



# Results Matter

Children's Physical Activity and Nutrition Program



*One-third of Georgia's children are overweight or at risk for childhood obesity.*

## Children's Physical Activity and Nutrition Program Shows Promising Outcomes

One-third of Georgia's children are overweight or at risk for childhood obesity. These children and youth face health consequences, such as Type 2 diabetes and heart disease. In 2006, Healthcare Georgia Foundation awarded grants to five nonprofit organizations in

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*Conducted by the Department of Foods & Nutrition and The Survey Research Center at the University of Georgia with a grant from Healthcare Georgia Foundation.*

Georgia to develop innovative, cross-site, multi-year programs designed to raise the level of physical activity and increase the consumption of healthy foods among Georgia's school children. The Children's Physical Activity and Nutrition program, or CPAN, aimed to engage members of the community to seek effective, sustainable solutions that benefit Georgia's children. A sixth grant was awarded to the University of Georgia to evaluate CPAN's success.

### Contents

Introduction 1

CPAN Program Highlights 2

Analysis 3

Successes and Lessons Learned 4

Foundation Reflections 5

About Results Matter 6

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In a Final Evaluation Report, UGA researchers provided an analysis of CPAN. Here, we offer a summary of their findings.

## Setting CPAN in Motion

Funded organizations were charged with implementing interventions designed to have a positive impact on school children in Georgia as identified by four outcome objectives:

- 1) Increased participation in physical activities;
- 2) increased effort to improve nutrition;
- 3) an increase in self-reported physical activity among participants; and
- 4) an increase in self-reported improvements in nutrition among participants.

In addition, each grantee was encouraged to include additional objectives that would benefit its particular target population and reflect each community's unique approach. Moreover, each organization was responsible for creating its own intervention.

To evaluate the success of these interventions, researchers at the University of Georgia used two common evaluation tools to examine changes in nutrition choices and physical activity: the "My Food Choices" and "My Physical Activities" survey instruments. Prior to implementing the interventions and evaluation plans, grantees were asked to develop a logic model for their interventions, which the UGA evaluation team reviewed with each grantee.

Before setting CPAN in motion, grantees attended a training workshop hosted by the UGA research team to review the overall evaluation design, instruments, protocols, and timeline. They were also given the opportunity to suggest modifications and add site-specific evaluation items. Following the workshop, the UGA evaluation team visited each grantee to provide technical assistance

with both the intervention and evaluation.

This summary is based on evaluations at the end of the third year of the program. Baseline data were collected from school children during Spring 2007. Data were collected again from the same children during Fall 2007 and Spring 2008. This report examines changes in physical activity and nutrition behavior from the baseline wave of data (collected Spring 2007) through the Spring 2008 wave of data collection.

## Evaluating CPAN

The data presented herein represent only information on those school children who completed all three waves of data collection. In all, 513 children completed the three waves of "My Food Choices," while 501 school children completed all three waves of the "My Physical

Organization	My Food Choices	My Physical Activities
Albany	100	143
BLAZE Sports America	11	10
HealthMPowers, Inc.	157	144
Northwest Georgia Healthcare Partnership, Inc.	138	139
Valdosta	107	65
<b>Total Number of Children</b>	<b>513</b>	<b>501</b>

Activities" portion. A breakdown by organization is presented below:

"My Food Choices" consists of 54 items designed to measure consumption of common food items. Children were given a booklet displaying realistic pictures of each food item and were asked to indicate how many days in the previous week they had eaten these foods. Thirty items represent healthier food choices; 24 items represent less healthy foods. Responses were summed across healthier and less healthy items to create representative measures.

Similarly, measures representing fruit and vegetable consumption (9 and 13 items respectively) were created. Each summed measure was then divided by

the number of items in that measure to determine the number of times in the prior week the child consumed healthier foods and less healthy foods, as well as the number of times the child consumed fruits and vegetables.

"My Physical Activities" consists of 22 items designed to measure physical and sedentary activity among children. Seventeen items represent high activity, while 5 items represent stationary activity. Since the purpose of the CPAN interventions was to increase physical activity, the data reported represent only measures of high activity among participants. Because two organizations did not include the activity of *wrestling*, the final scale for physical activity consisted of 16 items. Furthermore, some items represent activities that primarily are engaged in by females (*cheerleading*) or males (*football*).

Thus, separate scales have been created to analyze physical activity by gender.

Despite inherent cognitive difficulties of recall among young children, both the "My Food Choices" and "My Physical Activities"

evaluation instruments have been shown to be reliable indicators. Both instruments were tested extensively for reliability and validity among young children in previous research conducted by the Nutrition Intervention Laboratory at the University of Georgia. Moreover, extensive focus group research was conducted to create visual pictures of food items that children readily understood and recognized to enhance accurate recall. A time period of the *prior seven days*, as opposed to a longer time period such as *one month*, was chosen to allow more accurate recall.

To measure food consumption and physical activity among children from the baseline measurement throughout the study period, an analysis of variance also was conducted to determine

statistically significant changes. Post-hoc analyses assessed changes between baseline and Wave 2 measures, and between baseline and Wave 3 measures. Also assessed were changes among all children tested as well as changes within each grantee organization.

