention

Although no program in its entirety met all the criteria for success as a childhood obesity prevention model as hoped for by RWJF, many programs had at least one aspect that was progressing well or that seemed to hold potential for reducing the risk of obesity among young people. The following section describes some of the practices we determined to be most promising at the time of our site visits. In identifying promising practices, we took the following criteria into account:

- Potential for impact, based on logic of the design (i.e., how well the desired outcomes linked to the activities)
- Potential for impact, based on program intensity and duration
- Innovativeness of approach(es)
- Ability to reach the target population
- Acceptability to stakeholders
- Feasibility of implementation
- Potential for replication by others
- Sustainability

Strategy # 1: Peer Mentoring

The Diabetes and Obesity Awareness and Prevention Program (DOAPP) in Cincinnati successfully implemented a peer mentoring program to educate children in an after-school program about healthy eating, nutrition, and physical activity. Peer mentors from a local magnet high school that focused on health careers were trained to implement a curriculum in which they used didactic and hands-on activities to increase children's knowledge and awareness of healthy food choices, and to provide them with increased opportunities for physical activity. This approach showed great promise, as the peer mentors were able to both energize and teach the younger children. The students seemed to look up to the mentors and took the material that they delivered seriously. The mentors demonstrated a thorough understanding of the curriculum and were able to deliver it in



Peer mentors in Cincinnati's DOAPP teach children about healthy eating.

age-appropriate ways to the children in the after-school program. Despite the young age of the mentors themselves, they were able to effectively manage the groups of children and to relate to them well. The children demonstrated learning by responding to questions and by eagerly

showcasing what they had learned. In addition, although not assessed, we suspect there may be some benefits to the mentors themselves from participating in this program. This strategy has a high potential for replication in other school settings because older students are always available and can easily connect with younger children. It is also highly sustainable since the students are volunteers. The fact that the older students delivering the curriculum can also benefit by applying what they teach to improving their own lifestyles makes this intervention an even more appealing strategy.

Strategy #2: Childcare Menu Changes and Parent Cooking Classes

As one of its obesity prevention strategies, the Chicago IFCK site embarked upon an ambitious plan to remake the food offerings at a Head Start program and community center. They hired a registered dietician to train the center staff on better nutrition and healthier cooking methods. The food preparation staff was visibly excited about the menu changes they had been able to make to provide more nutritious and healthier meals. They appreciated their improved nutritional knowledge and reported that they enjoyed preparing fresh foods from scratch. A ripple effect of these small changes was already evident, with reported increased awareness about better health and nutrition among teaching staff and children and even among some parents. Nutrition education and cooking classes are also offered to parents, and the classes are well received. This program was one of the only sites that worked with childcare centers. The training of the cooking staff in conjunction with the parent nutrition education and cooking classes could be a model to be replicated nationally in Head Start centers and childcare centers. Because the program targets a very young audience and reaches their parents, this intervention has high potential to change behavior in the long run.

Strategy #3: “Plant of the Week/Harvest of the Month” Program

The Garden of Wonders program at the Abernethy School in Portland consists of an outdoor garden on the school’s premises and a classroom curriculum designed to increase knowledge of seasonal fruits and vegetables grown locally and in the garden. The garden bounties are later consumed as part of the students’ school breakfast and lunch. Twice a month, students are taught about the “Plant of the Week” in a curriculum that integrates nutrition with science and social studies by focusing on fresh local and seasonal produce. For the second half of the class, students go outside to the school garden to pick the vegetable or fruit they have just learned about and then bring it back to the classroom. In the second part of the lesson, a chef asks students to take part in his cooking demonstration and to taste test a simple, healthy dish prepared with the Plant of the Week as the main ingredient. While most other public schools in Portland do not have the same resources as Abernethy (which also has a kitchen to



The Garden of Wonders flourishes at the Abernethy School in Portland.

prepare foods from scratch), the Plant of the Week curriculum has already been adapted by the Portland Public Schools Nutrition Services with plans to implement it throughout the district. This decision is based on a recent study led by EcoTrust, a partner of the Portland IFCK site. The study showed that the increase in consumption of school lunches and in salad bar production of fruits and vegetables at Abernethy, when compared to the control school, was directly related to the Garden of Wonders educational activities. The program is promising as a best practice because it is well received by students, teachers, and parents. Although not all schools can have a garden on their premises, the idea of teaching children about locally grown foods while they are in season, and giving them an opportunity to taste them in their lunches, makes this a perfect combination of didactic and experiential approaches, strengthening its potential impact on behavior.

Strategy #4: Walking Programs

A walking program is a primary focus in at least three sites (Little Rock, Seattle, and Portland) and some element of walking is included in others (such as New York). In the program at the Martin Luther King Jr. Elementary School in Little Rock, the participating children are given pedometers and encouraged to track and record their steps each week throughout the school year. The walking program is incorporated into the curriculum for their other areas of study such as geography and social studies, and competition among classrooms is encouraged. Some teachers have begun wearing the pedometers as well.

At least two sites broadened their walking programs to include families and community members as well as children. “Walking and Biking Wednesdays” is one of the physical activity components of the Portland program that was started in 2005 by Safe Routes to School (a partnership program of the Bicycle Transportation Alliance and the Willamette Pedestrian Coalition). The program has installed bicycle racks, and has offered classes to Abernethy School students on bicycle, pedestrian, and occupant safety issues that will continue through the 2006-2007 academic year. While Safe Routes to School has insufficient resources to continue to lead or expand this program at Abernethy this year, a core of parent volunteers have begun to ensure the continuation of this program.

With the right partner organization and parent involvement, other schools can create a safe and supportive environment for physical activity similar to Abernethy’s. Seattle is also implementing a “Walking School Bus” program in which students, teachers, and family and community members meet at designated



Children are excited to participate in the Walking School Bus at Dearborn Park Elementary School in Seattle, despite the dreary weather.

locations to walk to school. Participants in the kick-off event were excited and were looking forward to future walks.

These types of programs show promise in part because they are very inclusive. People at all levels of fitness can participate, and often they are activities children and their parents can do together. In our observations, these programs were well received and resulted in high levels of participation from children and parents. The use of pedometers allows people to monitor and track their progress and take pride in their improvements.

One of the main challenges to this strategy is that it requires a champion to ensure that it is institutionalized in the school and embraced by students. The reliance on volunteers to lead the walking programs, both inside and outside the school, makes it harder to sustain and requires a lot of staff time up front to set it up. However, if these obstacles are overcome and the practice is incorporated and modeled by enough adults in the children's lives (e.g., teachers, principals, parents, peers), there is great potential to have significant impact on long-term behavior.

Strategy #5: Taste Testing before Introduction of New School Foods

The Seattle Start Strong program is hoping to increase school breakfast consumption by conducting taste tests of nutritious breakfast foods that use less processed ingredients, and more whole grains and fruits — such as yogurt parfait and banana oatmeal — before incorporating these items into the school menu. These foods are prepared in the school cafeteria by the cafeteria staff and the IFCK coordinator, using creative ways to get around some of the limitations posed by inadequate kitchen equipment. Parents and children are invited to test the new foods, although it is the children whose opinion is specifically sought by using a simple rating form that is graphically appealing and easy to fill out with a pencil. The children willingly participate, and are both thrilled and amused by this opportunity to offer their expert opinion about the acceptability of the breakfast food item and its likelihood of future consumption. This multifaceted approach — which involves finding cost-effective ways to prepare and serve food items that are appealing to students and getting cafeteria staff buy-in by involving them early in the process at the planning stage — could serve as a model for other schools in Seattle and elsewhere to increase school breakfast consumption. The practice is very time consuming to implement because of the trial period to find the items children are most likely to eat. However, once the menu is set and properly marketed to students, it has the potential to impact breakfast consumption in a positive manner.

Strategy #6: Increasing Physical Activity in Classrooms

When the City of New York mandated that every child be physically active for at least 120 minutes per week while in school, many schools had difficulty complying due to time and space limitations and staffing constraints. Schools chose to integrate additional physical activity during recess, transition time, and class time in a variety of ways.

Program staff with the *Healthy Schools, Healthy Families/Healthy Lifestyles* (HSHF/HL) program in New York trained classroom teachers in a series of brief physical activities they

could do in class, called “transition exercises.” The exercises vary in intensity, from stretching and yoga to jumping/shaking. Teachers may also add to the transition exercises by incorporating any practice with which they are familiar.

Little Rock similarly implemented “exercise breaks” in its partner school. Program staff created simple “Exercise Breaks” for teachers to use during classes to provide short, fun activities that get children moving. The materials were presented to teachers in a box of colorful cards that could be pulled out at random, an easy format for teachers to use. Our observations revealed that the activities were well received by the teachers and simple to implement, and the children were clearly excited and loved doing them.



Children take an exercise break as part of SPORT in Ms. Van Patter's 4th grade class at Little Rock's Martin Luther King Jr. Elementary School.

Since both New York and Little Rock have piloted these in-classroom activities, their materials may serve as the starting point for other schools and teachers. A flexible approach is advantageous in implementing these activities. Teachers retain control over when and how to implement them, and they are free to tailor the activities to their style and/or the needs of their classes.

Strategy #7: Curriculum Integration

The SPORT program in Little Rock successfully partnered with the Martin Luther King Jr. Elementary School to integrate its obesity prevention work into the curriculum for third and fourth grade students. The program has taken a creative approach to providing increased opportunities for students to engage in physical activity during school. Aware that Little Rock Schools had no physical education curriculum, the



A colorful map at Little Rock's MLK Jr. Elementary School shows “destinations” children have achieved through tracking pedometer steps for the SPORT program.

program developed a curriculum focused on “Personal Best Challenges” and provided it to the physical education teacher, who was thrilled since there was no existing curriculum for his classes. Personal Best Challenges are a series of short, measurable physical activities (e.g., jumping jacks, sit ups, obstacle course, shuttle run, etc.) that students work on over time to achieve their personal best. Another component of the program involved having children wear pedometers and track their walking steps. Children used a large, colorful map to determine where they wanted to travel, computed the distance and number of steps required to get there, and tracked their progress. The physical activity component integrated geography, social studies, mathematics, and history lessons.

The Garden of Wonders in Portland, as mentioned earlier, is a hands-on school-based garden program in which garden- and food-based experiential learning activities are tied to the educational curricula in social studies and science. An AmeriCorps volunteer teaches the Garden of Wonders curriculum, which ties the district-required curriculum in science and social studies to gardening and food-based educational activities. Each class has approximately 15 students and is held twice a month for a 30-45 minute period that focuses on the Plant of the Week, such as a carrot. The lesson lends itself to the natural integration of various academic subjects. For example, the teacher had the children read about the region of the world from which carrots originated and locate it on a map. Next, they talked about the characteristics of the vegetable and where it came from in the plant. After reviewing these facts, the teacher presented additional information about the nutritional content of the carrot, including vitamins and minerals, and explained why these nutrients were good for the body. By using the carrot as a learning tool, the teacher was able to touch on several important disciplines, including geography, botany, human biology, and nutrition. In addition, the children practiced reading out loud and doing some mental math calculations.

Curriculum integration is a promising strategy because incorporating nutritional and physical activity concepts into mandatory school subjects allows lessons to be reinforced from a variety of perspectives and learning styles. Furthermore, providing curriculum support, development, or materials where none exists can further strengthen partnerships with schools and other community institutions such as churches and recreation centers, which are important sources of educational and environmental influences for children. Although this strategy is highly replicable, it is important to allow for creativity and flexibility on how the lessons are organized and delivered to students.

Strategy #8: Farmers’ Markets

A few sites are currently operating or are considering the development of farmers’ markets. We did not have the opportunity to observe these during our site visits, so it is difficult to say for sure whether these practices would hold promise as implemented. However, this strategy has been gaining increased attention as an environmental approach that provides families with easier access to healthier foods while also benefiting local farmers.

Fresh Food Markets have been implemented in two schools by the New York grantee. Markets take place once a week in front of the schools, usually in the morning. They offer a wide variety

of produce at affordable prices to families of children who attend the school. Funding from the RWJF grant pays for shares of the farmers' market. The school coordinators run the market with assistance from parents from the community. According to the coordinators, the market has been well received and several parents volunteer on a regular basis to help run it.

Cincinnati has established a coalition of partners who are seeking funds to establish a farmers' market in the Avondale neighborhood, which is the target of their IFCK work. At the time of our site visit, Chicago was considering a move to a farmers' market style sale of the Growing Power fresh produce baskets that are sold at the Howard Area Community Center as part of the obesity prevention program. The grantee was having a difficult time finding a customer base for the baskets among the community center families. One reported reason for the families' reluctance to purchase the baskets was lack of choice. A potential solution identified by the grantee was to break up the baskets and let parents fill their own from the variety of produce available.

At the time of our visit, Hartford was planning to link with existing advocacy efforts to encourage broader use of Women, Infants, and Children (WIC) coupons at farmers' markets. Under current federal policy WIC provides \$10 to \$30 coupons to low-income women annually to purchase fresh produce at farmers' markets. In August 2006, the U.S. Department of Agriculture proposed a rule change that would give low-income women and children an additional \$6 to \$8 per month to purchase fruits and vegetables. Though not earmarked specifically for farmers' markets, the vouchers could be spent there.

Farmers' markets hold promise for several reasons. In low-income urban settings, it is not easy to find fresh fruits and vegetables at affordable prices, making them available in local schools eliminates this obstacle. For rural areas, the produce is easily available from local providers that operate close to small communities. By eliminating middlemen, the cost of fruits and vegetables is lowered and both families and growers benefit. Markets also offer choices for families, especially if the items available cater to their cultural food preferences. Because of their visibility on school grounds, well-run farmers' markets generate a lot of business from families whose children do not attend the school and, thus, become a community resource. If the sales generate a profit, the market can also become self-sustaining. Finally, the opportunity to impact the entire family's food consumption is a very attractive feature of this promising practice.

Despite their appeal, farmers' markets are very time consuming to set up and to run, requiring heavy investment of staff time and support from volunteers to keep it going. This makes the practice not as easy to replicate by programs that are not well staffed.

Sites' Approaches to Policy Change

Most of the sites' policy efforts were centered on changing school menus and increasing the time spent on physical activity in the schools, typically to implement recent legislative changes. In at least five of the sites, the school district had recently enacted policy changes to improve menus and increase physical activity time. However, in several cases, the schools lagged in implementing these changes. Therefore, some of the sites focused their policy efforts on helping the schools to implement the changes. For example, the IFCK coordinator in Greenville assessed the schools in the target community using the School Health Advisory

Council (SHAC) guidelines put forth by the North Carolina Board of Education. The assessments are being used to inform the school committee's decisions about changes to be made to support the state's new rules regarding health and wellness.

Challenges to Program Implementation

Almost every site encountered challenges at some point in the early phases of development of their childhood obesity prevention work. These challenges varied in terms of timing and intensity. However, most of the challenges we observed fell into one of the following two categories: funding and design related, and site-specific contextual barriers.

Although the intent behind the pilots was to fund discrete interventions that could be tested over a short period of time and without a major investment of resources, the multiple requirements of the grant worked against these goals. (Refer to the Plausibility and Design section for a more detailed explanation.) The small grant size (\$60,000 for 18 months) resulted in inadequate staffing for projects attempting to implement multiple strategies simultaneously. Although hospitals in many cases provided additional staff resources, many sites were still short-staffed. The withdrawal of the IFCK funding at the end of 2006 compounded the staffing problems, as many of the childhood obesity prevention programs were supported at least in part by staff in positions financed by IFCK grants. The short time frame also became a challenge for the pilots as it took grantees longer than anticipated under the synergy model to get their programs ready to be launched. One reason for this was that the injury prevention work did not prove to be as good a foundation for the obesity prevention pilots as was originally envisioned by the grant's designers.

The childhood obesity prevention grantees experienced some unique contextual challenges as well. **For the only rural site, Greenville, access to services for program participants living in the distant target community of Wilson was a real challenge.** Some of the families lack their own transportation, and there is little to no access to mass transit. The hospital arranged transportation to pick up participants and bring them to the program site, but the vans continually arrived either exceptionally early or too late. As Wilson is a resource-limited community, most of the services that families need are located in Greenville, a 30-45 minute drive from Wilson, again raising issues of transportation and travel time.

Other grantees had to deal with cultural and language barriers. In Greenville, where there is a rapidly growing Hispanic population, all of the courses offered by the grantee were conducted only in English. Program staff acknowledged that existing funding did not allow for materials to be translated into Spanish or for hiring additional staff that could speak the language. Seattle's school children speak 35 different languages and dialects, reflecting the tremendous cultural diversity of the area. To overcome this significant obstacle, the grantee gave up seeking the approval of every cultural group for their breakfast food items. Instead, it chose to focus on healthy, low-cost foods that all children, regardless of their ethnic background, approved of and enjoyed. Chicago used a bilingual Spanish- and English-speaking staff member to teach the nutritional segments of the cooking classes. New York partnered with Alianza Dominicana, an organization that had bilingual/bicultural parent coordinators in each school, to do outreach and

provide translation to parents. Translation of written program materials continues to be too time consuming to consider for many grantees dealing with multiethnic populations.

Effective parent engagement in programmatic activities was an issue for most grantees.

Examples of challenges include: getting parents to attend meetings or participate in trainings; obtaining parental approval for their child's participation in a program; and getting consent to obtain BMI measurements. This latter obstacle is controversial with many parents, who do not want their children to be labeled or stigmatized for being overweight. Also, program staff told us time and time again how difficult it was to engage parents in communities where there was often only one parent in the household, and that parent was working two jobs, with little time for anything else. Program staff was eager to learn what they could do better, and what strategies other programs might have used with some success. For example, Cincinnati learned that parents were motivated to attend events where their children were performing. Thus, the program staff built parent sessions around events where children could showcase their learning about nutrition and physical activity in fun and entertaining ways.

A common challenge across all grantees was the constraints naturally imposed by working with schools. Seven of the eight sites were working with elementary schools in some capacity. In six of these sites, the program activities were housed in the schools. One challenge of working in the schools is limited time, as the programs have to compete with multiple curriculum requirements during school hours. Sites such as Little Rock and New York who were attempting to add physical activities during the school day needed to fit their activities within a brief time span. For programs operating in an after-school time slot, such as Cincinnati, time was limited by homework requirements as well as varying parent pick-up times. There was also naturally more chaos in an after-school setting since the children have been in school all day. This led Hartford to shift its program, originally held after school, to the PE time slot during the school day.

At times, space limitations constrained programmatic activities. For example, in Cincinnati, the DOAPP after-school program competed with other activities for gymnasium space during after-school hours, such as basketball practice and cheerleading tryouts. Getting buy-in from school leadership sometimes presented a challenge, as most principals were already overburdened and concerned about school performance in academic subjects to meet state and federal requirements.

3. Partnerships

The Foundation and the NPO envisioned the childhood obesity prevention work to follow the IFCK model in developing projects that were hospital based, research driven, and implemented through partnerships with coalitions of community stakeholders. The assumption was that working with community partnerships comprised of various stakeholders with different resources and perspectives to try to prevent childhood obesity would be more effective than any one individual organization trying to do so alone. Grantees were expected to work as partners with community organizations to identify, develop, and evaluate obesity prevention strategies.

A key goal of the initiative articulated in the theory of change was to influence decisions on nutrition and physical activity in the community and in schools. To do this, grantees needed to engage the right set of committed partners with complementary missions, values, knowledge, and resources. For example, experienced physicians concerned with childhood obesity could use their influence over their peers and exert pressure on the political structure to develop needed policies at the national and local levels. It was also hoped that working in partnerships would leverage additional resources to supplement the small funding of the pilots. The expectation was that the IFCK grantees' positive working relationships and status as trusted partners in their communities would facilitate their childhood obesity prevention work.

OMG developed a rubric to assess the quality, strength, and success of the obesity prevention partnerships at the time of our site visits. A true partnership is more than a signed piece of paper conveying an agreement. For the obesity prevention partnerships to be successful, they needed common goals and objectives and a shared vision for what they hoped to accomplish together. In addition, the roles and responsibilities of the partners needed to be clearly established to avoid duplication of efforts or running into turf issues. Organizing the work and integrating the pieces required substantial convening capacity on the part of the grantees, especially in terms of leadership and facilitation skills. The coordination and implementation of the effort also required adequate resources, in terms of staff, capacity, and funding.

The obesity prevention grantees worked with a variety of partners to implement their efforts. The most common partners were schools, universities, direct service providers, and community-based organizations. A summary of the types of grantee partnerships appears in Figure 3, on the next page

<i>Key Indicators of Successful Partnerships</i>	
Partnership Assessment Area:	Indicators
Partnership Purpose	Shared vision, common goals, and objectives
Membership	Diverse and appropriate membership, trust and respect, members see partnership work as beneficial to their individual work, partnership is granted legitimacy in the community
Process and Structure	Members share a stake in process and outcome, clear partners roles and responsibilities, evaluation and feedback mechanisms exist
Communication	Effective formal and informal communication practices
Staff and Resources	Strong leadership, adequate human and financial resources

Types of Partnerships by Site								
Partner Type	Chicago	Cincinnati	Greenville	Hartford	Little Rock	New York	Portland	Seattle
Advocacy Group								
Service Provider								
Community Based Org								
Civic Group								
Government Agency								
University (including Cooperative Extension)								
Foundation								
School (District)								
School (Elementary)								

Examples of Emergent Successful Partnership Practices

Cincinnati: This grantee drew on the expertise of its diverse partners in appropriate ways to derive the most added value. A curriculum specialist at the university assisted with the development of the curriculum, physicians and medical students collected BMI measurements, and a hospital research assistant and a research coordinator helped with data collection and analysis. A physician who had developed the peer mentoring program for a separate grant oversaw the peer mentoring training and was involved in the program expansion under the RWJF grant. The IFCK team used its existing partnership with the Urban League, with whom it jointly runs after-school programs in the Avondale neighborhood, to facilitate implementation of DOAPP at the school sites. Finally, the program tapped a respected local community-based organization for ideas and input into the work as well as for community outreach.

New York: The site's individualized approach to working with schools was supported by full-time staff positions for each of the partner schools. All the partners in the *Healthy Lifestyles* program, a component of the preexisting *Healthy Schools, Healthy Families* initiative, were committed to the vision and understood their roles. School-based coordinators were able to build strong relationships with school staff and leadership, to use their strong interpersonal skills to negotiate obstacles and difficult personalities, and to connect people both within and outside the schools. Further, New York's partnership, which emphasized an individualized approach to meeting school needs, did an excellent job at matching those needs with the partners capable of addressing them, and allowing them to negotiate their relationship without unnecessary grantee interference.

Little Rock: The grantee built trust and buy-in of key stakeholders by involving them in program design decisions. Supportive administrators at the partner school allowed interested teachers and the school nurse to participate in the SPORT management committee. Student opinions were solicited for development of the Personal Best Challenge activities. Involving all of these key stakeholders in the design of tools and materials, as well as in the data collection efforts, increased their buy-in to the program.

Seattle: The program coordinator in Seattle held regular meetings with key staff from the partner organizations, ensuring that all players had clear roles and aligned responsibilities. These meetings were an important venue for ensuring that all partners were clear about their roles and that their work supported the goals of the Start Strong program. Furthermore, a monthly convening of an oversight committee included additional partners who met to discuss program goals, networking, and design issues. All participating schools and partners recognized and operated under the Start Strong name, reinforcing the commitment to integrate the work of the different partner organizations.

Partnership Challenges

The evaluation identified three distinctive types of challenges to building and sustaining the work of the local partnerships: **lack of a shared vision, unclear division of roles and responsibilities, and inadequate communication.** Mitigating these challenges takes skills and

time. Because the projects were intended to build on existing injury free work, and therefore existing IFCK partnerships, the Foundation and the NPO assumed that grantees had the necessary experience to embark on partnership building for their childhood obesity prevention pilots. However, in most of the sites, the pilots' new focus on nutrition and policy required the addition of new partners. Without the time, and in some cases the skills, necessary to successfully develop these new types of partnerships, most of the grantees experienced difficulties.

Lack of a shared vision: In some sites, the scattered nature of the work made it difficult for the partners to understand the overall goals of the initiative. For example, in Greenville, there were so many goals and activities targeting different populations, the partners had a hard time grasping all aspects of the pilot or were unaware of what the others were doing.

Unclear roles and division of labor: In part due to the speed of the grant process, some grantees brought partners on for pieces of work without clearly delineating their roles. For example, the Hartford IFCK grantee engaged a community partner who was working with the local bodegas to advocate for the sale of healthier foods, one of the Hartford project's goals. However, the Hartford IFCK coordinator reached out to this partner after the Hartford obesity project was under way and did not spend the time necessary to discuss respective roles with the partner. As a result, two months into the school year, the partners were proceeding with similar work along parallel paths.

Inadequate Communication: The expedited grant process to launch the pilots did not allow grantees sufficient time to establish and agree on a process for regular communication with their new partners. For example, in Chicago, despite joint work on the grant proposal and a written agreement regarding the work following grant approval, the grantee and its primary partner began the pilot with different views on the need for regular communication. In Seattle, the project coordinator was so pressed for time to get the pilot going that she reduced the frequency of partner meetings. The result was that the new schedule fell short of the time needed to keep everyone informed so she decided to go back to weekly meetings with all the partners.

4. Evaluation Capacity

One of the main purposes of OMG's study was to gain an early sense of the capacity of the childhood obesity prevention grantees to support a more in-depth evaluation of their pilots should they show promise as potential best practices in the field. As mentioned before, the fact that this assessment was conducted very early during the pilots' implementation poses some limitations on our abilities to draw conclusive findings. The following section describes the conditions needed for an in-depth evaluation of the grantees' work and our preliminary assessment of the grantees' capacity to support future evaluations of this work.

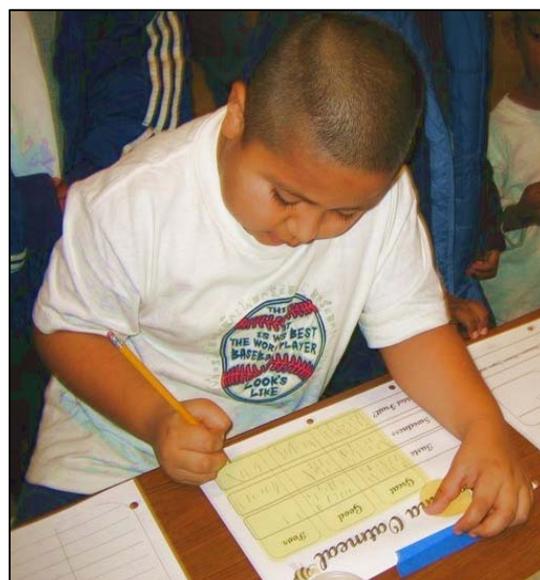
Conditions Needed to Support Evaluation:

1. Theory of change for the initiative and each site;
2. Outcomes that are aligned with activities, are measurable, and are attainable in the specified time periods;
3. Appropriate data collection tools and resources for data collection;
4. The capacity for data analysis; and
5. Time to allow pilots to evolve.

Site theories of change largely reflected the overly ambitious nature of the initiative's theory of change, resulting in too many outcomes to evaluate given the limited time and resources of the initiative. A couple of sites chose to narrow their evaluation work to their primary hypothesis rather than assess each component. Cincinnati and Little Rock viewed their obesity prevention pilots as research projects. Thus, they had a clear design and methodology for assessing outcomes and outputs from the beginning. For example, Cincinnati concentrated its evaluation resources on collecting and analyzing BMI data to test its hypothesis that the after-school peer mentoring program would result in a reduction in BMI of its participants. The rest of the sites took much longer to come up with tools and begin collecting relevant outcome data. At the time of OMG's site visits, New York and Chicago had yet to develop tools for assessing their desired outcome of culture change in the institutions in which their programs were offered. Similarly, Seattle had not yet developed a tool to track participation in its Walking School Bus activity nine months into the implementation. In OMG's feedback to the sites, we emphasized the need to reduce the number of outcomes to be measured and to focus on those that were most relevant to the pilot's core goals.

The majority of grantees were able to align outcomes with activities. When misalignment occurred it was related to changes in program delivery as the pilots evolved. For example in Hartford, increased parent utilization of the bodegas was listed as an outcome on the site's theory of change, yet activities to encourage this outcome were unclear. Naturally, it was difficult for grantees to develop outcome measures for activities that were still in flux. Greenville needed to develop pre- and post- intervention measures for the childcare providers the program planned to work with. However, at the time of our site visit, it was not clear what that work was going to look like or when it was going to start. In Chicago, some pieces of its training program for home visitor staff had yet to be developed, making it difficult to identify desired short- and long-term outcomes.

A majority of the grantees had measurable indicators for the outcomes that had been clearly linked to core program activities. Seattle developed a creative form to track students' preferences for new breakfast foods; Portland conducted a full assessment of lunch consumption patterns using plate waste (i.e., food that was served but not consumed by the child) as an indicator; Greenville developed several measures of knowledge gained by workshop participants on a variety of topics; New York and Little Rock used pedometer readings as indicators of increased physical activity; Cincinnati collected food diaries to track consumption; and Hartford gathered data on student knowledge of healthy foods.



Children rate new foods at Dearborn Park Elementary School in Seattle.

Sites had different perspectives on the likelihood of attaining BMI changes in the short term as well as varying success with collecting BMI data. Cincinnati's emphasis on BMI reduction as its central hypothesis took precedent over the measurement of other short-term outcomes such as attitude and behavior changes. None of the other sites anticipated BMI reductions within the short term of the grant period. Hartford, Little Rock, Portland, New York City, and Chicago were collecting BMI measurements with different degrees of success and with different expectations. For example, Hartford and New York City set a target for the percent of participants who would not increase their BMI in the short term. New York set a reduction in BMI as a goal for five years down the road. The sites' approach to collecting BMI also varied. Hartford and Portland sent consent forms home to the parents of children in their participating schools, asking for their written consent to allow the program staff to take the BMI measurements of their children. Both sites struggled with low response rates. On the other hand, Cincinnati sent passive consent forms home, requiring a parent signature only for refusal of participation. This approach resulted in Cincinnati's ability to collect BMI measurements on nearly all of the students in their participating schools. Cincinnati was planning to use the BMI measurements not only as a data collection method but also as an awareness and advocacy tool.

Most of the sites had developed and tested measurement tools for their key outcomes. However, several sites found that collecting data from children was difficult and they were looking for ways to more reliably obtain information from these participants. At the time of our assessment, most of the sites had developed and were administering tools to measure their key outcomes, even as other areas of work and their associated measurements were still evolving. Several sites found that some of their data collection methods with the younger children were not age appropriate. For example, in Hartford and Cincinnati, the attitude and behavior surveys they administered were too long for many of the younger children and above their comprehension level in some areas. In Hartford, Portland, and Little Rock, pedometers were intended to be a source of data on physical activity but the younger children were losing the pedometers or misreporting data from them.

Some data collection strategies required a significant investment of time by program and school staff, raising concerns over long-term sustainability. For example, Cincinnati initially collected BMI measurements and administered its attitude and behavior survey to almost all of the children in the three elementary schools in which it was offering its DOAPP program. This data collection effort was very time intensive for the staff and required the coordinator to temporarily put other program responsibilities on hold. At the time of our visit, staff were still unsure how to marshal the resources to enter the data from the nearly 700 surveys that had been collected. As a result, the team was considering options for sampling respondents for the post-survey at the end of the year. Both Little Rock and Cincinnati collected children's physical activity logs and food diaries on a frequent basis (daily in Little Rock; weekly in Cincinnati), which quickly became a very time consuming and burdensome task for staff. New York was collecting physical activity data for all classes in its partner schools on a weekly basis, also placing a heavy burden on the teachers collecting the information. The plate waste analysis conducted by Portland's coordinator was not going to be repeated again due to the time-consuming nature of the methodology.

Hospital and university support increased the grantees' data collection and analysis capacity, freeing project coordinators to spend more time on implementation tasks. For many sites, each of the multiple programmatic activities required the collection and analysis of different sets of data, which in some programs led to serious concerns about staff capacity to fulfill evaluation needs in a thorough and timely manner. New York, Chicago, Cincinnati, Greenville, and Seattle were able to supplement their staff with university students who collected, entered, and analyzed data. Students' time was not paid for by the RWJF grant. Without their help, none of these sites would have been able to effectively implement their evaluation plans.

Some grantees were unclear about how much time and resources were to be dedicated to the evaluation of their pilots. While the CFP issued by the NPO stated that applicants must have "a plan for evaluating the initiative," it did not specify whether outcome evaluation or process evaluation was expected. Some viewed their endeavors as a research project with anticipated outcomes to measure, others intended to assess implementation and determine outcomes after further program refinement. For example, program staff in Chicago initially only developed plans for a simple process evaluation to comply with what they understood to be the grant requirements. When asked by the NPO to submit a work plan after the grants were awarded, they turned to the program site to determine if any data already being collected could be used for outcome evaluation purposes. Furthermore, in most of the sites, because these were pilot projects, some program elements for which an evaluation had been planned were not implemented as intended or were eliminated due to a shift in priorities, while other program elements emerged for which no evaluation was planned.

III. Conclusions and Recommendations

This section summarizes the broad underlying themes presented in the cross-site findings of the report. We then provide recommendations for the Robert Wood Johnson Foundation to consider as it continues to take a leadership role in childhood obesity prevention research, programming, and field building.

1. Conclusions

- 1. Foundation program designers appropriately envisioned the pilots as a way to test promising strategies in the field of childhood obesity prevention and inform future funding decisions in this area. However, the multiple objectives that were required by the grant were not achievable given the short time frame for the work and the limited level of funding awarded.**

Funding of short-term pilots to test new strategies and promote innovation is a common practice among funders. Using community-based partnerships to implement programs and encourage partners to engage in policy work are also mechanisms employed by funders to leverage additional resources and ensure the sustainability and institutionalization of promising practices. In the case of the obesity prevention pilots, however, the dollar amount allocated by the grant

was insufficient, even assuming the assistance of the existing IFCK infrastructure, to support the work and staff time needed to build and maintain partnerships, implement programs, and undertake policy work. Additionally, the 18-month timeline to accomplish the multiple goals was too short to plan, implement, and evaluate the various aspects of the pilots. In the spirit of testing innovative practices, a more realistic time frame would have been two years, with a summer initiation date to allow for some planning time prior to the start of the school year, which is when most programs targeting school-age children are typically implemented. With an extended timeline, funding would also have to be expanded and the list of expected outcomes would have to be shortened and simplified to make it more realistic.

2. *The injury free sites lent resources and credibility to the obesity prevention programs. However, the obesity prevention work was not as easily integrated with the injury free work as foreseen in the initiative design.*

Consistent with the Foundation's goals behind its synergy funding strategy, the obesity prevention programs benefited from the in-kind support, community connections, and reputations of the hospitals in which the injury free programs are based. The other intention behind this funding approach was that the childhood obesity prevention programs would integrate strategies to increase access to healthy food with existing IFCK strategies to promote physical activity. In all but a couple of the sites, this integrated approach had not been put into practice at the time of this assessment. And, given the challenges grantees were experiencing, it is unlikely they would achieve the level of integration that was expected in the last six months of the pilot.

3. *An overly ambitious set of goals for the pilots compromised the capacity of staff to deliver work of consistent quality and intensity across the multiple areas of focus.*

Asked to do programmatic work in the areas of nutrition and physical activity, as well as policy and evaluation work, grantees struggled with how and where to most effectively allocate the limited resources of the grant. Some built on existing partnerships, while others had to spend considerable time recruiting new partners for this project. Some devoted a great deal of time and energy collecting data for evaluation purposes, while others collected very little, choosing to concentrate on programmatic activities instead. Program activities suffered when the various components were under resourced and staff members were going in too many directions.

4. *Although not fully tested, the pilots did allow for the emergence of program elements that hold promise for further exploration as effective obesity prevention strategies.*

The seeds sprinkled under the multiple goals fostered the growth of some promising approaches. None of the programs in its entirety seemed promising in and of itself. However, program elements that were particularly well received by target populations and communities and that showed early signs of potentially positive outcomes merit further exploration of their obesity prevention potential.

5. *The grant did not provide a clear set of expectations for the policy component of the pilots. Most sites spent little time on policy work. Where sites did engage in policy, their efforts were narrowly focused on school-level changes.*

While the Foundation and the NPO suggested that grantees engage in policy-level efforts to increase access to healthy food and physical activity, the focus of these efforts was left open. Several sites took a narrow approach to policy reform by focusing on school-level changes, such as improvement to menus and increased PE time. A couple of sites were trying to impact policy change at the school district level by helping school administrators find more cost-effective ways of improving the nutritional quality of the food prepared and/or delivered to school cafeterias.

6. *Building partnerships requires considerable time when starting from scratch and needs to be an ongoing activity for the duration of the project. The ability of the grantees to develop the partnerships needed in the short time allotted by the grant was overestimated by the Foundation and the NPO.*

While the IFKC grantees may have developed strong relationships for their injury prevention work, the new focus on obesity prevention required that they reach out to new players and agree on a new set of shared outcomes, roles, and responsibilities. Building and sustaining partnerships requires careful planning, aggressive networking, and strong facilitation skills. Some of the grantees seemed to lack the necessary expertise in these areas. These weaknesses were compounded by the time and resource constraints.

7. *Grantees were making reasonable inroads in the evaluation of their programs. However, the natural state of flux of any pilot project testing innovative strategies resulted in the need to revisit outcomes and tools periodically.*

All of the grantees had developed some tools to collect outcome data appropriate to their activities and stated theory of change at the beginning of the pilots. However, outcomes and activities often fell out of alignment due to the constantly changing nature of the work and the need to make adjustments to address challenges as they arose. Because of the fast pace of the work, grantees could not always keep up with the necessary revisions to tools and data collection approaches. Most of the grantees, however, were aware of these gaps and were working to remedy them.

8. *In our assessment, most of the grantees would be ready for some summative evaluation of their core work, once they have refined their programs further and improved their data collection tools, where needed.*

Most grantees' evaluations could benefit from more focused program activities, clearer outcomes and corresponding indicators, streamlined data collection, and more refined tools and instruments. Moreover, it will be important to ensure that complete outcome data are obtained from as many program participants as possible to ensure that any evaluation findings can be generalized.

9. *The obesity prevention sites now have an opportunity to build on lessons learned from the pilots and the current societal momentum around childhood obesity prevention.*

Almost daily media attention to the problem has heightened public awareness. Ongoing policy changes in terms of state and federal laws and school board policies around nutrition and physical activity, as well as work by organizations such as the CDC, American Heart Association, Clinton Foundation, and Robert Wood Johnson Foundation, combine to further buttress the work of the obesity prevention grantees. Most of the sites are likely to continue with at least some components of their programs, building on this momentum and the lessons they have learned through the pilots.

2. Recommendations

Here, we present 12 recommendations for the Foundation's consideration. These recommendations encompass three areas: 1) the Foundation's grant-making strategy; 2) evaluation guidelines for grantees; and 3) supporting grantees.

Grant-making strategy

1) *Short-term grants should have few goals.* Allowing the grantees to focus their work on just a few goals over a relatively short grant period for pilot programs would enable grantees to devote time and resources to a few key programmatic activities in specific areas. We suggest that the Foundation choose fewer areas as the focus for any future obesity prevention work. This is especially important for pilot projects so that the grantees can devote more attention to all aspects of program development, including design, partnership building, evaluation, and operations, to build and test a solidified approach.

2) *Develop an initiative-wide theory of change prior to issuing CFPs and require the grantees to develop a project-specific theory of change as part of their planning period.* Having a theory of change for the initiative developed with input from Foundation and the NPO would provide greater clarity for the grantees as to what was expected of them in terms of program, policy, and evaluation work. It would also enable grantees to better focus their proposals for pilot programs. The individual pilots' theories of change, as well as the initiative theory of change, should be revisited over time as the pilots evolve.

3) *Include an explicit planning period as part of the grant.* A defined planning period up front would enable grantees to more thoughtfully consider their program and evaluation designs, develop necessary measurement tools, and build relationships with key partners in their work prior to launching their pilots.

4) *When selecting grantees, place greater weight on the capacity to partner in community settings.* When grants are made for projects where partnerships are expected to be an ingredient for success, then significant time, energy, and resources should be devoted to partnership development. It is also critical to consider the experience and capacity of potential grantees to develop partner relationships in their communities.

5) Ensure that cultural competency is addressed by grantees working with diverse populations on obesity prevention. Cultural norms around food and health behavior in general are important to consider when designing obesity prevention interventions. The Foundation also can work with grantees to ensure that they carefully consider and decide how to address the language and cultural needs of their target populations during their work planning.

6) Consider grant timing, particularly for work that is occurring in schools. Work in schools is driven by the school calendar and is disrupted by summer and holiday vacations as well as the significant challenges encountered during enrollment periods. For programs that primarily work in schools, the Foundation should set the grant timeline accordingly to better fit with the ebb and flow of the school year.

7) More resources are needed for a pilot if the goal is to create a new program rather than to build upon existing work. Starting a program from the ground up requires more development and leg work than enhancing and expanding work that is already under way. If pilot programs are to be truly innovative, they may require more resources for development and planning, exploration of potential partnerships, increasing staff background and expertise, and logistical work.

8) In tying together different grant-making streams, the Foundation needs to be cognizant of the impact that change in one area has on another. The synergy concept entails overlaying one program upon another to efficiently build upon the existing work. However, this integrated approach means that the programs are dependent upon each other and whatever happens in one area will have repercussions for the other. The positive and negative consequences of changes to programs that are synergistically related need to be carefully considered prior to making any important funding decisions.

9) Increase the number of pilots in obesity prevention for rural areas because rural areas face additional challenges. The grantee in the one rural pilot faced additional challenges of moving into a new community that is physically distant from most of its resources. In rural areas, more staff time also may be required for travel and for initiating contact and building relationships in distant regions. Rural areas may lack readily available support services and may have different economic and social situations than urban areas, requiring different solutions.

Evaluation

10) Be clear about evaluation requirements for the pilot. Communicating requirements for data collection and evaluation in the initial CFP will ensure that grantees understand what they are expected to do and they can plan accordingly. This clarity should help grantees to more effectively identify and develop appropriate and effective methodologies, measurement tools, and sampling strategies for evaluation purposes, and ensure that they have the necessary resources to accomplish their evaluation goals.