## Analyzing Results

In analyzing the three waves of data collected, results are, in a word, mixed. Tracking baseline measurement to both Wave 2 and Wave 3 measurements shows significant increases in physical activity. However, during the same measurement period, no significant differences were observed among food choices. Yet, although the statistical difference is insignificant, increases in consumption of healthier foods were observed, as were decreases in consumption of less healthy foods.

*Across all sites, an increase in physical activity occurred, indicating that the interventions employed were successful. Furthermore, although changes in food choices were not statistically significant, the changes that did occur suggest that healthier foods were consumed more often and less healthy foods were consumed less frequently by children in the study.*

Despite differing intervention strategies used by each grantee organization, the cross-site evaluation instruments employed appear to have been successful in detecting increases in physical activity among children in the study. Although statistically significant improvements in food consumption behavior have not been observed, results suggest positive movement.

## Gaining Further Insights

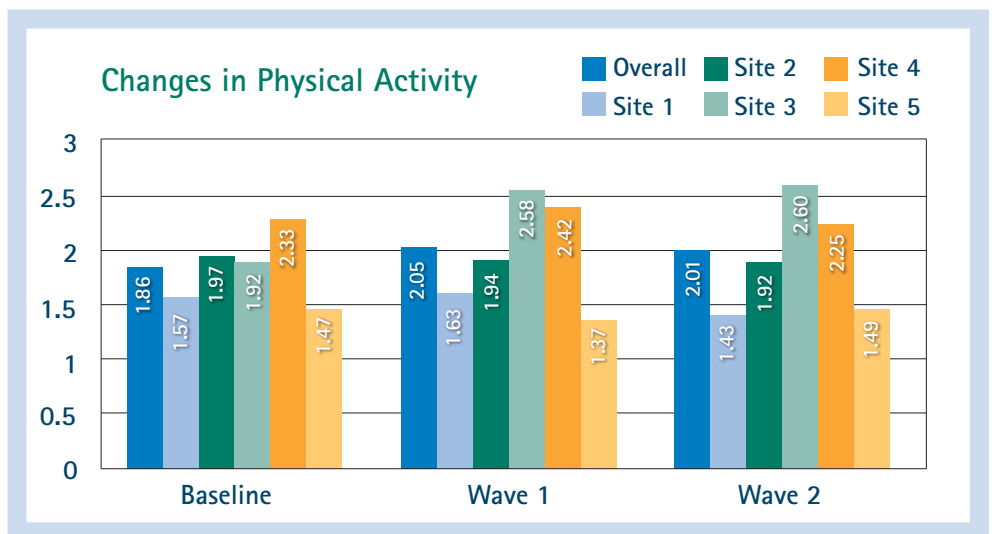
In addition to the encouraging results, this study also gave UGA evaluators the opportunity to gain valuable insights into the development, implementation, and evaluation of health promotion programs for children.

**School Access:** School access surfaced as a major issue and an important variable. Funded organizations had a wide range of experience with school access. Some grantees (e.g., HealthMPowers) had existing school programs, and built on that experience, enabling them to implement programs immediately. Other grantees (including Northwest Georgia, Valdosta, and Albany) learned that school access can be difficult.

Without a successful track record in schools or a well planned approach, grantees found that contacting teachers and connecting with students is challenging. A definite lag time

**Evaluation Readiness:** Going forward, it is important to determine the evaluation skills of the program staff who will be conducting the on-site assessments. These skills include: an understanding of cohort vs. cross-sectional evaluation design; sampling issues; administration of data collection instruments; data recording; and understanding informed consent issues when collecting data from children. The UGA evaluation team made several helpful recommendations in this regard (see boxed information).

**Building Community Capacity:** One of the most promising aspects of working with communities to conduct evaluation is the potential for building community capacity in this regard. Engaging community members in the process increased their comfort level with data collection and management, and all groups improved in this area over the course of the study. Thus, all grantee organizations now have enhanced evaluation capacity



developed in program implementation for those grantees that needed to build school networks, as compared to those with established school networks. As a result, some programs were delayed in their implementation, which affected evaluation timelines as well. Evaluators suggest that in awarding future grants to groups without existing school networks, time should be built in and coaching offered to allow for gaining access to schools.

and can build on it for future efforts.

**Rounding out the Picture:** Evaluators also recommend collecting additional data to augment the overall community description. For example, it would be important to know if other activities were occurring in the community relating to improved nutrition and increased physical activity that may have affected children and families. Were mandated school wellness policies in place to support the CPAN programs?

Were parents involved in worksite or other programs that support positive family health behaviors? Such data were not collected as part of this evaluation design, but this information would be important to know.

#### Theory-based Interventions:

Interventions evaluated in CPAN were not developed consistently from or grounded in health promotion theory. Using theory-based interventions could, perhaps, improve the process of program implementation as well as program outcomes.