11) Encourage childhood obesity prevention grantees to measure short-term outcomes, such as knowledge and behavior changes, that may lead to BMI changes in the longer term. The

Foundation or the designated NPO can encourage grantees to set realistic goals in terms of when to expect these types of outcomes and can encourage grantees to identify additional interim or process outcomes.

Supporting grantees

12) Provide more technical assistance in areas that were new to grantees engaged in this pilot work. In pilot projects focusing on a new field for the grantee, more technical assistance may be needed and the NPO needs to be given enough resources to support the capacity-building needs of the grantees in an effective and timely manner.

For technical assistance we recommend:

- Providing the sites with information resources in areas of particular struggle such as parental engagement and the collection of data from young children
- Facilitating the exchange of knowledge and tools among grantees
- Offering more individualized approaches to technical assistance. Because of grantee differences in expertise and in needs, individual approaches to grantee support may have been more beneficial than the group sessions that were conducted. The Foundation or NPO may want to consider developing a list of qualified consultants in different areas and making that list available to grantees, along with resources for capacity building. Or, it may choose to offer a series of workshops in different content areas from which grantees can choose, according to their needs.

Appendix A: Site Profiles

Chicago, Illinois: IFCK, Children’s Memorial Hospital Howard Area Community Center Obesity Prevention Program

1. Early Assessment of Implementation Progress

IFCK-Chicago has partnered with the Howard Area Community Center (HACC) to implement a program with two distinct but interrelated components: 1) increasing access to, consumption of, and education about healthy foods on site at HACC; and 2) increasing access to, consumption of, and education about healthy foods through the distribution of the “Growing Power” fresh produce basket. Of these two components, the first benefits from a higher degree of organization and direction and is progressing well. For the second, more planning is needed to effectively focus activities related to the Growing Power basket. There were several missed opportunities for marketing the Growing Power basket and as a result the produce basket distribution has remained minimal.

The menu changes and HACC food preparation staff trainings in better nutrition and healthier cooking methods are the highlights of the program. All of the stakeholders interviewed agreed that these two program elements have had the most impact. At the time of our visit in November 2006, two of the three planned trainings of the food preparation staff had been implemented. The food preparation staff we spoke to were visibly excited about the changes they had been able to make in the menus to provide more nutritious and healthier meals.

These small changes were already having a ripple effect, and several individuals we spoke to confirmed that there was an increased awareness about better nutrition among teaching staff and children and that it was even reaching some of the parents. Early signs of this “culture change” were already evident, such as the newly adopted policy to celebrate birthdays with a special children’s parade instead of serving cake. Another example is that as a Head Start center, the parents are invited to eat with the children. Thus, they experience firsthand the changed children’s menus and have provided positive feedback. In addition, the Head Start parent council had started discussing nutrition at its meetings.

The nutrition education and cooking classes were almost always at maximum attendance capacity (15 parents), demonstrating interest by the parents to learn more about healthier eating. However, as of the time of our assessment, the opportunity to use the classes to market the Growing Power basket had been missed. The class we observed was the first offered this academic year, and the first in a series of six classes. The parents seemed excited to be there and were actively engaged. The 20-30 minute nutrition education segment prior to the cooking class was competently led by an educator from the University of Illinois Expanded Food and Nutrition Education Program. She was also leading the cooking class afterwards. The one missing element

SUMMARY

Strategic focus: To increase access to, consumption of, and education about healthy foods on site at the Howard Area Community Center (HACC) and through weekly distribution of Growing Power produce baskets to children and families enrolled in HACC’s early childhood and home visiting programs.

Target Population: Children and families at HACC in the Rogers Park neighborhood of Chicago who are participating in early childhood and home visiting programs.

Activities: RD analysis of HACC menus; RD training and consultation with HACC food prep staff to prepare more nutritious meals for children; cooking and nutrition classes for parents; sale and distribution of Growing Power produce baskets; training of home visitor staff in basic nutritional assessment and counseling.

was the Growing Power produce basket. One of the intended purposes of the cooking classes was to teach parents how to use the produce in the Growing Power baskets. Although the Growing Power basket ingredients were used in the recipes prepared on the night of our observation, the basket was not explicitly mentioned during the class. The Growing Power basket was also not displayed at the class, so parents had no way of making this connection for themselves. We learned through our interviews, that in prior cooking classes, the basket had not been featured either. This is a missed marketing opportunity and an oversight in program implementation.

Challenges to Implementation

Most of the challenges of implementation regard the Growing Power produce basket program, which has had little enrollment success due to a haphazard marketing approach. In any given week, only two to seven families are purchasing the basket. A registered nurse employed by HACC is the primary staff person on the ground responsible for the implementation of the Growing Power program. However, she cedes most of the marketing and daily operations of the program to an energetic but inexperienced volunteer from AMATE, a year-long service program for recent college graduates. The approach to encourage families to enroll in the weekly Growing Power produce basket program and to entice them with free and then subsidized baskets over time has not been implemented as planned. Instead, parents are offered a free basket one time per classroom with the option to sign up later to purchase the baskets. They were originally priced at \$8 for the basic basket. Due to lack of sales, at the time of our visit they were being offered for \$5. Also, use of the LINK card to pay for the Growing Power basket was not being heavily promoted, even though it was an option.

Furthermore, there were several weak implementation features contributing to the lack of sales of Growing Power produce baskets: 1) parents had to order the baskets in advance at the start of the week and then they pick them up at the site on Friday; 2) the posters and fliers on display for the program were not very visible, were out of date, and described multiple basket and pricing options, which could be confusing; and 3) more direct parent outreach, such as speaking at some of the Head Start parent meetings about the baskets, also was needed. On a positive note, since some parents have said that they do not like the lack of choice in the baskets, at the time of our assessment, HACC was beginning to experiment with a Farmers' Market style of produce selection that would allow parents to fill the baskets themselves.

2. Early Assessment of the Partnership

The obvious benefit of having IFCK-Chicago and HACC working in partnership is that the staff acknowledge the different and complementary areas of expertise that each can offer. IFCK (based at Chicago Children's Memorial Hospital) has the resources to provide technical and evaluation assistance, while HACC, as an established multiservice and community-based agency serving low-income residents, has the infrastructure and experience to carry out the day-to-day tasks of program implementation. While this division of labor reflects the actual program setup, the two organizations have not been able to fully capitalize on their different skills as partners. Operationally, the two organizations have had very different notions of what the RWJF grant should be as well as different understandings of their respective oversight roles. Although

personality and working style differences factor in, another reason for the misunderstanding seems to be related to a lack of clear communication regarding roles and expectations, despite the written subcontract detailing their agreement.

The contrasting perceptions of the subcontract arrangement and oversight responsibilities are in part due to the speed of the Robert Wood Johnson Foundation's grant process as well as an assumption about the trust that existed between the hospital and the community partner. The IFCK-Chicago program director expressed this as a lesson learned regarding the need to have a longer-term relationship to lay the groundwork for an effective partnership. While a longer-term relationship surely would have made a difference in this case regarding the formation of the partnership for this grant, the need for ongoing communication, as well as clear role delineation both verbally and in writing, is critical for any partnership to be effective. Following our site visit in November 2006, IFCK and HACC had begun to meet on a more regular basis.

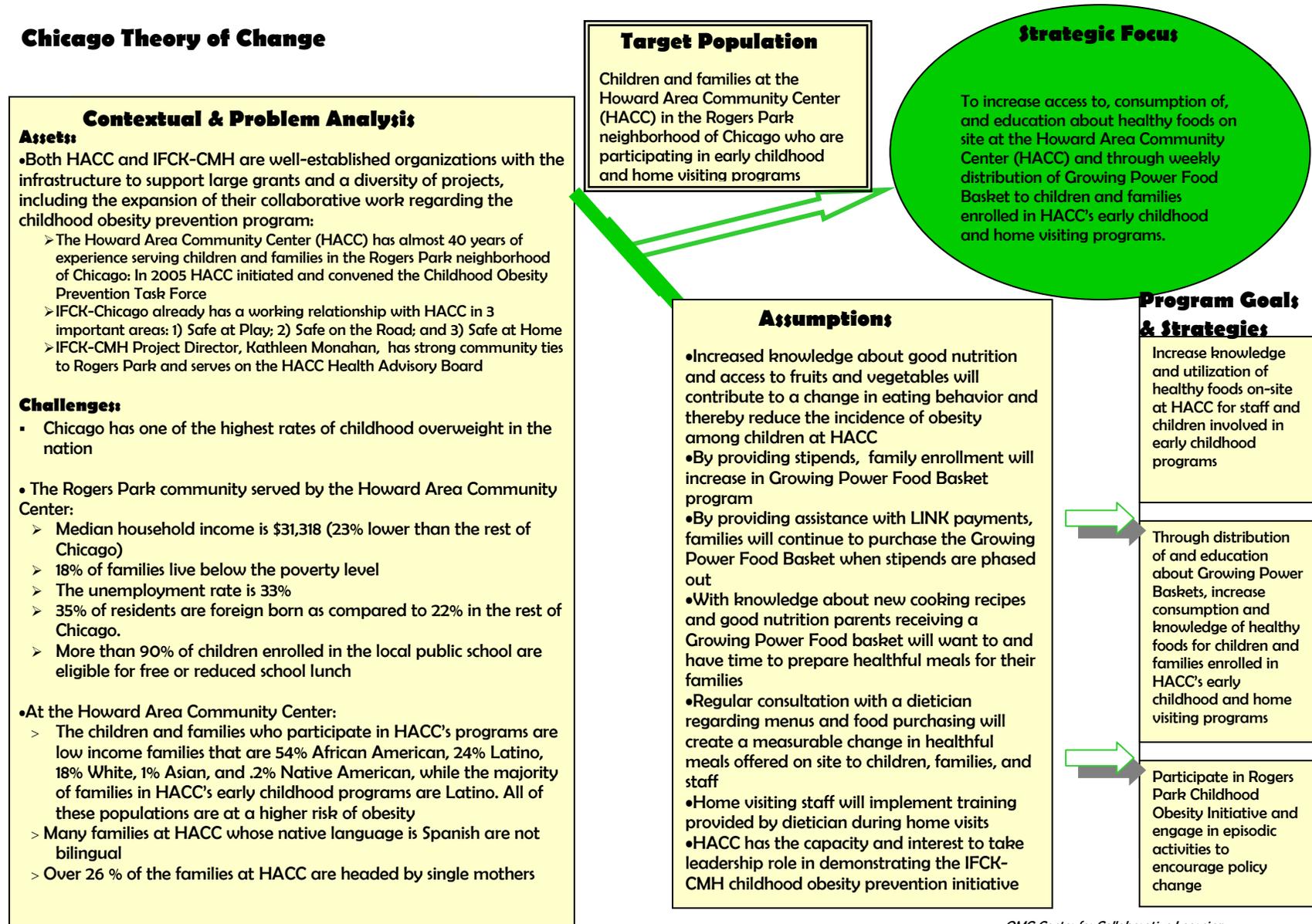
3. Early Assessment of Evaluation Capacity

The IFCK and HACC staff saw the RWJF grant as a program grant for which only process outcomes were required and therefore did not plan an evaluation component in the design. Early in implementation, when expectations for evaluation became clearer, the IFCK staff mapped out a number of measurement parameters using mostly existing data at HACC, such as quarterly BMI data and annual child nutritional assessments. However, the timing of the annual nutritional assessments does not coincide with the start and end of the interventions at HACC, therefore making it difficult to link any changes to these interventions. Additionally, the assessment forms do not contain any questions designed to correlate program activities with nutritional measurements. The program is currently recording the numbers of parents purchasing the Growing Power baskets and participation in cooking classes, but they have not asked whether these activities have caused parents to change their eating, cooking, or food-buying habits. This means that it is effectively impossible to say with any degree of certainty that correlations between the children's nutrition assessments and project activities are anything more than coincidental, since no integrated set of evaluation tools was developed. HACC also employs other interventions to impact BMI and nutrition, which could contribute to changes in BMI or the nutritional assessments. The other source of data that the IFCK staff are using to assess the cooking class impact is pre- and post-intervention food recall surveys conducted by the nutritionists leading the cooking classes. No data are currently being conducted to assess the menu and other cultural changes heralded as one of the program's greatest successes.

Capacity to Support Future External Summative Evaluation

As of the time of our assessment, the program did not have tools in place to appropriately measure the impact of any of the program elements on the nutrition of the children at HACC. However, the IFCK staff wrote this grant to support the implementation of a start-up program and not with the goal of conducting a research study. In their grant application, they indicated that if the program were to be expanded in the future, evaluation would be needed to measure outcomes. Before a summative evaluation can be conducted, an integrated measurement plan needs to be developed along with the resources to support the collection of necessary data.

Chicago Theory of Change

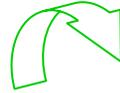


OMG Center for Collaborative Learning



Chicago Theory of Change

Program Activities



Goal 1: Increase knowledge and utilization of healthy foods on-site by HACC staff for children involved in early childhood programs

- RD analysis of menus
- RD training and consultation with food prep staff to prepare more nutritious meals on-site for children at HACC regarding:
 - Food purchasing
 - Menus

Goal 2: Through distribution of and education about Growing Power Baskets, increase consumption and knowledge of healthy foods for children and families enrolled in early childhood development and home visiting programs

- Encourage families to enroll, in classroom waves, in weekly “Growing Power” fresh produce basket program by making stipends available (on a limited basis) to families who are unable to afford the Growing Power food baskets
- Enhance use of LINK card (food stamp debit card in Illinois) to pay for Growing Power basket once financial support/stipends are phased out
- Compile recipes for parents using ingredients in Growing Power basket
- Enroll families in cooking classes at HACC to teach them how to utilize fruits and vegetables in that week’s Growing Power basket
- Train home visitor staff in basic nutritional assessment and counseling for them to use this component during the home visits they conduct with families

Goal 3: Participate in Rogers Park Childhood Obesity Initiative and engage in episodic activities to encourage policy change

- Attend regularly scheduled Rogers Park Childhood Obesity Initiative meetings
- Encourage Rogers Park Childhood Obesity Initiative to develop safe physical activity component in their plan and outreach
- Work with CLOCC (Consortium to Lower Obesity in Chicago’s Children) and their Rogers Park community networker
- Engage in episodic activities to encourage policy change, such as the Bicycle Rodeo, to promote physical activity and cycling

Short-Term Outcomes (18 months)

Goal 1: Increase knowledge and utilization of healthy foods on-site by HACC staff for children involved in early childhood programs

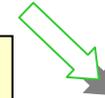
- Increased healthy food offerings as determined by weekly menu
- Increased use of Growing Power produce in menus and recipes on site at HACC
- Food prep staff receives at least three trainings from dietician

Goal 2: Through distribution of and education about Growing Power Baskets, increase consumption and knowledge of healthy foods for children and families enrolled in early childhood and home visiting programs:

- Increased number of HACC families receiving Growing Power Food Basket one time
- Increased number of HACC families receiving Growing Power Food Basket two or more times
- Increased consumption of healthy foods of families enrolled in cooking classes
- Increased number of families using LINK card to pay for GP produce baskets if relevant
- Increased consumption of fruit and vegetables by families enrolled in Growing Power Food Basket program
- Home visitor staff will attend at least one training session led by dietician

Goal 3: Participate in Rogers Park Childhood Obesity Initiative and engage in episodic activities to encourage policy change

- IFCK has regular presence on Rogers Park Childhood Obesity Initiative
- Episodic events promote awareness of physical activity and healthy eating



Intermediate Outcomes (2-5 years)

- Less of an increase in BMI for children in families enrolled in Growing Power only and families enrolled in both Growing Power and cooking classes as compared to families not enrolled in Growing Power or cooking classes
- Increased demand for high quality and low priced produce will result in expanded Growing Power program within HACC and Rogers Park
- HACC benefits from experts and resources available at CLOCC in following best practices for obesity prevention
- Plan is developed for replicating best policies and strategies of program for future expansion to other Chicago neighborhoods



Long-Term Outcomes (5+ years)

- Children and families adopt healthy eating habits
- High level of involvement and leadership from parents and community
- Improved capacity of IFCK-Chicago to work in partnership with likeminded organizations to implement policies and programs that promote healthy communities
- Changes are sustained and there is institutionalization of successful policies and practices related to healthy eating and exercising habits in all participating communities

OMG Center for Collaborative Learning

Cincinnati, Ohio: IFCK, Cincinnati Children’s Hospital Medical Center – Diabetes/Obesity Awareness Prevention Program (DOAPP)

1. Early Assessment of Implementation Progress

The main focus of the childhood obesity prevention work in Cincinnati is to increase healthy eating and physical activity by implementing the Diabetes/Obesity Awareness and Prevention Program (DOAPP), a peer health education curriculum, in three after-school programs in public schools in the city’s Avondale neighborhood. The principal investigators envision their work primarily as a research study to determine if DOAPP is effective at reducing the body mass index (BMI) measurements of overweight children. DOAPP was piloted at one school prior to receiving funding from RWJF. The RWJF grant facilitated the expansion of the program into two more schools. A secondary element of the strategic focus is to provide greater access to nutritious foods and opportunities for exercise in the Avondale community.

The peer mentor model holds promise as a means to engage elementary school students in a curriculum about healthy eating and physical activity. A central component of DOAPP is that high school students

serve as peer mentors, teaching the elementary students in the after-school program a curriculum focused on healthy eating and physical activity. Twenty-two peer mentors from a magnet school focused on health sciences were trained to work as educators with the children in the program. At the time of our site visit, implementation of the after-school program was progressing well. The peer mentors were able to hold the children’s attention and to lead and control the small and large groups effectively. They were able to deliver the content of the curriculum while remaining flexible to make adjustments as needed, based on time and space limitations, children’s responsiveness, etc. Anecdotal evidence indicated that the children were absorbing the content and making some behavior changes accordingly. The curriculum seems well designed but potentially overly ambitious given time and space limitations. DOAPP is offered twice per week at each school for one hour at a time, with some time shaved off of the hour due to some natural chaos at the sites. There are myriad additional benefits to the peer mentor approach, including providing the peer mentors with a paid job experience as health educators and providing role models for the younger students with whom they can connect on issues beyond the DOAPP curriculum. We see a great deal of potential in this model.

SUMMARY

Strategic focus: To increase healthy eating and physical activity by implementing the DOAPP program, a peer health education curriculum, while simultaneously providing greater access to nutritious foods and opportunities for exercise in the Avondale community.

Target Population: 150-225 African-American children, 50% of whom have screened positive for obesity, at three K-8 elementary schools in the Avondale neighborhood of Cincinnati.

Activities: Screen elementary students for obesity; 11th and 12th grade peer counselors implement healthy eating and healthy lifestyles curriculum in K-8 after-school program; provide healthy snacks; facilitate policy change in schools; increase access to healthy food and physical activity in the larger community.

IFCK/DOAPP has effectively built upon the physical activity efforts of their injury free program. The fact that most of the efforts to increase physical activity as part of DOAPP were already happening under the injury free grant supports the synergy notion behind the obesity prevention grants. Through the IFCK, playgrounds were built in the community to increase access to safe places to play. The IFCK also facilitated the creation of a new football stadium. The evening basketball program is ongoing and apparently a great success. The DOAPP program also incorporates physical activity into the twice weekly after-school sessions.

At the time of our visit, IFCK/DOAPP was just beginning to make inroads to increase access to healthy foods in keeping with the project's environment and policy goals. Some of this work was already under way by the Cincinnati Public Schools. In addition to expanding the DOAPP after-school program, the IFCK obesity prevention project had planned to focus on access to nutritious foods in the schools and in the community. By the start of this school year, the Cincinnati Public Schools had already implemented policy changes to increase access to nutritious foods. The school district mandated changes in school menus to include healthier choices, including healthier after-school snacks, supporting the work of DOAPP. The school wellness committees provide an untapped potential avenue for DOAPP to influence the schools' efforts to promote healthy eating and exercise. At the time of our visit, the injury free coordinator had indicated an interest in joining the committees at the three DOAPP schools, but was not yet involved.

Efforts by the DOAPP team to expand access to nutritious foods in the community were just getting under way at the time of our visit and were focused on bringing a farmers' market into the Avondale neighborhood and working with the Avondale Community Council to increase the supply of healthy food establishments as part of its redevelopment efforts. The other area in which DOAPP has made inroads affecting system-level concerns is within the hospital. The team has been at the center of an effort among hospital staff to streamline obesity care.

Another policy-level goal of DOAPP was to use this pilot to inform development of a BMI measurement policy across the Cincinnati School District. At the same time, through the school-wide BMI measurements, DOAPP was hoping to spread awareness among affected families. DOAPP successfully screened 833 children in the three intervention schools; of them, 38% screened positive for obesity. This was a huge accomplishment, given the volume of data and the coordination required. BMI measurements were gathered during school hours at a time when the school nurse was conducting routine vision and hearing screenings. DOAPP staff and volunteers assisted the nurse in taking measurements. After the screenings, letters were sent home to the parents of the children who screened positively for obesity, encouraging them to enroll their children in the after-school program, as well as pursue other options. At the time of our site visit, the IFCK staff was planning to begin follow-up calls to the parents of kids who screened 95% or more for obesity. The DOAPP staff is planning to use the pre- and post-intervention measurements in the schools to advocate for age-appropriate BMI measurements in all schools.

Challenges to Implementation

The primary goal of the program is to reduce the BMIs of children who are obese, yet the current enrollment is not targeted to children who screened as obese or screened as at risk for obesity. As of January 2007, BMI screenings indicated that 38% of children in the after-school program who screened positive for obesity. Despite the fact that this number reflects the numbers in the schools overall, it means that the intervention is reaching a population where 62% of the children who did not screen positively for obesity. While these students can benefit from the DOAPP program in terms of increased awareness, the primary anticipated outcome of the program of a reduction in BMI does not apply to them. If DOAPP is intended to impact the BMIs of students who screened positive for obesity, recruitment needs to be more targeted.

DOAPP hoped to enroll more children who are at risk of obesity after parents were notified of their children's BMI scores. However, the primary staff person overseeing the after-school program indicated that the program lacked the capacity to accommodate more students. At the time of our site visit, 30 children were enrolled in one of the sites, 40 at another, and 50 at the third site. While the DOAPP team said the programs can absorb more children and can average 75 students per day, the peer supervisor, overseeing the program at the three sites, felt that 35-40 was an ideal number of participants at each school. If more students enroll in the program, more peer mentors will be needed. Mentor training typically occurs in the summer, making it difficult to add more mentors during this school year. Regardless of the number of mentors, the supervisor felt a larger number of children would likely detract from the program because of more behavior disruptions with the larger-size groups. In addition, physical space for the program is limited. This raises concerns about the plausibility of adding more children to the program midyear to increase the enrollment of children who screened positively for obesity. One option may be to use the summer to recruit the students who screened positively at the June BMI screening for next year's program.

Greater outreach to and involvement of parents, as well as access to healthy foods outside of school, are important elements to sustain behavior changes from the program. The limited scope of the grant has meant less attention to these components thus far; however, efforts are beginning. Several DOAPP partners expressed the belief that unless they are able to change the environment in the children's homes, they will not be able to affect the children's outcomes. As of January 2007, the parent engagement component of the project consists of quarterly parent meetings during which the children perform short plays to convey what they are learning in DOAPP. The scope of the obesity prevention grant limits the program's capacity to do more intensive work with parents. On the positive side, anecdotally the staff report the children are talking about changes they have made in what they are eating at home. The grant plans also include efforts to increase access to healthy foods in the neighborhood. Similarly, as this is not a central component of the grant and research study, it had received less attention in the first year of the grant. At the time of our visit, efforts to increase access to healthy food outside of the school were just getting under way.

2. Early Assessment of the Partnership

The DOAPP program has developed a very complementary set of partners, from the hospital to the university to the community and for the most part has successfully leveraged the individual strengths of the partners to support the work. DOAPP works collaboratively with the Urban League to run the after-school programs and to incorporate its obesity prevention curriculum into the existing after-school program. A curriculum specialist from the University of Cincinnati designed the after-school curriculum, and a pediatric endocrinologist at Children’s Hospital developed and implemented the peer mentor program. The DOAPP peer supervisor and IFCK Program/DOAPP coordinator meet regularly to discuss logistics and implementation issues. The hospital provides the partial staff support of a research coordinator and senior research assistant for data collection and analyses. DOAPP staff indicated that the school board and principals of the targeted public elementary schools were supportive of DOAPP’s initiatives. The Avondale Community Council serves as a “sounding board” where DOAPP can “test the waters” with their ideas. All the partners we interviewed were highly committed to their work and seemed to be working toward the same goal — reducing BMIs in kids who are obese or at-risk of obesity.

3. Early Assessment of Evaluation Capacity

The primary focus of the evaluation is testing the hypothesis that DOAPP will result in a reduction in BMI. While it is worth testing this hypothesis, the assessment of changes in attitude, awareness and behavior should not be shortchanged as a result. Given the limited dosage of the intervention, these changes may be more appropriate measures of impact in the short term. The program staff we spoke with indicated that they thought increases in awareness about healthy eating and exercise and associated behavior changes were the most likely outcomes within a year, rather than changes in BMI. The principal investigators said they consider the assessment of changes in attitude, awareness, and behavior to be less vital to the goals of their study and are operating accordingly, spending less of their limited time and resources on measuring these changes. Assessing changes in attitude, awareness, and behavior are critical to evaluate the success of DOAPP in the 18-month grant period because: 1) if BMI is reduced or there is less of an increase in BMI in program participants as compared to non-participants, changes in attitude, awareness, and behavior among the participants, when compared to non-participants, can be used to support the attribution of the BMI results to the program; 2) changes in attitude, awareness, and behavior can be used to show outcomes for the 62% of program participants for whom a decreased BMI may not be a desirable outcome; and 3) given the limited dosage of the intervention (2 hours/week in school), changing awareness, then behavior, may be more realistic goals for the short term, leading to the longer-term result of BMI reduction or maintenance.

If the attitude, awareness, and behavior outcomes were elevated in importance, then some refinement of the strategies and tools to collect this outcome data would be necessary. At the start of the school year, the survey was administered to almost the entire student population, placing a significant demand on staff time. As a result, the principal investigators were considering administering the post-survey to only a random sample of students in each school. Administering the post-survey only to the students receiving the intervention and a sample of non-participants, as a control group, would be more efficient and render more relevant data.

Additionally, the survey proved to be inappropriately designed for the youngest students. DOAPP staff are working on developing a new tool for the younger students for the future. Food diaries collected during the after-school program provide another potential source of data. However, the peer supervisor acknowledged that the current method of collecting this information is not working very well, as it relies on the children's ability to recall food for the entire week.

Capacity to Support Future External Summative Evaluation

We believe the grantee has the capacity to support a future external evaluation, provided the team reviews the desired outcomes for the short term. Additionally, some improvements are needed to strengthen the collection of data on awareness, attitude, and behavior changes. Because the program is still in the early stages of implementation, the principal investigator feels that it would be a few years before DOAPP could support a full evaluation.

Cincinnati Theory of Change

Contextual & Problem Analysis:

Assets:

- Since 2000 IFCK- Cincinnati, in partnership with other community organizations, has been successfully working to reduce unintentional injuries to children in the Avondale community
- IFCK-Cincinnati is the co-coordinator of after-school programs in Avondale, in partnership with the elementary schools and the Urban League
- DOAPP (Diabetes/Obesity Awareness and Prevention Program) has been in existence since the fall of 2003 and has been successful in implementing its educational program in the Cincinnati public schools
- During development and pilot phases of DOAPP, IFCK-Cincinnati established effective partnerships with the Cincinnati Public Schools and several community organizations, including: Urban League of Greater Cincinnati, Hughes Center High School for the Health Professions, the Cincinnati Nutrition Council, the Cincinnati Recreation Commission, local media, local churches, and community councils

Challenges:

- Injury and obesity are two of the most prevalent problems facing youth in the United States:
 - The prevalence of known plus previously undiagnosed cases of type 2 diabetes mellitus (T2DM) – which is largely due to obesity – is 62% higher in African American than in non-Hispanic whites according to the National Health and Nutrition Examination Survey (NHANES III, 1988-94) of a probability sample of the US population
- In Cincinnati:
 - African Americans account for 27% of the population but make up 36% of all injury hospitalizations and nearly 75% of the injury-related deaths
 - There are no curricula addressing obesity within the Cincinnati Public Elementary Schools
 - There is no screening of youths at risk for obesity
 - There are no healthy food choices in the public schools
- In Avondale:
 - 35% of families live at or below the poverty level
 - Median household income is \$14,491 annually
 - The majority of students within the Avondale elementary schools qualify for free or reduced-priced lunches (94.5% of South Avondale students, 91.8% Burton Elementary, and 87% Rockdale elementary)
 - Avondale has the 4th highest injury rate of all the Cincinnati communities

Target Population

- 150-225 African-American children, 50% of whom have screened positive for obesity, at three K- 8 elementary schools in the Avondale area of Cincinnati: Burton, Rockdale, and South Avondale

Assumptions

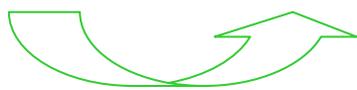
- In order for elementary students to make lifestyle changes they must be aware not only of the problem of obesity, but also possess the desire to change habits
- Motivating young people to make the lifestyle changes necessary to prevent obesity is better achieved through peer health and nutrition education because fellow students are better able to develop programs that are sensitive to ethnic and developmental differences
- Elementary students will act upon increased knowledge from peers about good health and nutrition and will change exercising and eating behavior at school and at home. Consequently, the incidence of obesity among children will be reduced at Avondale Public Elementary Schools
- Children will keep accurate food diaries
- As a result of increased outreach, parents will attend bi-monthly interaction meeting and complete the survey
- Parents will use the healthy eating cookbook and will have time to prepare healthy breakfasts, lunches, and dinners
- Parents will be able to afford ingredients for preparing recipes suggested in healthy eating cookbook developed by local chefs
- The pool of talented and skilled high school students interested in being peer health educators will be large enough to meet the demands of the DOAPP program
- Parents of children who screen positively for obesity will seek help for their children

Strategic Focus

To increase healthy eating and physical activity by implementing the Diabetes/Obesity Awareness and Prevention Program (DOAPP), a peer health education curriculum, while simultaneously providing greater access to nutritious foods and opportunities for exercise in the Avondale community.

Program Strategies:

- Increase awareness of risks of obesity and motivate students to practice healthier lifestyles
- Increase access to nutritious foods and to physical activity in the community and school environment
- Increase community activities to prevent/reduce obesity by strengthening partnerships with other organizations to effect policy change



Cincinnati Theory of Change

Program Activities

Goal 1: Increase awareness of risks of obesity and motivate students to practice healthier lifestyles
For students in three elementary schools:

- Screen all students for obesity
- Send letters to families of youth that screen positive for risk of obesity suggesting intervention options, including the DOAPP program
- Recruit, enroll, and provide training to 50 highly motivated 11th and 12th grade students/peer counselors from Hughes Center High School for the Health Professions to implement curriculum addressing healthy eating and healthy lifestyles 4 hours per week (2 hours /day, 2 days/week) for an entire academic year
- Match 50 peer counselors from Hughes High School with 50-75 students in each of the three elementary schools
- Ensure that family food and physical activity diaries are kept and updated by peer counselors
- Adjust curriculum for after-school program to increase physical activity
- Peer mentors work with local chef to develop easy healthy choices cookbook

For parents of intervention youth:

- Schedule bi-monthly parent interaction sessions on obesity prevention
- Disseminate healthy eating cookbook that peer mentors use with students
- Develop, pilot, then implement parent survey at each bi-monthly parent meeting

Goal 2: Increase access to nutritious foods and to physical activity

- Provide healthy snacks to all three after-school programs
- Incorporate more physical activity into the curriculum of the after-school programs
- Introduce families to healthy foods and where to purchase foods (partner with local food stores.)
- Work with schools to change their school day diet calendar/menus and join school efforts to change/remove vending machines.
- Provide youth with play space in the community to increase activity (e.g. build playgrounds, parks, football stadium)
- Increase activity for youth in the community during evening hours (e.g. basketball program for youth)
- Involve after-school program participants in "Cincinnati Walks" events

Goal 3: Increase community activities to prevent/reduce obesity by strengthening partnerships with other organizations to effect policy change

- Work with CPS administration to approve that all youth in every Cincinnati Public School be screened for their risk of obesity
- Program staff members participate in wellness committee in each school to address the obesity problem
- Develop a hospital coalition to address the obesity problem as a unified team
- Work with Cincinnati Public Schools (and in particular the 9 elementary schools with funding from the Ohio Department of Education) to make each Cincinnati Public School a community learning center within the region it resides
- Discuss with Avondale Council establishing increased access to healthy food choices in the community, in an attempt to influence which establishments will be located in the redeveloped area



Short-Term Outcomes (18 months)

Goal 1: Increase awareness of risks of obesity and motivate students to practice healthier lifestyles

- A 9% reduction in overweight youth who have screened positive for obesity and who are involved in the after-school program in all three elementary schools, as determined by BMI pre and post intervention
- A significant reduction in waist circumference in affected group
- Better understanding and attitude about healthy eating, healthy lifestyles, and obesity amongst the study students taught by peer mentors, after the intervention as compared to pre-intervention
- Parent involvement and change in food preparation at home as determined by parental attendance of meetings, food diaries among intervention youth, and parent surveys
- Obesity screening occurs in more schools
- The obesity prevention program is expanded to more area schools

Goal 2: Increase access to nutritious foods and to physical activity

- School administration and wellness committee are informed of the severity of the problem, as evidenced by data collection in the schools, and are motivated to create change in school policy around physical activity.
- More healthy foods are offered in schools
- Vending machines are removed from schools, or offer healthy options.
- There is increased physical activity in after-school programs.
- There is an increased amount of physical activity during after-school programs.

Goal 3: Increase community activities to prevent/reduce obesity by strengthening partnerships with other organizations to effect policy change

- Partner organizations (i.e., CPS, South Avondale Elementary, Burton Elementary, Hughes Center High School, University Hospital, Urban League, etc.) are clear on their roles and are making progress towards meeting desired outcomes
- Enhanced capacity of DOAPP to educate students and family members in target schools and the greater community about healthy eating, healthy lifestyles, and obesity
- Funding is secured and sustainability plan is developed to ensure continuation of program
- Increased awareness and interest in DOAPP as indicated by increased requests for information
- Avondale Council proposes plan to increase access to healthy foods in community
- There is a centralized, clear system of obesity care in the hospital from prevention to tertiary care, which is tied into the DOAPP program.



Intermediate Outcomes (2-5 years)

- Plan is developed for replicating best policies and strategies of program for future expansion to other Cincinnati neighborhoods and school districts
- There are more healthy food choices (e.g. restaurants that offer healthy food) in the community (in particular in the redevelopment area)
- District-wide screening for obesity is in place
- There is greater clarity in the community about where people can go for help when obesity is a problem.



Long-Term Outcomes (5+ years)

- Decreased obesity rates (BMI) among children in grades kindergarten through eight
- Children and families adopt healthy eating habits
- High involvement from community and parents to sustain new policies in participating schools
- Improved capacity of IFCK-Cincinnati to work in partnership with likeminded organizations to implement policies and programs that promote healthy school communities
- Partnerships are institutionalized as a vehicle towards systemic change in childhood obesity, as indicated by community acknowledgement of the partnership as a key part of the effort to reduce childhood obesity and enhance children's health
- Changes are sustained and there is institutionalization of successful policies and practices related to healthy eating and exercising habits in all participating schools
- Make a national impact by serving as a model for similar community-wide collaborations in urban low-income areas

OMG Center for Collaborative Learning

Greenville, North Carolina: IFCK, Pitt County Memorial Hospital and University Health Systems Children's Hospital – Healthy Choices: Influencing Policies, Communities, and Families

1. Early Assessment of Implementation Progress

The primary focus of the Healthy Choices program is a weekly educational and experiential workshop for families. In addition, Healthy Choices is working to integrate national and state school policies into the school system and into childcare settings. Healthy Choices is conducting these activities in Wilson, North Carolina, a small rural community approximately 20 miles west of Greenville.

The Healthy Choices initiative is on track with its activities and has encountered few serious external obstacles to the work. Program staff has significant experience implementing family programs and has implemented an obesity prevention focused adaptation of their existing highly successful Nurturing Parenting program. Although the project was progressing well, at the time of our site visit more work was needed to develop partnerships in the Wilson community, which is a new area of intervention for this project. A key school administrator is on board to support the work, but whether there is support from principals at the individual school level was less clear. As the only rural IFCK childhood obesity prevention programs, the lessons from this pilot can inform the development of obesity prevention programs in other rural communities.

At the point of our assessment, the primary focus of the implementation was the Healthy Choices program, a weekly educational and experiential workshop for families. The family workshops adapted the Nurturing Parenting program model, which has been validated as a best practice used nationally in child abuse prevention. The workshops are designed to promote effective parenting skills around children's health and well-being practices. Program staff successfully obtained referrals of families who might benefit the most and began the program in October with nine families participating. The program combines nutrition, physical activity, injury prevention/safety messages, nurturing, and a healthy family meal. An initial assessment of nutrition and physical activity was done for each of the families, and based on the results individualized personal family plans were developed. The families' goals were reviewed at the end of the six weeks, and a three-month follow-up home visit monitors continued commitment. Local university students and hospital staff helped deliver the classes. A part-time coordinator was hired through the grant to take over implementation of this piece from the project coordinator. A partnership was being developed with the local YMCA to do yoga classes and possibly other physical activities for the families.

SUMMARY

Strategic focus: To improve nutrition and physical activity in families, communities, schools, and childcare facilities through education, support for policy implementation, and behavioral changes.

Target Population: Children 3-17 years of age in Wilson, NC, a low-income, low educational levels area.

Activities: Educate families about nutrition and physical activities and promote changes in their routines. Work with schools to facilitate implementation of new state policies. Raise community awareness.

Policy changes to affect the distribution of food in schools and childcare settings were still in the assessment and planning phase at the time of our visit, with some implementation details still be worked out. Menus of four schools in Wilson were assessed using the School Health Advisory Committee (SHAC) guidelines, and four more were to be assessed (going beyond the original goal of working with four schools) at the request of school administrators. Action plans for the schools were yet to be developed. And at the time of our visit, there were no plans to follow up with the schools on their implementation of the action plans. Childcare provider training had not started yet. The program was preparing to offer four seminars to teachers and food providers/cafeteria staff in childcare facilities, two on nutrition and two on physical activities for young children. They hoped to be able to offer continuing education units for the staff as incentives for participation. The program also was considering offering a policy-oriented seminar for the directors. The seminars were to begin in January, with one seminar offered per month.

Although there is a logical connection between the types of activities and the desired outcomes as stated in this site's theory of change, our assessment is that the intensity or strength of the interventions that are necessary to achieve these outcomes is not what it needs to be. The family workshop covered a great deal of material in a very short time, and at times coverage of the material felt superficial. The lack of experiential activities in the classes may make it less likely that participants will fully learn and understand the information and change behaviors as a result. The simplicity of materials and discussion is explained partly by the fact that staff developed classes for the literacy levels of the families, acknowledging that they would first need to be able to read and understand basic health information before they could act on it. Appropriately, the class we observed focused on introducing new ideas about nutrition and physical activity to the families. Use of non-verbal aids or models, and the incorporation of methods of instruction other than lecture would have reinforced the information. It may also be necessary to spend more time on core material around nutrition and physical activity and remove some material less directly related to the goal of reducing obesity. Program staff seem to be aware that six weeks of classes are not enough to create real and lasting change, and that it is a good starting point for them to reexamine what is and is not achievable in the short term. Healthy Choices is a pilot program that is clearly a work in progress, and program staff plan to revise and redesign as needed based on their experiences with the first six-week session completed in December.

Challenges to Implementation

The challenges below relate primarily to the implementation of the family workshops. It was too soon to ascertain challenges that may arise for the other pieces of the initiative that had yet to be implemented.

Many of the challenges to implementation stem from characteristics of providing services in a rural community. For example, transportation has been an ongoing issue. Some of the families lack transportation of their own, and there is little to no access to mass transit. The program staff and key resources are mostly located in the small city of Greenville, which is a 30-45 minute drive from Wilson. The literacy rates for both parents and children in this rural community are low and the program has worked hard to address this challenge. Since there was only one Spanish-speaking family currently participating in the family program, materials were not translated and there were no Spanish-speaking program staff to work with this family. The local

hospital in Wilson was not engaged at this point with the work of Healthy Choices. As a result, our concern was that the outreach efforts might encounter some resistance from the community, or at least less than optimal commitment to the work if residents felt that outsiders were imposing these initiatives upon them.

2. Early Assessment of the Partnership

While the partnership seemed to include the right community institutions to support the Healthy Choices agenda, there was not a sense yet they had a shared responsibility for accomplishing the outcomes of the program. The Healthy Choices partnership is based in Wilson, the target community. Partners include the Wilson Medical Foundation, Department of Mental Health, Health Department (WIC Office and Food Stamps), Department of Social Services, YMCA, and the school system (assistant superintendent, principals, school nurses, social workers, and teachers in the four target schools). The partners are involved for distinct pieces but do not see the project as a whole. Unless a clear connection is established, or the elements of the program are reduced to those that are easily connected (e.g., stricter nutrition standards in schools and intense work with at-risk children), the current partners will not be able to support the work to their fullest capacity.

Cooperation with schools seemed to be grounded around the policy compliance issue. Although Wilson schools have a School Health Advisory Council that is supposed to have a coordinator position to support its policy compliance work, this position was vacant and the program coordinator was essentially doing the job of the school coordinator. The implementation of stricter nutrition standards for next year will require full buy-in by school principals to be effective. Healthy Choices needs to be seen as an external resource that can help in the development of plans to meet the standards and as a liaison to the resources available through the IFKC connections in Greenville. As with any partnership, roles and responsibilities need to be clear to all partners at all times to avoid frustration and duplication of efforts.