### Building on Success

Working with community-based partners to document program outcomes can be challenging for all parties. Yet it is extremely important to work together, if we are to identify evidence-based programs that can be transferred and used by other communities. The most successful of these programs need to be studied in further depth to determine the factors that contributed to their success; an evaluation design that incorporates both qualitative as well as quantitative approaches should be used.

The CPAN program has proven successful in many ways. It demonstrated that community organizations can conduct programs resulting in positive changes in both eating behaviors and physical activity in children. In addition, the university-community partnership resulted in a learning experience for both partners. Moreover, the community organizations had an opportunity to learn from one another and to improve their programs based on the experience of others. Thus, evaluation capacity now exists in these communities for future purpose.

Last but not least, CPAN has resulted in lasting, positive relationships among the UGA evaluation team and the community organizations—relationships pertinent to building healthier futures for Georgia's children.



## Evaluating Lessons Learned

The University of Georgia evaluation team made several recommendations regarding the importance of determining evaluation readiness of program staff in charge of conducting on-site assessments:

- Community organizations should be encouraged to develop a more detailed description of the data collection process prior to baseline data collection. For this initial study, they were asked for dates (*when*), but not about the process (*how*).
- Community organizations need more technical assistance with data collection. One recommendation is to have evaluation staff on-site and actively involved in initial baseline data collection; during the second round evaluators can be on-site to provide consultation; and for the third round, the community staff would manage the entire process.
- Community organizations should be provided with more detailed information on processing data. Evaluators also recommend having one or two standard on-line process data forms which all sites could use to track activities.
- Community organizations would benefit from an evaluation readiness scale to be used at the time of baseline collection to determine the type of assistance they require. This instrument could be used again at the end of the program to demonstrate evaluation capacity building within the organization.



## Reflections by Healthcare Georgia Foundation

*Lisa Medellin, Program Officer; Gary D. Nelson, President*

Overall, the Foundation believes the CPAN initiative was an important investment providing insights into the design, implementation, and evaluation of programs aimed at preventing childhood obesity. We offer the following considerations:

- **Design of the Grantmaking Program**  
Regarding the execution and management of CPAN, the grantmaking program benefited from: 1) selection of high performing applicants with evidence of capacity; 2) inclusion of technical assistance/training opportunities for grantee organizations; (3) required (core) objectives across grantee organizations; and (4) diversity in settings, interventions, and populations addressed by the grant. In retrospect, the Foundation considered the time frame to be too short for the design, implementation, and evaluation of the initiative. More time was needed for planning and preparation by grantees prior to the CPAN launch. Finally, the decision to combine program and evaluation technical assistance proved beneficial to the grantees.
- **Program Intervention and Behavior Change**  
Several lessons were learned from the perspective of the program interventions supported by CPAN: 1) as cited by the evaluation team, many were void of an underlying theoretical model for the program; 2) some interventions suffered from deficiencies in intensity and duration of effort—unevenly implemented over a sufficient period of time to achieve the desired effect; 3) some interventions were simply too weak to achieve intended outcomes; 4) in retrospect, the Foundation should have emphasized interventions that included a broader focus to allow for environmental change in addition to behavioral change; and 5) family focused, community focused, and policy interventions needed more attention.
- **On Outcomes and Results that Matter**  
Several choice points framed the assessment of the initiative: 1) the use of a logic model-defining relationships between inputs and outcomes would have been beneficial for each of the programs implemented and evaluated; 2) the assessment process may have missed results associated with community change (vs. individual change); 3) the balance between program-specific and common outcome measures across multiple programs is difficult to achieve, and despite the use of common metrics, aggregation of outcome data across programs was not always possible; 4) the availability of a common benchmark/baseline measures proved difficult to establish; and 5) the level of evidence of what constitutes success—and relatedly the questions of attribution and contribution—required more deliberation and negotiation prior to launching this grantmaking program.

Important lessons were learned at all stages of the initiative that will inform future investments and reduce the likelihood of theory, implementation and measurement failure. Organizations participating in the initiative demonstrated strong commitment, innovation, and a desire to achieve better outcomes for young people. Because results matter, the Foundation will share the lessons learned and seek opportunities to use both evidenced-based programs and our own experience to guide future investments.

## Recommended Citation

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## About Results Matter

Healthcare Georgia Foundation is strongly committed to improving program outcomes through ongoing evaluation. *Results Matter* is published as part of the Georgia Evaluation Resource Center (ERC) and its suite of evaluation tools and services tailored to help nonprofit health organizations achieve better outcomes by enabling them to understand their performance, revise and plan accordingly, and communicate results to their stakeholders.

## Coming Soon:



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## About Healthcare Georgia Foundation

Healthcare Georgia Foundation is a catalyst for better health and health care in Georgia. Through strategic grantmaking, Healthcare Georgia Foundation supports organizations that drive positive change; promotes programs that improve health and health care among underserved individuals and communities; and connects people, partners and resources across Georgia.

Healthcare Georgia Foundation is a statewide, private independent foundation whose mission is to advance the health of all Georgians and to expand access to affordable, quality health care for underserved individuals and communities.

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