The partnership in Wilson shows some important gaps at this early stage. At the time of our assessment, there was a lack of community-based organizations — such as churches, local business leaders to support the community piece, other nonprofits that work from a family-strength perspective rather than a child abuse perspective, and after-school providers. The local Wilson Medical Center also needed to be engaged in the public health aspect of the work. Cooperative Extension is another agency that has a wealth of resources that can be tapped. Greenville has many resources that are underutilized for the Healthy Choices work in Wilson. Through its association with East Carolina University, Pitt Memorial Hospital, the Pediatric Healthy Weight Research and Training Center, and University Health Systems, Healthy Choices has a wealth and variety of expertise available to it in Greenville. The program was able to draw on this expertise and support to some extent, but the work of Healthy Choices could be strengthened substantially by establishing stronger ties between the Wilson partners and the Greenville resources.

3. Early Assessment of Evaluation Capacity

Program staff know how to collect data and develop measures to assess change, but the implementation of the assessments and data collection tools needed improvement. Knowledge tools for family workshops were basic and designed for the specific lesson. However, in the family program, the pre- and post-intervention measures as currently administered could not yield much in the way of valid data because they were collected too close together in time (one hour apart). There is no way to tell whether they are measuring lasting knowledge or short-term memory recall. Information gleaned from the pre- and post-intervention knowledge tests in class was primarily for internal use and used to redesign lessons. The childcare provider education piece of the program was to be assessed with a pre- and post-intervention test based on the curriculum taught in the workshops on healthy foods and physical activity. Implementation was to begin in January.

The SHAC assessment provides an excellent baseline about the status of nutrition and physical activity in the schools in relation to compliance with federal standards. However, the existing assessment did not include new state standards that are more stringent. This is a problem since the new standards were in the process of being implemented, but the tool was not sensitive to them. A new set of measures is needed to assess compliance with the state standards. Physicians at the Pediatric Healthy Weight Research and Training Center could potentially help develop this tool. Healthy Choices planned to use the SHAC assessment as a post-test as well, which could benefit the grantee's evaluation capacity to measure its policy work regarding federal standards.

Capacity to Support Future External Summative Evaluation

The grantee has the capacity to support a future external evaluation, provided some improvements are made to strengthen the collection of data on behavior and knowledge changes. Data collected were relevant to the work the grantee is doing, although many were process, not outcome, indicators. Existing outcome indicators captured knowledge, not behavior. The tools were too program-specific to be applicable elsewhere. The grantee plans to conduct three-month post-program home visits to inform its assessment of behavior change, but it was not clear how it is going to use the information. The SHAC modifications to include the new state standards would be the most promising aspect of this work if the revised instrument were to be used for evaluation as well as assessment. Association with the university gives the grantee advantages such as access to students who can collect and enter data.

OMG Center for Collaborative Learning

“Healthy Choices” IFCK Greenville NC (Pitt Memorial) Theory of Change



Target Population:
Children ages 3-17 years of age in Wilson, NC, a low income, low educational levels area

Strategic Focus: To improve nutrition and physical activity in families, communities, schools, and childcare facilities through education, support for policy implementation, and behavioral changes.

Contextual & Problem Analysis:

CHALLENGES:

- For youth ages 2-18 in North Carolina, there is a 32.9% prevalence rate of being at risk or already overweight. In the Wilson NC area, the rate is higher than the state average, 36.1%. A large percentage of the population is minority, and families with low incomes and low education are at higher risk for injury and unhealthy lifestyles
- Wilson is a rural area
- 49% of housing units are renter occupied
- Unemployment 8.9%
- 25% of children live in poverty (compared to state average 16%)
- One third of children live in single parent households
- More than 50% of children qualify for free/reduced price school meals
- Almost 20% of children receive food stamps
- Lack of transportation in a rural area

ASSETS:

- Partnership with Eastern Carolina Injury Prevention Program (ECIPP) Nurturing project, a family focused interactive parenting program that teaches appropriate expectations, choices & consequences, boundaries, structure, & positive communication
- Partnership with ViQuest, a corporate wellness center that has a children’s weight management program
- IFCK and ECIPP already established in the community
- People of Wilson already rely on expertise of University Health System

Assumptions

- The improvement of children’s physical activity and nutritional outcomes cannot be achieved without policy changes
- With Healthy Choices’ help, schools and childcare centers will be better able to comply with recent changes in policy for nutrition and physical activity.
- Schools and childcare providers value increasing children’s physical activity and developing healthier eating habits and will cooperate in creating these changes.
- People will make lifestyle changes as a result of the program.
- The ViQuest model can successfully be applied as a template throughout the Wilson community.
- In order to help children’s physical activity and nutritional outcomes parents must be involved.
- Parents will be able/willing to attend training classes.
- Families are concerned about unhealthy behaviors and are open to change.
- Families are willing and able to track eating and exercise behaviors.
- Schools, families, caseworkers, and childcare providers will accurately report their behaviors.
- Families will allow program staff into their homes for site visits.
- Strategies integrating family, community, and policy will be more effective at impacting childhood obesity than strategies targeting just one of these areas.
- A collaborative partnership will be more effective in combating childhood obesity than the efforts of a single organization alone.

Program Goals

- ➔ **Goal 1: Facilitate policy changes in schools and child-care facilities to improve/increase access to healthy foods and encourage physical activity**
- ➔ **Goal 2: Raise community awareness of healthy lifestyle choices through community-wide education and training**
- ➔ **Goal 3: Promote exercise and nutrition routines in families to help parents and children increase physical activity and develop healthy eating behaviors**
- ➔ **Goal 4: Develop and sustain partnerships supporting childhood obesity prevention efforts in the greater Greenville area**



“Healthy Choices,” IFCK Greenville NC (Pitt Memorial) Theory of Change

Program Activities:

Goal 1: Facilitate policy changes in schools and childcare facilities to improve/increase access to healthy foods & encourage physical activity

- Facilitate implementation of state policies regarding exercise and nutrition in Wilson School System.
- Assess current school menus, provide feedback, work on remediation.
- Promote policies requiring a variety of healthy food options to school students
- Collaborate with childcare personnel to revise or adopt healthy food and fun physical activity policies to implement in pre-schools.

Goal 2: Raise community awareness of healthy lifestyle choices through community-wide education and training

- Identify community resources available to families.
- Refer families to other resources as needed.
- Work with Social Services and the Health Department to provide informational handouts to food stamp and WIC recipients so they can choose nutritious food.
- Through the media and direct communication with parents, advertise safe play places such as school playgrounds, community play areas, parks, and backyards
- Create synergies with other injury prevention initiatives – e.g. notify parents of unsafe situations such as an overweight child who does not fit in a safety seat.

Goal 3: Promote exercise and nutrition routines in families to help parents and children increase physical activity and develop healthy eating behaviors

- Conduct trainings for parents to encourage them to change their own, as well as their children’s poor eating and exercise practices.
- Conduct six-week interactive workshops for families (1 group per quarter with 10 families in each).
- Implement and experiment with family games to show movement can be fun
- Provide gym alternatives for families who cannot afford fitness fees.
- Develop and provide to parents exercise routines for their children.
- Develop and distribute handout “Your Child’s Next Pediatric Visit.”
- Distribute materials from CDC and Prevention’s VERB campaign.
- Provide injury prevention training such as risks associated with losing weight and balance to avoid trips and falls.
- Offer to conduct Grocery Store Tours and Nutrition Label Learning Opportunity to help participants identify healthy foods.
- Use visual aids to educate adults and children about appropriate portion sizes.
- At 3 month interval, evaluate sustained change by conducting home visits with families who participated in training.

Goal 4: Develop and sustain partnership supporting childhood obesity prevention efforts in the greater Greenville area

- Continue and strengthen partnerships with ECU Brody School of Medicine and other community groups.
- Work with ViQuest to apply their model of parental involvement in children’s weight management into the IFCK childhood obesity prevention work.
- Work with Social Services and the Health Department to distribute information.

Short-Term Outcomes (18 months):

Goal 1:

Four target schools are in compliance with state healthy food and physical activity policies.

Increased knowledge among childcare providers of fun physical activities and healthy food choices.

Goal 2:

Families are better informed about resources in the community, such as safe play places, that can support healthy eating and activity habits.

Parents are more knowledgeable about safety concerns and injury prevention for overweight children.

Goal 3:

Parents participate, engage in activities, role model healthy eating and physical activity behaviors for children

Parents and children increase involvement in physical activity.

Increase in parental knowledge about injuries and exercise.

Parents make positive dietary changes in family meals (i.e., provide appropriate portion sizes for children).

Parents learn to read product nutrition labels, identify healthy foods, and plan nutritious meals.

Goal 4:

Stakeholders are engaged in planning and implementing Healthy Choices, with partner organizations fully cooperating and knowledgeable about their roles.

Funding is secured and sustainability plan is developed to ensure continuation of the Healthy Choices initiative.

Increased awareness of existing resources, active participation and coordination of services

Intermediate Outcomes (2-5 years):

Families are better informed about healthy eating choices

Policy changes are institutionalized, as evidenced by sustained nutritional and physical activity changes in schools and child care facilities.

Partnerships between the IFCK subgroup focusing on childhood obesity and other community partners are solidified and institutionalized.

School District has assessed and revised schools menu and has developed policies to increase daily physical activity. Grantee has developed the capacity to sustain the work.

Long-Term Outcomes (5+ years):

Obesity rates among children under 17 have decreased.

Wilson public schools, childcare providers, community, and municipal organizations are committed to the success of the Healthy Choice program, and outcomes are sustained.

Healthy Choices initiative is expanded (replicated) to other neighborhoods and schools in the greater Greenville area.

Hartford, Connecticut: IFCK, Connecticut Children's Medical Center – Kid Healthy Program

1. Early Assessment of Implementation Progress

The Kid Healthy (KH) program is a multipronged effort that includes children's weekly physical education and nutrition classes at schools and after-school programs as the core activity. Other activities include efforts to affect the supply of foods at neighborhood groceries (bodegas), outreach to involve the parents of the children in the intervention schools, advocacy efforts to improve school menus and physical education (PE) requirements at the schools, and a broader public awareness campaign.

Implementation of KH activities was progressing very well at the core; the children's weekly PE and nutrition sessions were well planned and well implemented. However, the other components were not as well organized or directed. More planning is needed regarding how to effectively focus these other activities. The staff resources may not exist to effectively implement these other components while maintaining the success in the children's programming. Better leveraging of partnerships, particularly with the Hartford Food System, a community based organization with overlapping goals, could help boost these other components.

Children's weekly sessions at schools are the highlight of the program. Targeted students were visibly engaged in the activities (note: our assessment is limited to visiting one of the three schools). IFCK has won the support of the school board and the principals, and all but one of the PE teachers. The timing for implementation of activities has varied at each school, which may impact the ability to achieve the same outcomes at the end of 18 months across schools.

Although a few changes could be observed in the offerings of fresh fruits and vegetables at the larger bodegas, no healthy snack changes — one of the program's aims — had occurred as of October 2006. A central piece of the original program design was to link the students' increased awareness gained through the nutrition/PE classes to what they purchased in the store with the incentive of the students receiving a sticker for every KH-food purchased. At the time of our assessment, the largest challenge still in question was how the bodegas, especially the smaller ones, would be able to offer more fruits and vegetables and even non-perishable healthier snacks, given their limited storage capacity, if they lose revenue by doing so? This is a significant concern that does not seem to have been explored in any depth as of our October visit.

SUMMARY

Strategic focus: To promote healthy nutrition and to increase daily physical activity among children in target schools and neighborhoods by educating and encouraging healthy food consumption and exercise by students, and by influencing the supply of healthy food opportunities for students.

Target Population: 6- and 7-year-old students at Sanchez, Burns, and Rawson Elementary Schools in the Frog Hollow Neighborhood. Also, children in the same age group who are members of the Boys and Girls Club (Asylum Hill) and 7th Day Faith Adventist Church.

Activities: Provide 30-min nutrition and PE sessions (weekly) for students and parents (monthly) at

The parent engagement component also needs more attention to succeed. The program was also targeting the students' parents, by offering monthly 30-minute sessions on nutrition and physical activity, which were intended to help them understand what the children were learning so that they could support the program and facilitate its impact. While no parent meeting had happened in 2006 at any of the sites, planning was under way. The program's parent outreach strategy included putting ads on bulletin boards in the schools' Family Resource Centers and advertising in the school newsletter. A \$20 incentive was offered to parents who attended. Letters announcing parent events were not sent home. The program attracted 12 to 15 parents to a meeting at one of the schools early on, despite the limited outreach. Additionally, at the time of our site visit, it was unclear how the activities aimed at the parents connected to expected outcomes. The only outcome the IFCK team cited for parents was increased utilization of corner stores and bodegas, which was not connected to the program's only activity (monthly sessions). More discussion of what are logical, feasible, and desirable goals for parents is needed.

Challenges to Implementation

There is not enough staff capacity to implement all of the planned activities effectively. The program was receiving support from the hospital (Connecticut Children's Medical Center), which had extended its resources to the implementation of KH activities (i.e., nutritionist and research, public relations, and government affairs departments). However, the program coordinator and a part-time program assistant were the main staff on the ground implementing the activities. Even with the resources extended from the hospital and the Injury Free Center, the KH team seemed thinly stretched as there were several activities occurring simultaneously at all of the school and community sites. As of December 2006, the program coordinator was no longer managing the program, which raises additional concerns around how the program will proceed.

2. Early Assessment of the Partnership

The grantee has been flexible with their school and community partners for the delivery of the children's programming, throughout the implementation, adapting activities to fit schools' needs and schedules. All three of the schools as well as the two community partners seemed to have bought into KH and were doing what they could to ensure a smooth and successful implementation.

The partnership with the Hartford Food System (HFS), the other key partner, is underdeveloped. HFS seemed relatively uninformed of the work that KH has undertaken and planned to undertake regarding the bodegas, while the IFCK coordinator saw HFS as the primary partner and a key ingredient to implementation success. The two partners did not communicate on any regular basis nor was there any formal agreement as to who was responsible for what components of the joint work. *HFS and KH have complementary assets they could bring to the table, but this has remained largely unexplored by the partnership.* The limited extent of communication and outreach to HFS has resulted in its operating in isolation from KH and viewing its work as separate.

3. Early Assessment of Evaluation Capacity

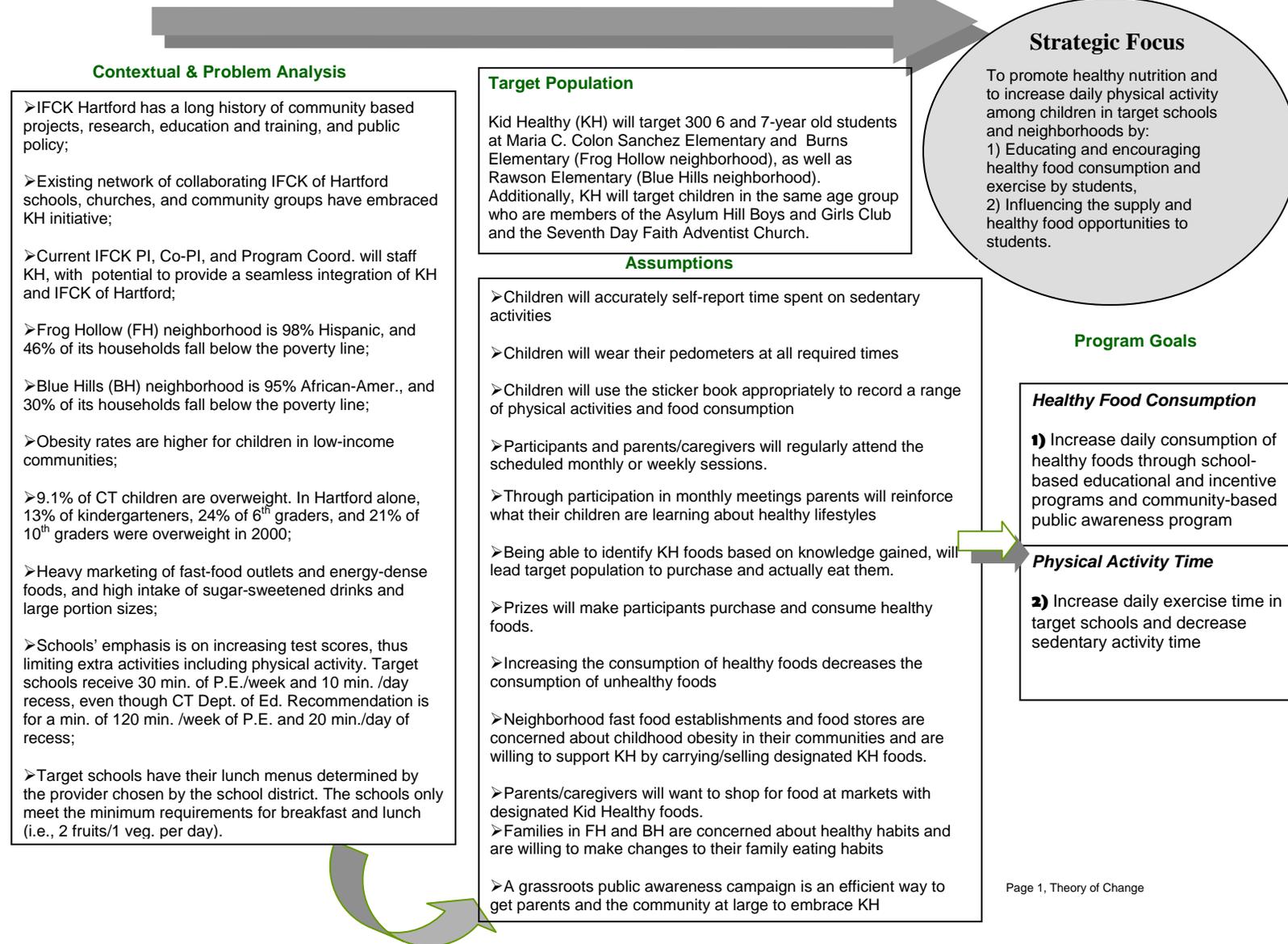
The data collection plan for evaluating the outcomes of the children's nutrition and PE sessions is fairly solid yet a few implementation challenges have been encountered. However, the data collection strategies for the parent education component, the bodega work, and the school menu and physical activity advocacy work need further refinement. The tools for measuring the outcomes of the children's sessions include sticker books to track changes in the children's behavior, pedometers, BMI measurements, and a pre- and post-intervention program attitude and behavior survey. As of the time of our assessment, the main challenges that the program had encountered with these tools were lack of parental consents for BMI measurements and the reliability of the younger children to respond to the survey and to keep track of the pedometers. The sticker books, just beginning when we visited, also seemed potentially problematic for the younger children in terms of recall.

As mentioned above, there was a disconnect between the activities for parents and the outcomes expected for parents. If increased parent utilization of the bodegas was a desired outcome, the measurement of this outcome is lacking. The measurement plan at the time was to use a "Parent Purchasing Observation Tool" developed by the KH team. The ability to identify parents or even the same group of adults over time when using this tool in the stores to assess a change in utilization is problematic. Other questions regarding the administration of the tool exist such as whether it is an observation tool, as it is identified, or an interview instrument (as some of the questions would indicate); the timing of when it is going to be used as a "pre-" and "post-visit assessment" vis-à-vis any planned interventions with the bodegas; who is going to have the time available to administer it; and the content itself (few of the healthy snack options intended as the aim of the program were even listed as items for which to track purchasing).

Capacity to Support Future External Summative Evaluation

The grantee has the capacity to support a future external evaluation of the children's nutrition and physical education sessions, provided that some improvements are made to strengthen the collection of data on behavior changes from the students. The readiness to support external evaluation of the other components, such as the parent engagement and bodega work, did not exist at the time of our site visit. More work is needed to clearly identify the expected outcomes of this work and to ensure that programming is in place to reach those outcomes.

IFCK-Hartford: Kid Healthy THEORY OF CHANGE



IFCK-Hartford: Kid Healthy THEORY OF CHANGE

OMG Center for Collaborative Learning
September 2006

Program Activities

Goal 1: Food Consumption

- 30-min nutrition and physical activity sessions for children (weekly) and parents (monthly) in each school, community, and church location.
- Create, distribute and teach children how to use a sticker book to track daily usage of KH foods
- Distribute water bottles to children and teach them to track daily water consumption w/ sticker book
- Collaborate with neighborhood fast food establishments and food stores to designate KH foods. Children will receive a sticker for every KH food they get. Prizes will be given to those who accumulate 20 stickers
- Collaborate with school administrators, parents and others to assess and recommend changes in school menus
- Assess school menus guided by CDC's School Health Index Self-Assessment and Planning Guide
- Weigh and measure children at target schools, CBOs, and church to determine BMI at baseline and at completion of project
- Measure gained knowledge by conducting a pretest and posttest questionnaires of children on identification of KH foods
- Build parent and community support for KH with a grassroots public awareness campaign with posters and flyers that will be disseminated in the community; public service announcement for local radio stations and schedule a Kid Healthy program on community cable TV
 - One-hour daily nutrition and physical activity sessions for children over a 5-week period at Camp Courant

Goal 2: Activity Levels

- 30-min nutrition and physical activity sessions for children (weekly) and parents (monthly) in each school, community, and church location
- Create, distribute and teach children how to use a sticker book to track daily usage of TV and video games
- Collaborate with school administrators, parents and others to assess and recommend changes in physical education/activity time
- Designate school playgrounds as Kid Healthy Zones with designated days, times, and activities where children can increase their daily physical activity in a safe way
- Distribute pedometers to children, teach proper usage and expected amount of daily steps and provide sticker books to record steps
- Conduct a pretest and posttest questionnaires of children to measure amount of daily physical activity and daily use of TV and video games
- Build parent and community support for KH with a grassroots public awareness campaign with posters and flyers that will be disseminated in the community; public service announcement for local radio stations and schedule a Kid Healthy program on community cable TV
- One- hour daily nutrition and physical activity sessions for children over a 5-week period at Camp Courant

Short-Term Outcomes (18 months)

Goal 1:

- 25% of participants replaced soda, sports beverages or juice/juice drinks with water
- 25% of participants identified 7 healthy snacks
- 25% of participants increased consumption of fruits and vegetables to two per day
- Target schools modified menus from minimum requirements to 3 fruits and 2 vegetables per day
- 60% of participants maintained their BMI
- Increased parent utilization of corner stores and bodegas

Goal 2:

- 25% of participants increased physical activity (increased steps on pedometer)
- 33% of participants report decreased screen time to less than 2 hours per day
- Target schools increased physical activity recess time to 20 min./day (doubled the time)

Intermediate Outcomes (2-5 years)

- Obesity prevention activities within multiple community agencies, schools, and the neighborhoods they serve have been institutionalized.
- School District has assessed and revised schools menu and has developed policies to increase daily physical activity (recess and PE time).

Long-Term Outcomes (5+ years)

- KH initiative is expanded (replicated) to other neighborhoods and schools in Hartford and elsewhere in CT
- Hartford public schools, community, and municipal organizations are committed to the success of KH program aspects and outcomes are sustained.

Little Rock, Arkansas: IFCK, Arkansas Children’s Hospital Research Institute – School Partnership for Obesity Research and Prevention (SPORT) Program

1. Early Assessment of Implementation Progress

The SPORT program is a school-based and neighborhood park program aimed at increasing students’ access to physical activity and healthy foods. The physical activity components consist of a walking program, a classroom curriculum, and a program designed to increase individual students’ exercise during PE class and recess through “Personal Best Challenges.” The nutrition activities consist of helping to ensure the state’s new obesity prevention guidelines are instituted through the cafeteria offerings as well as restrictions on unhealthy foods in class.

Implementation of SPORT activities was progressing very well overall. Keys to the smooth implementation and progress to date are the grantee’s solid partnership with the target school and the program’s solid professional staffing. Arkansas legislation (Act 1220 enacted in 2003) to address childhood obesity and develop nutrition and physical activity standards within the state further contributes to the success of SPORT, since the MLK school is required by law to incur some of the changes SPORT is promoting. Key SPORT staff sit on the Little Rock School District’s advisory committee, and the program was in the beginning stages of the implementation of MLK’s own wellness advisory committee. In our assessment, the school-level wellness committee, once established, has the potential to provide a positive foundation to integrate more permanently some of SPORT’s work into the school culture and ensure sustainability.

The physical activity component of SPORT is comprehensive; activities varied from a general walking program to extended activities for recess and/or P.E. implementation progress of the different exercise activities varied at the time of OMG’s site visit.

- *The walking program was fully implemented, systematically targeting students and interested school staff and informally targeting parents and families. For the walking program, students added the daily steps on their pedometers to get a total number of steps — that were converted into miles — for the entire class.*
- *Implementation of the Personal Best Challenges began in the fall after careful planning that included input from children into the kinds of activities they preferred. The goal was to implement the challenges during PE class, refine the activities, and then incorporate them into recess period. The SPORT team designed a manual to accompany the challenges, so in the future MLK can continue with the activities and other schools may implement them also.*

SUMMARY

Strategic focus: *To increase elementary school children’s access to healthy foods and to increase their physical activity, primarily through a school-based program and small park-based summer program for activity and healthy snacks.*

Target Population: *Primarily third and fourth grade students at the Martin Luther King Jr. Elementary School. Secondary is a small sub-sample of these students in a summer program at the community park.*

Activities: *Increase physical activity through exercise breaks, walking program, Personal Best Challenges, and TV shut-off; provide healthier competitive food offerings; change*

- *Implementation of the exercise breaks in the classrooms* also recently started at the time of our visit in December. Each teacher received a neatly organized and easy-to-use box containing instructions and suggestions for exercises that can last anywhere from 5 to 15 minutes. We observed the exercise breaks in a couple of classes and the children were noticeably excited, often requesting specific exercises.

The program component aimed at decreasing children's television watching and game playing was in its planning stages at the time of our site visit and is scheduled to launch in early March 2007. The kickoff event for the intervention is the TV Turn-off, where students are asked not to watch television or play video or computer games for a period of one week. During that period, the students will complete a daily journal on the activities (e.g., reading, playing outside, etc.) they engaged in each day instead. After this initial event, students and their parents will be encouraged to sign an agreement to reduce the children's television watching and game playing by a mutually agreed upon amount (e.g., 30 minutes per day). The program will suggest activities that children can do instead. *We anticipate that it may be challenging for the school to sustain this after the grant period is over as the workload will most likely fall on the teachers.*

Implementation of SPORT's nutrition components was progressing at a slower pace. At the time of the site visit, very few nutrition activities had been implemented, as the program staff was working on getting the district's food service supervisor's buy-in. SPORT, along with the school cafeteria's main staff, has been actively engaged in implementing the proposed nutrition-related changes that do not require the district's approval, such as cafeteria offerings of low-fat and fat-free milk. The SPORT team has repeatedly attempted to connect with the district's food service supervisor, who has presented an obstacle. In addition, SPORT has been working with school staff, students, and parents to ensure that sources of competitive foods (e.g., classroom rewards and classroom parties) are healthy and in compliance with the guidelines of the district's advisory committee.

Since the OMG site visit in early December, parental engagement has evolved from being a challenge to gaining momentum in the implementation of the school wellness committee. Initially, although there was a core group of involved parents, the program had to go through the PTA to recruit parents for the wellness committee, which had been somewhat of a barrier due to a new coordinator who had not been accessible. The committee held its first meeting in December 2006 and had scheduled a second meeting for late January 2007. A SPORT staff member is in charge of getting the school wellness committee off the ground. The program anticipates that parents and school staff will begin taking ownership while the program staff member continues to offer assistance and support.

SPORT's park component was well planned, and its implementation was completed in the summer of 2006. The program staff saw the park activities as of lesser importance than its activities during the school year. Program staff admitted the park component placed a burden on the program, both in terms of finances and staff capacity. The team concluded that although the park component was a great way to provide the children with physical activity and healthy snacks when school was out, in the future it needs to be modified. An indoor facility would be needed to complement the outdoor activities due to extreme summer temperatures. Also, the program would likely be offered full time to attract more children since a number of working

parents need full-time childcare. At this point, the future of the park program is uncertain. Program staff suggested the summer component may be repackaged and sold to the city's Parks and Recreation Department. The team has carefully documented all the activities and the implementation process, which is a positive tool for future program dissemination.

Challenges to Implementation

Building long-term capacity at MLK to continue the program at its current high levels may be challenging. The key program champions at the school are the principal, the PE teacher, and the school nurse. These individuals were able to verbalize the importance and the advantages of having SPORT staff physically present in their school. Despite the fact that MLK probably will not need to collect the same amount of data on students once the research study ends, keeping the program running at its current level of quality may be somewhat challenging for three very busy school staff.

Administrative barriers at the district-level will likely preclude, or at least hinder, the program from implementing all planned changes to the school menus. The district person responsible for school nutrition is very reluctant to follow up on the program's food change recommendations. A few interviewees questioned whether SPORT alone has the power to change items on the school menu. The program staff anticipates that eventually this challenge will be overcome because the district's wellness policy dictates and supports the nutrition changes that the program is trying to implement. In addition, the uncooperative district nutrition person is a member of the district's advisory committee, and it is likely that other members of the committee will place pressure on her by supporting the changes themselves.

1. Early Assessment of the Partnership

The program has a solid partnership in place, especially with the school. The program team has a strong and open relationship with the school. During the planning and implementation stages of SPORT, the school staff and teachers provided input on most program components. Program staff emphasized that the school has been a great problem-solver, always willing to accommodate any programmatic needs as long as they work for the school staff. By the same token, SPORT staff have accommodated the needs of the school staff and teachers whenever feasible. The Arkansas Children's Hospital Research Institute (ACHRI) has provided key personnel to assist the SPORT team especially with data collection. The existing relationship between IFCK and MLK has given SPORT credibility, facilitating the program's access into the school.

Despite the strong relationship with MLK, SPORT can benefit from additional teacher buy-in. SPORT staff as well as the school's key program champions were mindful of the importance of teacher buy-in for program sustainability within and outside MLK. At the time of our visit, the program had the full commitment of a couple of teachers who were part of the program planning committee. A major barrier to teacher buy-in is time, as revealed by the interviews. Teachers already have a great deal of responsibility with testing and meeting the No Child Left Behind requirements, which may leave them with little or no time to perform exercise breaks or record data.

2. Early Assessment of Evaluation Capacity

SPORT has successfully undertaken significant data collection efforts thus far. Since SPORT was designed as a pilot/feasibility study to be implemented at a single site, staff availability seemed more than adequate for these efforts. However, needs may change in the future if the program is taken to a larger scale. Program implementation and data collection were supported by a number of research assistants. Data collection efforts included focus groups to identify student preferences regarding physical activity. SPORT used these results to develop a survey that was administered to determine activities to be used in the physical activity components. To assess classroom practices and changes regarding competitive foods, SPORT developed a brief survey for students. This survey was pilot tested, and reliability and validity issues were considered and addressed.

Data collection through student pedometers has been something of a challenge. A continuing challenge is that students lose their pedometers, even if sometimes only for short periods of time. In one class we observed, about a third of the students reported they had lost their pedometers. Data quality may suffer if most students do not consistently have and use their pedometers.

Capacity to Support Future External Summative Evaluation

The principal investigator is an experienced researcher and methodologist who oversees the design and implementation of data collection efforts. The grantee has qualified staff to support external evaluation. Should the program expand as intended, it would need a larger staff to collect the data necessary for a summative evaluation, which the program leadership acknowledges as a future need.

SPORT: Little Rock THEORY OF CHANGE

Contextual & Problem Analysis

Assets:

- Act 1220 of 2003 was passed by the Arkansas General Assembly and signed into law by the governor, creating a comprehensive program to combat childhood obesity in the state. One of the major provisions of the Act required the creation of a Child Health Advisory Committee (CHAC) to recommend additional PA and nutrition standards for public schools
- AR law mandates annual body mass index measurements for all public school children
- SPORT has the potential to strengthen the existent IFCK partnership with MLK, since the school has committed to adding obesity prevention as a further area for intervention

Challenges:

- 38% of school-age children enrolled in public schools in AR are either overweight or at risk for overweight
- Schools may lack resources for implementing significant changes in curricula and programming to combat the obesity problem
- Unsafe walking and bicycle routes inhibit physical activity by making it difficult for children to walk or ride to school or to parks
- Large numbers of students who qualify for federally subsidized meals do not have access to nutritious meals during the summer. The summer SPORT program may be an important tool for students who would not have access to healthy snacks and PA otherwise

Target Population (School Site)

Third and Fourth grade students (approx. 200) at Martin Luther King, Jr. Elementary School (MLK)

Target Population (Park Site)

Small sub-sample of MLK students (approx. 15-20)

Assumptions

- Children will wear their pedometers at all required times
- Students will accurately record their individual steps on walking log
- Personal challenge P.E. and recess data will be accurately recorded by P.E. staff and volunteers
- Students will be encouraged to participate in walking and personal challenge activities at recess and P.E.
- Teachers will comply with requests to implement exercise breaks in their classrooms
- Implementation of activities specified for goals 1 and 2 will be enough to meet CHAC recommendations n. 1, 2, 4, 5, 7, and 8
- Emphasizing the negative effects of TV viewing as part of children's homework contract will make them committed to reducing sedentary activity time
- Safety and other concerns of parents will not affect children's participation in park-based activities
- Recruited students will attend park-based activities
- Location of park will encourage children to participate because of its close distance from the school and/or children's residence
- Several other key partners will collaborate with SPORT

Strategic Focus

To increase elementary school children's access to healthy foods and to increase their physical activity, **primarily** through a school-based program and **secondarily** through a small park-based summer program for activity and healthy snacks

Program Goals

Healthy Foods

- 1) To increase children's access to healthy foods

Physical Activity

- 2) To increase children's physical activity in school and at the park, and to decrease their sedentary activity

Policy Recommendation

- 3) To facilitate implementation of the state of Arkansas' Child Health Advisory Committee (CHAC) guidelines for nutrition and physical activity standards and policy at MLK

Partnership

- 4) To mobilize resources and establish support structures to implement and expand SPORT



SPORT: Little Rock THEORY OF CHANGE

Program Activities

Goal 1: Healthy Foods

School Site (Main component)

- Propose alterations in all non-food service school-based sources of competitive foods such as classroom rewards, vending machines, classroom birthdays, on-site sales of food pre/after class, etc., to ensure healthy nutrition.
- Train food service personnel on SPORT Food Service Behavioral Guidelines
- Train teachers, school staff, PTA and parents on competitive foods guidelines

Park Site (Summer Program, secondary component)

- Provide healthy snacks in the summer for participant children, following all federal and CHAC guidelines
- Field trips to visit community garden for exposure to fresh, healthy choices
- Develop and implement >25 nutrition education activities

Goal 2: Physical Activity

School Site (Main component)

- Work with school to Include both free play and structured activities at recess
- Provide teachers with ideas for classroom exercise breaks – 5 min. activities per day (up to 3/day)
- Students keep walking logs
- Encourage students to meet their walking and personal challenge goals each week
- Include strategies for reducing TV watching and video game play that will emphasize reduced TV viewing as part of a homework contract
- TV/video game shut-off period (approx. one week)

Park Site (Summer Program, secondary component)

- Design specific activities to utilize the playground unit, sports courts
- Implement 9 personal best challenge activities

Goal 3: Policy Recommendations

- Address CHAC recommendations numbers 1, 2, 4, 5, 7, and 8 through implementation of activities in goals 1 and 2 specified above.
- Make recommendations for nutrition and physical activity policy and standards to the Board of Education if applicable
- Develop the School Wellness Committee
- Implement regular meeting schedule for council
- Implement annual school-wide BMI measurement

Goal 4: Partnership

- Engage with as many partners as possible, such as "Pick a Better Snack," Nutrition and Physical Activity Advisory Committee; Bicycle Advocacy of Central AR, Midwest Dairy Council

Short-Term Outcomes (18 months)

Goal 1:

- School-based sources of competitive foods are altered to comply with CHAC guidelines
- Potential strategies for reducing fat and calories in the school menus are identified
- Choices of fruits and vegetables are offered more frequently at school lunch

Goal 2:

- Time spent by students in daily physical activity (both in and outside of school) has increased
- Time spent by students watching TV and playing video games has decreased

Goal 3:

- Goals 1 and 2 activities are fully implemented and CHAC recommendations are addressed
- If needed, recommendations are made to the Board of Education regarding changes to school policies and standards for nutrition and physical activity
- Increased level of involvement from parents in School Wellness Committee

Goal 4:

- Primary partners and "significant project contributors" are engaged in SPORT

Intermediate Outcomes (2-5 years)

- Funding for sustainability and expansion of SPORT is secured
- All CHAC recommendations are fully implemented at MLK
- Children's BMI has decreased
- SPORT provided preliminary data for submission of application for large randomized trial to identify promising practices

Long-Term Outcomes (5+ years)

- Children adopt healthier eating habits
- Changes are sustained and there is institutionalization of successful policies and practices related to healthy eating and exercising habits in participating schools
- Improved capacity of IFCK Little Rock to work in partnership with like-minded organizations to implement policies and programs that promote healthy school communities
- Promising practices are identified and disseminated to other schools and professional groups

New York City, NY: IFCK, Morgan Stanley Children’s Hospital of New York-Presbyterian – Healthy Lifestyles for Healthy Schools, Healthy Families

1. Early Assessment of Implementation Progress

The NYC IFCK site used the RWJF childhood obesity prevention grant to expand the Healthy Schools, Healthy Families (HSHF) program that had been in place in New York City since 1999. The IFCK team expanded the physical activity component of HSHF in five public elementary schools in Washington Heights and Central Harlem. IFCK’s project, Healthy Lifestyles, supported the hiring of a physical activity coordinator to oversee activities in all five schools, a research assistant to help with the tracking of the program’s results, the purchase of farmers’ market shares to expand the farmers’ market offerings at the schools, and other program supports such as health education materials.

At the time of our assessment, implementation of Healthy Schools, Healthy Families/Healthy Lifestyles (HSHF/HL) activities was progressing very well overall. The smooth implementation and progress to date may be mostly attributed to the grantee’s supplementing Healthy Lifestyles with preexisting program infrastructure (e.g., an established partnership, adequate professional staffing) provided by Healthy Schools, Healthy Families. Our observations are based on visits to three of the five schools (PS 4, PS 128, and PS 180). The main focus of the expanded physical activities under Healthy Lifestyles was to ensure that children meet the NYC Department of Education (DOE) requirement of 120 minutes of exercise/physical activity per week. Given that at the beginning of the grant levels of physical activity were low to nonexistent in most of the schools — with some schools not even having a PE period — the activities the program is able to implement are likely have a measurable impact.

HSHF/HL follows a school-based decision-making model, which means that schools get to decide what types of activities they want to implement. This individualized approach to implementation is a major strength of the program because it increases school buy-in and allows for a more organic and flexible approach.

Another important factor that seems to contribute to the success of HSHF/HL is the grantee’s focus on linking existing resources to meet the stated needs of schools. The grantee accomplishes this by using its extensive network of community partners, and utilizing the resources of the hospital and of Columbia University. The resource-rich environment of New York City provides great opportunities for HSHF/HL to tap into, and some of the grantee’s greatest contributions are

SUMMARY

Strategic focus: To improve fitness opportunities and the understanding of and access to healthy foods to promote healthy lifestyles for children, their parents, and school staff.

Target Population: All students, parents, and school staff in five partner elementary schools in Northern Manhattan (PS 128M, PS132, PS 152, PS 4, PS 180).

Activities: Encourage staff wellness, healthy snacks, farmers’ markets, nutrition curriculum, physical activities in the classroom, Jeter Meter and fitness competitions; provide nutrition and physical activity bulletin boards; support to school fitness and nutrition committees; build partnerships.

its ability to match school needs to available resources and to expand its network of partners as needed.

HSHF/HL has implemented Fitness and Nutrition Committees (FNC) that meet monthly in all five target schools. FNCs are composed mainly of school staff, teachers, and parent care coordinators from community based-organizations. HSHF/HL staff have supported the work of the committees and helped implement them. In our assessment, FNCs provide a positive foundation to integrate some of the HSHF/HL work more permanently into the school culture and ensure sustainability. In addition, FNCs help schools to fulfill the wellness committee requirements mandated by the Child Nutrition and WIC Reauthorization Act of 2004. Although parent involvement was part of the original plan, according to staff, parents have not been actively present due to scheduling and language barriers.

Another factor contributing to HSHF/HL's positive implementation progress is that the program was extremely well staffed, thanks to the overlap with staff who work for the HSHF program. In addition to a research assistant in charge of data analysis, a physical activity coordinator, and a nutritionist serving all schools, each school had their own full-time, in-house, graduate-level program coordinator who oversaw all HSHF/HL activities and was responsible for funneling additional resources (e.g., grants, new partners) to their schools. School principals strongly agreed that although their administrative support is of utmost importance to the program, having a coordinator on site was key to a successful program.

Two accomplishments that are likely to live beyond the life of this and other initiatives are: 1) changes to the healthy snack policies that are now in place in some schools, and 2) valuable connections to organizations with funding to work with schools on wellness issues.

Challenges to Implementation

Inadequate leadership or principal support in a few schools is a challenge to coordinators' work. Although this was not the case in all schools, both coordinators and school staff suggested that principal support is a critical element to the success of the program. Progress in schools with less enthusiastic and disengaged principals was not as steady as in schools where the administration was fully engaged and/or supportive.

Building long-term capacity at schools to continue the quality of the program may be challenging. Despite the fact that HSHF/HL has a wealth of funding sources and in-kind resources from its multiple partners, the question remains of how to sustain program quality in the face of potential staff reductions as the grants end. Although principals stated a strong desire to continue with the program should funding decrease, they admitted that it would be extremely difficult without having an on-site program person. In their view, it takes three to five years to promote school change, but ten years to institutionalize it. Leadership turnover among school administrators is an additional challenge to institutionalizing a program and maintaining the ongoing commitment and support of school staff, students, and parents.

Parent engagement remains one of the most difficult challenges this grantee is faced with, but its work with a local CBO that operates in the Latino community has generated some participation.

2. Early Assessment of the Partnership

The program has a solid partnership in place — based on the foundations provided by HSHF — from the hospital to the university to a number of resourceful and well-funded community partners. The program thrives on partnership building, as a number of the different activities happening at the schools were provided and/or supported by a partner organization. HSHF/HL also relies on community partners for community outreach, which gives the program more credibility. The program does not re-create anything that is already in place and successfully implemented.

The strong relationship that Healthy Schools Healthy Families/Healthy Lifestyles has with the schools can be attributed to the people skills of the program coordinators. These include negotiating difficult personalities and barriers, and connecting people both within and outside of school. Additionally, the program coordinators have an extremely relevant role in drawing community partners and other resources to their schools.

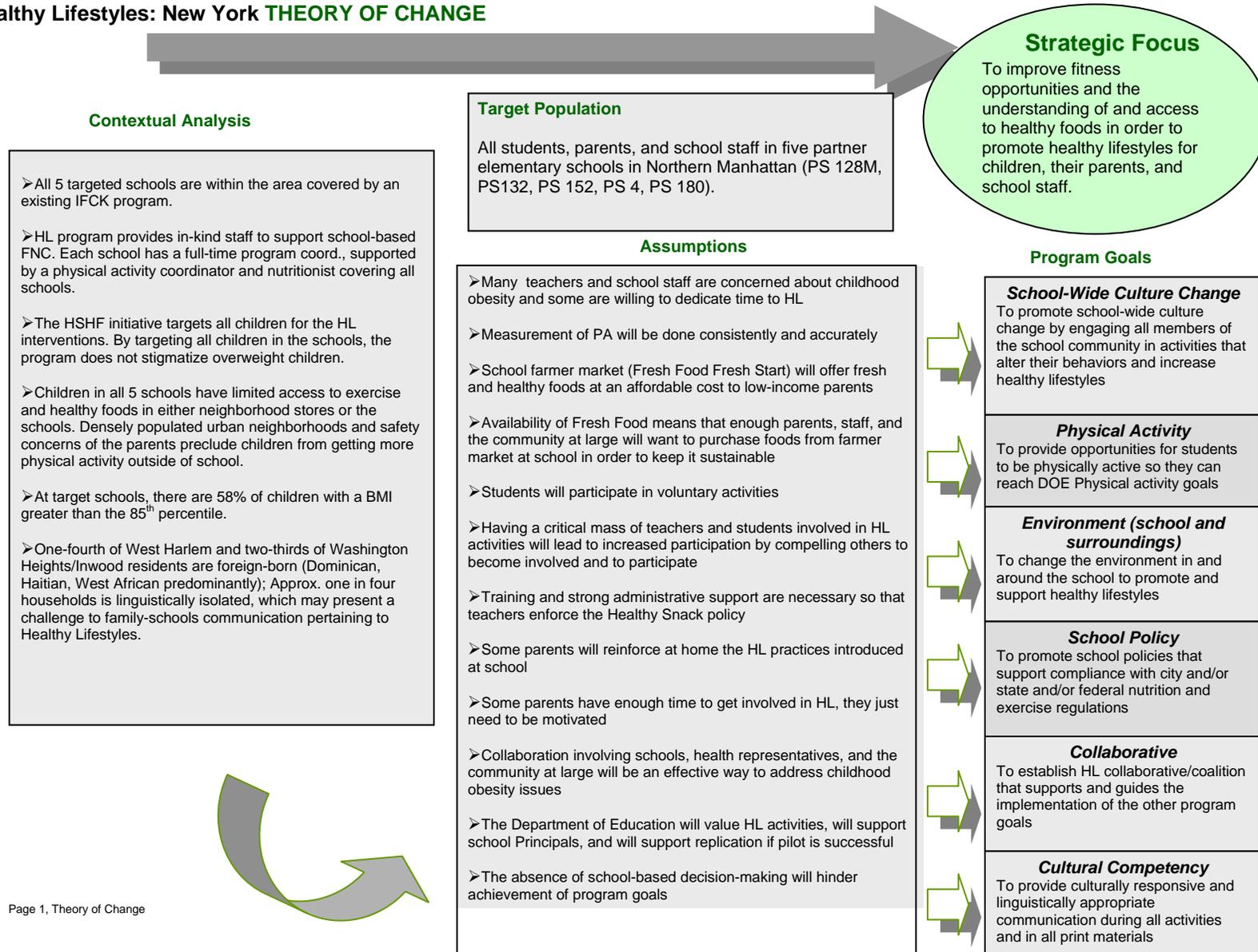
3. Early Assessment of Evaluation Capacity

Program staff is faced with the cumbersome task of having to collect data across all five schools. Given this overwhelming task, the grantee has had to decide what can be realistically accomplished. Some simple tools are used to track implementation indicators, such as attendance sign-in sheets at events, farmers' markets, and FNC meetings. Other tools have been designed to measure program outcomes. The physical activity (PA) tracking tool is very thorough. However, it requires a significant amount of work from the teachers and relies on students to self-report, which tends to be highly unreliable. The informative "Report Card/Highlights" that coordinators put together for each of their schools are a good feedback tool. They inform school staff and parents of all of the program's accomplishments, including the presentation of school-wide BMI pie charts and other information on wellness activities that have occurred.

Capacity to Support Future External Summative Evaluation

The grantee has enough evaluation pieces in place, and qualified staff to support external evaluation. Some measures, such as the amount of physical activity, could be refined so they are more reliable and reduce the burden on teachers to collect data from students. An important consideration at this point, however, is that the research assistant and the physical activity coordinator, who were the main staff supporting the grantee's internal capacity for evaluation (collecting, entering, cleaning data and analysis), are paid for by the RWJF grant and may not be retained after the funding is over. It is not too early to start thinking about leveraging additional resources to pay for these professionals, or train someone else to do their job after the grant period is over.

Healthy Lifestyles: New York THEORY OF CHANGE



Healthy Lifestyles: New York THEORY OF CHANGE

Program Activities

Goal 1: School-Wide Culture Change

- Staff wellness programs encompassing nutrition education and exercise sessions (e.g., Biggest Loser challenge)
- Send letters to parents and inform students about Healthy Snack Policy
- Implement social marketing campaign focused on Strang "8 Habits of Healthy Kids"
- Train parents on Strang; trained parents facilitate workshops for other parents
- Parent/family nutrition and fitness workshops and events
- Student nutrition curriculum and events (including breakfast promotion)
- Encourage completion of School Health Index where feasible
- Conduct key informant interviews on a yearly basis to determine the extent and success of culture change
- Develop and implement nutrition tracking system for nutrition activities

Goal 2: Physical Activity

- Series of physical activity programs that can be delivered during classroom time by teachers (e.g., Tai Chi, Yoga, transition exercise), and consultants (e.g., ballroom dancing)
- Train teachers at beginning of year and provide support throughout year for in-class PA
- Provide opportunities for parent fitness (e.g. aerobics classes, walking clubs)
- Implement PA tracking mechanisms in every school
- Develop and share with schools a report w/ their compliance with PA minutes
- Encourage consistent PE programming throughout school year
- Promote after-school seasonal programs such as baseball, soccer, etc.
- Train school staff to optimize recess programming (e.g. SPARK)

Goal 3: Environment

- Farmer's Markets at schools (Fresh Food Fresh Start-FFFS) where feasible
 - Build school and community awareness of market
- Improve playgrounds and collaborate with IFCK where appropriate
- Multi-faceted bilingual visual messaging campaign (Gym/Cafeteria makeovers, Jeter Meter School Poster(s), Healthy Snack Zones, Bulletin boards on 8 Habits of Healthy Kids Campaign)

Goal 4: School Policy

- Get administrative support and train teachers to enforce the HS policy
- Survey select principals and teachers to determine the extent to which they attempt and/or succeed in enforcing HS policy
- Engage school and district nutrition services to buy-in to policy (invite to FNC, work with School Food Plus, meet with Food Service Managers)
- Support Fitness and Nutrition Committees at each school
- Inform/remind parents of policies and changes to policies

Goal 5: Collaborative

- Engage all stakeholders in planning and implementing, to ensure their input and increase their buy-in through regular meetings and ongoing multi-level involvement (see attached for complete list of partners)

Goal 6: Cultural Competency

- Provide all written materials in Eng., Spanish and French where appropriate
- Consider cultural norms and values in programming decisions
- Translation at all events, activities, and through all outreach attempts
- Partner with organizations with an established credibility in the community

Short-Term Outcomes (18 months)

Goal 1:

- Each school has defined their own set of priority activities
- Each school has agreed-on measures of participation, with definitions of success decided on
- Early signs of school culture change are identified
- Students are involved in nutrition activities

Goal 2:

- Schools have a system in place to track compliance with PA minutes/week
- Schools make informed decision on programming to improve compliance w/PA time/week
- Children with BMI above 85th percentile will remain stable
- Teachers, parents, and school staff increased participation in HL programs

Goal 3:

- All schools where parents want to take ownership of a market have implemented FFFS
 - Parent-volunteers helped to run the market
 - Increased number of customers (parents, staff, and community members)
- Safe play spaces are in place in and around the schools and are used regularly
- Information on bulletin boards are updated monthly

Goal 4:

- Teachers' skills at enforcing HS policy have improved
- An FNC is in place at all schools, and a broad constituency is consistently represented at regular meetings (e.g., teachers, parents, school staff)
- FNC activities are tracked using the eval tool
- Schools agreed to implement, develop, and enforce HS policies

Goal 5:

- Stakeholders are engaged in planning and implementing HL, with partner organizations fully involved
- Funding is secured and a plan is developed to ensure sustainability of HL program in all schools
- Funding for playgrounds is secured with IFCK

Goal 6:

- An ethnically diverse group of parents is involved in the meetings

OMG Center for Collaborative Learning

Intermediate Outcomes (2-5 years)

- School policies that support outcomes consistent with HL are in place
- Increased participation of parents, students, and staff in HL activities
- Healthy Lifestyles program is implemented and sustained in each partner school according to the needs and resources of that school
- HL indicators in schools report cards have improved
- Increased physical activity for each child (measured in min./week)

Long-Term Outcomes (5+ years)

- % of children with BMI above 85th percentile has decreased
- School policies are continuously revised and updated to support HL goals
- Parents have supported/promoted HL at home
- Diverse HL programming at each school reflects a buy-in among school staff and a commitment to HL

Portland, Oregon: IFCK, Oregon Health Science University, Doernbecher Children's Hospital – Healthy Eating and Safe Physical Activity (HESPA) Project

1. Early Assessment of Implementation Progress

The IFCK project at Oregon Health Sciences University (OHSU) has used the RWJF grant to expand and integrate school-based healthy eating and physical activity programs at the Abernethy Elementary School in Portland as a model wellness initiative.

The Abernethy Elementary School was well on its way to implementing a healthy eating program prior to the RWJF childhood obesity prevention grant award to OHSU. Abernethy had been working on the Garden of Wonders and on-site scratch kitchen initiated by Linda Colwell (a trained chef and parent who is also the project visionary for the healthy eating component); the school's principal, Tammy Barron, was committed to developing a comprehensive culture of wellness at her school, and there was high level of support from Abernethy's teachers and parents, and external partners such as Portland Public Schools Nutrition Services and EcoTrust (a local nonprofit conservation organization). The RWJF Healthy Eating/Safe Physical Activity (HESPA) grant allowed the hiring of a Community Wellness Coordinator housed at Abernethy who has effectively concentrated most of her efforts on supporting the healthy eating component of the HESPA project with very positive results.

The scratch kitchen and garden have been connected through a series of short lessons, taught by an AmeriCorps volunteer, designed to increase knowledge of seasonal fruits and vegetables grown locally and in the garden and to allow children to participate in cooking classes led by the school's chef. The foods introduced in the classroom are later consumed as part of their school breakfast and lunch. The enthusiastic participation of children, the integration of nutrition concepts into other academic subjects (e.g., geography, reading, etc.), significant awareness of healthy eating habits, and approving attitude toward foods offered in their cafeteria were all evident during OMG's site visit observations. These results have been corroborated in a recent study conducted by EcoTrust using data collected by the HESPA Coordinator. The study showed increased consumption of school lunches at Abernethy directly tied to the implementation of the scratch kitchen and related educational activities. Finally, not only has Abernethy had an increase in participation of school lunches but also an increase in salad bar production of fruits and vegetables when compared to a control school.

Since no elementary schools in Portland have nutrition education standards, it seemed not only like the logical place for the grantee to focus its efforts, but also the most efficient use of limited

SUMMARY

Strategic focus: To integrate a school garden education program, on-site scratch kitchen, and a safe physical activity program at the Abernethy Elementary School.

Target population: 370 students (grades K-5) at the Abernethy Elementary School.

Activities: Garden of Wonders education classroom/hands-on garden program, on-site scratch kitchen, Walking and Biking Wednesdays, enhanced PE, policy advocacy around improved school nutrition, partnership building.

resources to develop a sustainable model through a nutrition curriculum that could impact the whole district. The Abernethy-inspired “Vegetable of the Month” program is now being implemented by the School Nutrition Services as a way to introduce locally produced fresh fruits and vegetables, along with nutrition education in all the district’s schools. This is a major accomplishment of the HESPA partnership.

The safe physical activity component has maintained preexisting programs operating in the school, and incorporated some new elements, but it is far from the level of implementation that would be required before measurable changes in physical activities could be captured. Safe Routes to School (which is a partnership program of the Bicycle Transportation Alliance and the Willamette Pedestrian Coalition) started a “Walking and Biking Wednesdays” program in 2005. However, it has no resources to continue to lead or expand this program at Abernethy this year. Fortunately, Abernethy benefits from a core of parent volunteers who have now taken on the leadership role to ensure the continuation of this program, at least at the existing level. The IFKC coordinator who also works on HESPA has provided training and support to Abernethy’s PE teacher, to make fuller use of the school’s playground equipment to increase opportunities for students to engage in safe physical activities, both as part of PE and during unstructured recess time. The coordinator was instrumental in implementing the “Walk-to-Farms” and “Exercise Across America” activities conducted by the PE teacher last year that reinforce what the students are learning in the Garden of Wonders classroom.

Challenges to Implementation

One of the main challenges to the successful implementation of the program is the lack of staff time allocated to strengthen and expand the physical activity component. The loss of the IFKC grant has meant the loss of the coordinator position, which will leave the physical activity component in the hands of the PE teacher alone. At the time of our assessment, due to lack of staff time, these activities were not being consistently implemented and had not been fully integrated into the PE curriculum. Although some attempts had been made at collecting data on these activities and their impact on physical activity levels, the findings were inconclusive. It is unlikely that in the absence of a coordinator, HESPA can expand and/or develop new programs that can produce a measurable change in physical activity at the targeted school — especially now that new standards will increase the amount of physical activity for elementary school children from 90 to 120 minutes a week.

2. Early Assessment of the Partnership

Our assessment suggests that the grantee’s efforts in strengthening the HESPA partnership to effect policy change have not yet produced the desired results. It has been difficult to bring the various partners that were already involved at Abernethy prior to the RWJF grant (i.e., the scratch kitchen and Garden of Wonders education and outdoor garden program, EcoTrust, and the Bicycle Transportation Alliance) to the table to consider a new agenda, which would place the nutrition and physical activity components under one umbrella with a broader strategic focus.

The fact that the grantee is identified with injury prevention and not obesity prevention, makes IFCK-Portland’s leadership in this field less obvious to the other players, and perhaps accounts

for the difficulties in convening the group. Also, numerous groups with a long track record of working on healthy eating and physical activity are meeting in Portland around the same issues as HESPA. Thus, the nonprofit community may be feeling pulled in too many directions and seeing some duplication of efforts.

In recent months, however, communication between partners, especially IFCK/HESPA and EcoTrust, has improved. HESPA and EcoTrust have signed a Memorandum of Agreement, an important first step toward defining their roles and the nature of their collaboration. Attendance to HESPA's Advisory Committee is also improving, which could result in better communication. Abernethy's principal is even more committed to the wellness agenda in her school than she was when HESPA first approached her, and she sees the benefits of HESPA's contributions to her long-term plans. Finally, opportunities to expand the partnership are opening up in the area of policy, and the IFKC coordinator is being invited to join these groups. These are all positive signs that the partnership may be getting over its initial difficulties and starting to coalesce in a more productive way.

3. Early Assessment of Evaluation Capacity

The main goal of evaluation activities is to provide evidence to support the nutritional benefits of the Garden of Wonders/scratch kitchen program at Abernethy. HESPA's coordinator has been instrumental in collecting student-level consumption and knowledge data, which has been combined with cost and supply data collected by EcoTrust. At the end of 2006, EcoTrust released its report with key findings that pointed to the success of the program and helped provide economic justification for program expansion and replication to other Portland schools. The EcoTrust evaluation looked at the impact on children's nutrition of the combination of educational/experiential interventions directed at the children (e.g., Garden of Wonder and nutrition classes) and an environmental change (e.g., the reintroduction of fresh fruits and vegetables prepared at the school site). For the 2006-2007 school year, EcoTrust will focus on monitoring food sourcing to examine impacts of the project on the local economy. It will also administer the student food preference and knowledge surveys at a control school. These data will be helpful for comparison purposes, especially for measuring the effectiveness of the Garden of Wonders education program and the Plant of the Week program in schools where these programs are available.

On the physical activity side, measuring students "lifestyle steps" through pedometers for the Walk, Bike, and Exercise program has proven difficult, not only in terms of collecting reliable data from students self-reports, but also in terms of data entry, which has turned out to be a very laborious task especially with the limited staff available. HESPA staff are reconsidering the usefulness of these instruments and looking for alternative ways to get more accurate data. Another challenge has been measuring students' BMIs at the beginning and end of the school year. This was an original goal of the evaluation, but has proven to be difficult. Only 65 children had returned signed consents for their BMIs to be measured, as of December 2006.

Capacity to Support Future External Summative Evaluation

The solid nature of the EcoTrust research conducted to date may preclude the need for an additional external evaluation of the Abernethy model. However, it is important to note that in

order for Abernethy's findings to apply to future replications, the program cannot deviate in significant ways from its original version. In view of the fact that the local School Nutrition Services is already implementing a simpler version of Abernethy's model, there is an opportunity to evaluate these replications separately and compare findings with the results obtained at Abernethy. This would provide very useful comparison data to further test the impact of the mixed types of nutritional interventions in schools. The physical activity component needs further work before it is ready for a full evaluation. Once the school Wellness Committee decides what programming will be needed at Abernethy and allocates the staff resources and secures partners to implement it, HESPA can begin to reexamine the evaluation approach, beginning with redesigning existing tools that rely on student to self-report.

Portland HESPA Theory of Change

Contextual and Problem Analysis:

Assets:

- The HESPA project will benefit from the successful "Garden of Wonders" school food and garden education program (now referred to as the "Farm to School" program) founded by Linda Colwell in 1999 and existing grant monies from the Edwards elementary school, which were transferred over to the Abernethy school in fall 2005 when these two schools merged.
- Abernethy Elementary school has strong support from parents and the local community: Many parents volunteer in the classrooms and at school-wide activities.
- Active PTA
- EcoTrust is a key partner responsible for implementing the Farm to School healthy eating component of HESPA. They have successfully involved key stakeholders in food policy and agriculture. EcoTrust will be conducting a quantitative and qualitative assessment of the scratch kitchen model.
- Strong community support as a result of Abernethy Elementary School's solid working relations with local neighborhood associations.

Challenges:

- A large proportion of Oregonians have poor eating habits:
 - In 2004, 59% of Oregon adults were considered overweight or obese.
 - The prevalence of obesity in Oregon has increased by 96% since 1990.
 - 23% of Oregon 8th graders were reported as being overweight or at risk of becoming overweight.
 - Only 27% of 8th graders met the recommendations for 5 or more servings of fruits and vegetables per day.
 - 32% of low-income children between 2 and 5 years of age in Oregon are overweight or at risk of becoming overweight.
- Students lack sufficient physical activity:
 - Only 43% of Oregon 8th graders reported participation in daily physical education classes, while an even smaller percentage (15%) of 11th graders participated.
 - Some students are very active in school-based and community-based physical activity, but participation in such programs is not universal.
 - School districts and parks departments have not been able to maintain many public play structures, which have historically been an important part of physical activity.
 - Community design and transportation systems (which are built around automobiles) present barriers to daily physical activity: Residential areas are separated from business and commercial districts with busy roadways that make it unsafe for children.

Target Population

- 370 students (grades K-5) at the Abernethy Elementary School who are from the inner-city southeast Hosford-Abernethy neighborhood area of Portland.

Strategic Focus

To implement the Healthy Eating, Safe Physical Activity (HESPA) project by integrating a school garden education program, on-site scratch kitchen, and a safe physical activity program at the Abernethy Elementary School.

Assumptions:

- Eating a healthy diet will contribute to reducing the incidence of obesity among children in the participating school.
- Home environment of students will not counteract or undermine positive efforts and effects of HESPA program.
- IFCK – Portland will have the sufficient number of staff to successfully coordinate all the many different components of the HESPA demonstration project to impact 100% of the student population at Abernethy.
- IFCK – Portland will be able to provide an array of healthful meals that are palatable and affordable to students.
- Food service staff will be trained easily and efficiently on new menus and cooking methods and will successfully prepare menus without Linda Colwell's direct supervision in the kitchen.
- The increase in daily level of physical activity from two-pronged program will improve physical fitness.
- Participating in the HESPA program will change overall eating and exercise habits in children in the long run.
- Parents and children will want to get involved as result of greater outreach efforts, education, and increased availability of information regarding HESPA program.

Program Goals and Strategies

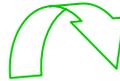
- Increase access to and instill healthy eating habits by implementing:
 - Garden of Wonders Classroom
 - Garden of Wonders outdoor garden
 - On-site Scratch Kitchen
 - Activities to educate and involve parents and teachers.

- Increase the daily physical activity among Abernethy students inside and outside of school by:
 - Promoting walking and biking to school
 - Encouraging safe use of newly built playground at Abernethy

- Strengthen Partnerships

Portland HESPA Theory of Change

Program Activities



Goal 1: Garden of Wonders education classroom/hands-on garden program and On-site Scratch Kitchen

Students:

- An AmeriCorps staff member (who will serve as the Garden Education Coordinator) and other staff will deliver the GOW classroom curriculum, which ties District required curriculum in science and social studies to garden and food based educational activities.
- Teach children to grow and prepare their own food through the Garden of Wonders growing area on the grounds of the Abernethy school.
- Introduce a new local seasonal vegetable each week, so students can learn about its history, its nutritional value, and the parts of the plant.
- Schedule visits from local farmers to Abernethy to make presentation to students (e.g., free range chickens, etc.).
- Serve students breakfast and lunch on a daily basis while sourcing local, seasonal, and sustainable foods as much as possible and integrating the knowledge students have gained through the GOW curriculum. (For example, students will be served dishes with the vegetable they have learned about the previous week.)

Parents/Teachers: GOW weekly bimonthly newsletter, "Lunch for Dinner" PTA event, "Community Wellness Nights" (cooking classes, lectures, etc.), and dissemination of Abernethy Cookbook.

Goal 2: Increase the daily physical activity among Abernethy students

- IFCK/HESPA will partner with The Bicycle Transportation Alliance and Willamette Pedestrian Coalition to integrate a Safe Routes to School program into Abernethy's physical education program.
- Integrate physical activity and an IFCK playground safety curriculum to maximize use of newly built playground at Abernethy.
- Give pedometers to students for them to record daily "lifestyle step" goals
- Implement the Walk, Bike, and Exercise program through PE curriculum, which tracks students overall activity level during school PE and at home.
- Conduct safety assessments of all the playgrounds in neighborhood.
- Conduct GIS mapping project of safe playgrounds.
- Develop a website showing the location of the playgrounds, their safety scores, and tips on physical activity
- Conduct safe play workshops with students in the PE class.
- Collect pre/post heights and weights of students to determine BMI at baseline and at completion of project.

Goal 3: Strengthen and Coordinate Partnerships to effect policy change

- Work with EcoTrust and Portland Public Schools Nutrition Services on better integrating Farm to School program with physical activity component of HESPA to begin developing a wellness model at Abernethy that can be replicated in other schools.
- Work with Bicycle Transportation Alliance on Safe Routes to School program.
- IFCK-Portland, EcoTrust, and Portland Public Schools Nutrition Services work in concert to establish key relationships at Abernethy (principal, teachers, food service workers, family services coordinators, PTA president)
- Work with Active Living by Design (ALbD) and Healthy Eating by Design (HEbd) to learn from best practices of their existing project, to share resources, and seek further opportunities for collaboration.

**Short-Term Outcomes
(18 months)**

Garden of Wonders education classroom/hands-on garden program and On-site Scratch Kitchen

- Increased student knowledge of healthy food choices as reported on food preference survey.
- Positive change in attitude about nutritional foods.
- Increased number of students participating in school breakfast and lunch program
- Increased availability and consumption of locally grown and seasonal fruits at school.
- Nutritious breakfast and lunches provided at a low cost.
- Increased parent and teacher knowledge of FTS scratch kitchen and GOW classroom activities.

Programs to increase the daily physical activity among Abernethy students

- Increased range of activities on playground equipment that strengthen children's upper body and lower body, increase heart rate, and develop balance and agility.
- Increased number of students reporting trips to school made by walking and biking.
- Increased number of "lifestyle steps" children make.
- Increased number of opportunities for students engaged in physical activity outside of physical education class.
- Increased number of opportunities for parents to participate with students in physical activity outside of school.
- Healthy BMIs of student participants.

Strengthen and Coordinate Partnerships to effect policy change

- Regular meetings of key partners are scheduled to relay important information and wellness model is developed.
- Safe Routes to School program is fully operational.
- Each partner takes responsibility for work and is accountable to the rest of the group.
- Funding is secured and sustainability plan is developed to ensure continuation of HESPA program at Abernethy.

**Intermediate Outcomes
(2-5 years)**

- Increased healthy food consumption and physical activity for children in target population.
- Plan is developed for replicating effective wellness model at Abernethy for future expansion to other Portland public schools.

**Long-term Outcomes
(5+ years)**

- Improved capacity of IFCK-Portland and Portland elementary public schools to work in partnership with likeminded organizations to implement policies and programs that promote healthy school communities
- Partnerships are institutionalized as a vehicle towards systemic change in childhood obesity, as indicated by acknowledgement by the community that the partnership is an integral part of the effort to reduce childhood obesity and enhance children's health
- Changes are sustained and there is institutionalization of successful policies and practices related to healthy eating and exercising habits in all participating schools

Seattle, Washington: IFCK, Harborview Medical Center – Start Strong (SS) - Family Breakfast at School

1. Early Assessment of Implementation Progress

The Seattle IFCK project, based at the Harborview Medical Center, is using the RWJF childhood obesity prevention grant to implement its Start Strong (SS) program. Through a partnership with the Seattle Public Schools and Feet First (a nonprofit organization that promotes walking), SS is intended to increase kids' activity levels and improve breakfast consumption. The two primary components of the project are the walking school bus and the promotion and testing of culturally diverse nutritious breakfast offerings at four elementary schools in Seattle.

The SS program was in very early stages of implementation when OMG visited Seattle in October 2006. Thus, it was hard to conduct a thorough assessment. The Walking School Bus component led by SS partner Feet First had held a successful kick-off event. Children, parents, and some staff clearly enjoyed walking together, showing receptivity and a willingness to participate by both families and staff. At the time of our assessment, however, there was no clear plan in place for the future of the program. A school point person interested in exercise/walking promotion (PTA parents, school nurse, PE teacher, and/or other staff member at the school) had not yet been identified, although the PE teacher at Dearborn Park, one of the four participating schools, had been active in getting students and teachers to participate in this program. At the time of our visit, Start Strong contacts had been developed at the other three schools, though the participation and leadership were not as strong as they were at Dearborn Park. Outreach to family and community members had been minimal, and efforts were no longer being made to recruit local senior citizen groups to accompany students in the Walk-To-School program, as was originally planned in the proposal. Other components of this program that had not yet been fully implemented included encouraging parents who live farther than one mile from school to park at designated areas and walk the remainder of the way to school with their children and planning a one-mile "Recess Walk" on school grounds during the school day. The Feet First coordinator recognized she did not have the time to take up this ambitious agenda in four different schools.

The breakfast component also got under way with special events for the SS kick-off, which included successful taste tests of breakfast foods at the different schools. These foods were prepared in the school cafeteria by the cafeteria staff and the SS coordinator using creative ways to get around some of the limitations posed by inadequate kitchen equipment. Children were consulted through a simple tool about the acceptability of the alternative breakfasts and the likelihood they would consume them. Finally, ongoing efforts also were being made to

SUMMARY

Strategic focus: To provide nutritious breakfasts and walking to school incentives while promoting healthy lifestyles for elementary students and families in four Seattle public schools.

Target Population: Over 1,300 elementary students (ages 4-12) and their families who are primarily low income and from racial/ethnic minorities at high risk of childhood obesity at: Emerson, Dearborn Park, Maple, and Wing Luke elementary schools.

Activities: Walking School Bus and the Seattle breakfast program. Outreach to students and parents, school staff, and the community is another integral component.

implement school policies that would remove challenges to breakfast participation, such as having school buses arrive earlier so children have more time to eat breakfast.

In our assessment, piloting the breakfast program in several schools is a major strength of SS for three reasons. First, it focuses on a very specific and measurable goal (i.e., increased breakfast participation), which has been identified by the School District Nutrition Services as a target for improvement. Second, taking the time to find out what children and parents like, finding cost-effective ways to prepare and serve the popular food items, and involving cafeteria staff in the process of testing and implementation, should pay off in the future through increased breakfast program participation. Third, the close relationship of the grantee to the School District Nutrition Services STEPS coordinator will ensure that the pilots inform nutrition policy, and will also increase the chances that the school district will implement the program across all Seattle schools.

At the time of our assessment, SS attempts to supplement the breakfast consumption with an educational component to be integrated into the classroom curriculum by teachers had not gone as planned despite offers of lesson plans and assistance by graduate students. Teachers remain reluctant to give up classroom time, which they see as needed to succeed in mandatory standardized tests. However, the Seattle Nutrition Action Consortium (SNAC), which is part of Seattle Public Health Department as well as the Seattle Public Schools Nutrition Services' STEPS program are providing nutrition education in Seattle schools. Both of these programs are providing this education in partnership with Start Strong. The fact that these are institutional resources suggests their efforts are more likely to be sustainable in the long run and they can supplant or supplement the work of Start Strong if necessary.

At the time of our assessment, the outreach component of the Start Strong program was still in its beginning stages. This aspect of the work is very time consuming, and to succeed, it will require concentrated attention from staff, and knowledge of community organizing techniques. A single staff person working in four schools part time cannot effectively do this job without additional staff support.

Challenges to Implementation

The biggest challenge to SS at the early stage of our assessment had been insufficient staff time to plan, initiate, and coordinate all the various components of the project in four different schools. The different administrative cultures of the schools were dictating an individualized rather than a one-size-fits-all approach. The different cultures also required intense relationship building to develop the necessary trust between SS and the schools. As a result of all these unanticipated demands, some SS goals (e.g., breakfast pilot) had received more attention than others (Walk-To-School, community engagement, nutrition education), and coordination had suffered. Another challenge likely to impact implementation is the school district-wide budget cuts that will force two of Start Strong's partner schools (Dearborn Park and Emerson) to merge in the 2007-08 academic year. The inevitable result of this has been that teachers and administrative staff have competing priorities that draw attention away from the Start Strong program.

2. Early Assessment of the Partnership

In our assessment, the Start Strong program has a complementary set of partners. The positive working relationship between the partners, including Feet First, the Seattle Public Schools Nutrition Services STEPS representative, and the SS coordinator, is due in part to their previous work history together for another RWJF grant (Healthy Eating by Design) at two other elementary schools. This experience has provided an extensive network of contacts to draw from for the current obesity prevention grant.

The grantee has successfully leveraged the individual strengths of the partners to support the work. Feet First has lent its reputation and advocacy savvy to call attention to the need to incorporate a physical activity aspect to any attempt at reducing childhood obesity. They have also contributed a staff person's time to work with the SS schools. The partnership with a researcher from the University of Washington, General Division of Pediatrics has been extremely fruitful for the evaluation component of the Start Strong project. Finally, the STEPS coordinator provides the critical link between the nonprofit and academic partners and the school system, and is committed to applying the lessons learned from SS to inform policy at the school level. Weekly partner meetings were convened by the SS coordinator to discuss overall program goals, networking, and conceptual issues. Finally, all participating schools and partners recognize and operate under the Start Strong name, additional evidence of the hard work that has been done to integrate the work of different partner organizations into a cohesive whole.

The only obstacle we identified regarding the non-school partners is the limited time the Feet First coordinator has to support the goals of SS in four different schools. With regard to the school partners, different levels of buy-in play a role in how much progress SS had been able to achieve in the individual schools at the time of our assessment. In the absence of school champions to lead the work, the IFCK coordinator had to do most of the start-up work — further stretching her limited time on this program.

3. Early Assessment of Evaluation Capacity

The program has partners with strong capacity and motivation to collect data and conduct data analysis. The University of Washington researcher is making use of the many resources at her disposal to support the Start Strong evaluation, including using students at the University of Washington Public Health School to support the research. The Seattle Public Schools Nutrition Services will use the data collected on the nutrition content of the school breakfasts and the numbers of students participating to determine the cost effectiveness of implementing similar measures in other Seattle schools.

The use of an experimental design for the nutritional evaluation using control schools and pre- and post-intervention measures is very encouraging because it will strengthen overall findings. However, this design can be weakened by many factors out of the control of the evaluator, including lack of teacher cooperation with the pre- and post-intervention survey administration, poor response to the parent mailed survey, and inadequate compliance with completion of the “Hands Up” pre- and post-intervention survey. If the response rates are too low, there won't be enough cases to conduct statistical analysis between the pre- and post-intervention responses and

between the experimental and control groups. Data quality can also suffer if school staff are not fully committed to supporting the evaluation.

Data collection procedures on the Walking School Bus project are not well established yet. The Student Breakfast and Transportation “Hands-up” Survey does not make any specific mention of the “Walking School Bus.” Also, although Feet First has a form that is supposed to be used to count the number of children and parents participating in “Walking Wednesdays,” it is not clear who is collecting that information for each school on a weekly basis.

Capacity to Support Future Summative External Evaluation

The Start Strong program is in a nascent stage of development. The capacity for future external evaluation to capture long-term changes in attitudes and behavior would depend upon improvements in data collection, which will be difficult to achieve unless more resources are dedicated to increasing sample sizes and ensuring high response rates and good data quality.

Seattle Start Strong Theory of Change

Contextual & Problem Analysis:

Assets:

- Seattle public schools garnered national recognition in 2004 for progressive nutritional policies adopted by the district
- District policies establish guidelines on the nutrient quality of school meals and acknowledge the importance of a “pleasant and relaxed” environment in terms of food consumption.
- Food service staff at all four participating staff is skilled and fully engaged in increasing level of participation in breakfast programs.
- Despite budget cuts, the District has made progress in implementing policy goals, including an increase in its use of fresh, local, unprocessed foods and implementation of culturally diverse foods in its lunch menu.
- Individual schools are encouraged to supplement district-wide policies with local school-based initiatives.
- THE IFCK – Seattle can draw from extensive resources through its unique partnership with Harborview Medical Center, Children’s Hospital & Regional Medical Center, and Public Health Seattle & King County.
- The Start Strong program also has the resources available from the collaborative effort established between the Injury Free Coalition for Kids – Seattle, Feet First, and Seattle Public Schools to combat childhood obesity.
- Two successful pilot programs at Bailey Gatzert Elementary School (The Walking School Bus Program) and T.T. Minor (Healthy Eating by Design) will serve as models for the Start Strong program at 4 other Seattle public elementary schools.
- Four target schools are actively interested in participating in Start Strong program.

Challenges:

- All children, but especially low-income children from racial/ethnic minority groups who face additional barriers to good nutrition and physical activity, are overweight or at risk of being overweight because:
 - > They are falling short of getting the ½ to 1 hour of recommended daily exercise.
 - > They are not eating nutritionally sound meals that meet the recommended daily energy requirements.
- Student participation in school breakfast programs is low at Start Strong’s partner schools: Emerson (48%), Deerborn Park (26%), Maple (12%), and Wing Luke (23%).
- The following factors pose challenges to participation in Walking School Bus and/or Seattle breakfasts: School arrival times, bus schedules, work schedules of parents, fear of abduction, lack of traffic safety, distance to school, lack of menu variety and/or unpalatable/culturally ill-suited food items.
- There are insufficient promotional activities to increase participation of parents and other family members in breakfast programs.
- Focus groups revealed that barriers to participation in free school breakfast programs might also be due to lack of time, concerns about nutritional value, and perceived stigma.
- Budget cuts have negatively impacted the breakfast program, reducing the funding available to only approximately 50 cents per student breakfast.
- Budget cuts will also force several schools to merge (in the 2007-08 school year), including two of Start Strong’s participating schools: Deerborn Park and Emerson.
- School policy mandates fewer hours devoted to physical education to increase time available for test preparation for WASL.
- Nutrition education is not part of SPS curriculum.

Target Population

Over 1,300 elementary students (ages 4-12) and their families who are primarily low income and from racial/ethnic minorities at high risk of childhood obesity at: Emerson, Deerborn Park, Maple, and Wing Luke elementary schools.

Strategic Focus

To implement the Start Strong program by providing nutritious breakfasts and walking-to-school incentives while promoting healthy lifestyles for family and community in four Seattle public elementary schools.

Assumptions:

- Eating a range of healthful and culturally appropriate breakfasts will contribute to reducing the incidence of obesity among children in participating schools.
- IFCK – Seattle will be able to identify an array of culturally appropriate meals that are also nutritious and cost-effective.
- Culturally appropriate breakfasts prepared by food service staff will be palatable to students and families and will have whole grains and food.
- Food service staff will be trained easily and efficiently on new menus and cooking methods.
- The increase in daily level of physical activity from Walk-to School program will contribute to improving physical fitness.
- Participating in school Healthy breakfast and Walk-to-School programs will change overall eating and exercise habits in children.
- Parents and children will want to get involved as result of greater outreach efforts, education, and increased availability of information regarding Start Strong program.
- Parents are interested in learning and incorporating knowledge gained from school materials and family nights in their homes.

Program Goals:

- Implement Walking School Bus program in four public elementary schools
- Increase student participation in Seattle Breakfast program at four public elementary schools
- Increase family and community involvement in Walking School Bus and Seattle Breakfast programs
- Strengthen Partnerships (Feet First, SPS, STEPS, COAT, etc.)

OMG Center for Collaborative Learning

Seattle Start Strong Theory of Change
Program Activities

Goal 1: Implementation of Walking School Bus programs:

- Coordinate efforts with Feet First and Seattle Public Schools to:
 1. Identify safe walking routes to school
 2. Identify a point person interested in exercise promotion (PTA parents, school Nurse, PE teacher and/or other staff member)
 - Outreach to family and community members (the elderly especially) to accompany students in Walk-to-School programs.

Goal 2: Increase student participation in Seattle breakfast programs

- Research culturally appropriate breakfast options, test recipes, and offer taste tests throughout the year.
- Research current breakfast choices being offered, conduct nutrition analysis, and identify barriers to current practices regarding whole grains and whole fruit
- Identify low-cost options to improve healthy food choices
- Work with district and food service workers to provide nutritious and palatable breakfasts with increased availability of whole grains and fresh fruit.
- Establish school and school transport policies supportive of breakfast participation
- Implement promotional activities and present to schools at monthly morning assembly to kick-start the program.
- Educate students about health benefits of having breakfast and additional benefit of increasing readiness to learn.

Goal 3: Increase Family and Community Involvement in the Walking School Bus and Seattle Breakfasts Programs

- Work with University of Washington to recruit graduate student volunteers to assist with education and evaluation of Start Strong program.
- Prepare and display promotional materials to engage parents in special breakfast events and in walking and neighborhood safety issues:
 - Update the nutrition bulletin regularly with nutrition information on breakfast consumption, healthy eating tips, etc.
- Send communications home regarding new options to school breakfast
- One day per month offer “Breakfast Club” to parents as incentive to sit with children while they eat breakfast.
- Present at family night periodically to gain parent support and offer taste tests
- Organize special breakfast events with students, family, and community members

Goal 4: Strengthen and Coordinate Partnerships

- Work with Feet First to develop monthly activities to promote the relationship between the walking program and the breakfast program
- Organize monthly Start Strong meetings with key partners: Feet First, STEPS to Health, Neighborhood House, University of Washington.
- Organize quarterly partner meetings
- Develop relationships within each school (food service workers, family services coordinators, teachers and staff, PTA president and principal)



Short-Term Outcomes
(18 months)



Goal 1: Implementation of Walking School Bus:

- Four partner schools will offer Walking School Bus program.
- Students acquire positive attitudes about physical fitness

Goal 2: Increase Participation in Seattle Breakfasts:

- 10% increase in student participation at each partner school.
- Policy changes are in place to allow students to arrive 20 minutes before school begins to eat breakfast at four partner schools.
- Breakfast choices will be more diverse and contain more fiber, have a higher whole grain content and will offer more whole fruit at all four partner schools.

- Four partner schools will have increased access to healthy breakfast foods.
- A majority of the students and parents will show increased knowledge of healthy eating habits.

Goal 3: Increase Family and Community Involvement

- 10% increase in parent participation in school breakfast and Walking School Bus program at four partner schools.
- Family members are trained in neighborhood safety issues and their participation increases in special breakfast school events and Walk-to-School programs.
- Established network of volunteers to educate and promote Walking School Bus.
- Community members and school staff have increased awareness of Start Strong program.

Goal 4: Strengthen and Coordinate Partnerships

- Partners are clear on their roles and work collaboratively to meet desired outcomes.
- Funding is secured and sustainability plan is developed to ensure continuation of Start Strong program in existing partner schools.
- “Replication Kit” will be disseminated and shared with other schools and district planners.

Intermediate Outcomes
(2-5 years)

- Increased physical activity and healthy food consumption for children in the target population.
- Increased parent and community involvement and leadership in programs.
- Plan is developed for replicating best policies and strategies of Start Strong program for future expansion to other schools and districts.



Long-Term Outcomes
(5+ years)

- Students improve physical fitness habits
- Students improve eating habits.
- District and state-wide policies are adopted for ensuring culturally appropriate and nutritious choices in school food.
- High level of participation and leadership from parents, school leaders, cafeteria staff, and community.
- Improved capacity of IFCK-Seattle and Seattle elementary public schools to work in partnership with likeminded organizations to implement policies and programs that promote healthy school communities.
- Partnership is institutionalized as a vehicle towards systemic change in childhood obesity, as indicated by acknowledgement by the community that the partnership is an integral part of the effort to reduce childhood obesity and enhance children’s health.
- Changes are sustained and there is institutionalization of successful policies and practices related to healthy eating and exercising habits in all participating schools