

CASE STUDY

Rapid Response Funding

Implementing policies and community programs that encourage healthy eating and physical activity are a necessary step in helping children attain and maintain a healthy weight.

There is more to learn about the effectiveness of current policies and programs that focus on changing individual behavior and altering the settings where families make decisions about nutrition and physical activity.

When policies or programs are implemented, change can happen very rapidly. To take advantage of these natural experiments, investigators need to be able to collect data before and as the changes are occurring to determine what is working.

NCCOR Takes Action

NCCOR members realized that with every policy implemented, opportunities were missed to better understand the implications and outcomes. In 2012, NCCOR members decided to develop new funding mechanisms to rapidly respond to research opportunities. Within the year, NCCOR's funding partners helped two such funding mechanisms become a reality.

NIH Fast Track R01 Mechanism

NCCOR members created a workgroup and conducted an organizational scan to determine if any partners had similar funding mechanisms in place. The workgroup discovered that both NIH and RWJF had working examples of rapid response mechanisms on different topics, and one of NIH's had been in place for over 20 years. The success and lessons learned from those programs helped solidify support and provided a template for the new funding mechanism.

On Aug. 8, 2012, several NCCOR-affiliated NIH institutes — the National Institute of Diabetes

WHAT IS A NATURAL EXPERIMENT?

Unlike randomized experiments, a natural experiment is observational. Natural experiment studies occur when conditions are determined by nature or other factors out of the control of investigators, such as when a policy is applied.

and Digestive and Kidney Diseases, National Cancer Institute, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, and the Office of Behavioral and Social Sciences Research — and the National Institute on Aging issued an eagerly awaited Funding Opportunity Announcement (FOA) to establish an accelerated review and award process to support timesensitive research for evaluating a new policy or program expected to influence obesity-related behaviors and/or weight outcomes.

With NIH's rapid response mechanism, eligible applications can be funded within 3-4 months after the application is submitted — up to six months faster than the minimum nine months required for investigators to receive funding through traditional R01 mechanisms at NIH.

Since its release, the FOA has led to substantial interest, and submissions have covered a range of issues, including consumer-focused obesity

LEVERAGING COLLECTIVE CAPITAL

Rapid Response Funding efforts leveraged NCCOR partners' "capital" i.e., time, resources, assets, and abilities to create a high-value product. The National Institutes of Health (NIH) and the Coordinating Center contributed financial capital; NIH provided managerial capital by overseeing the process. NIH, the Robert Wood Johnson Foundation (RWJF) also contributed intellectual capital to the project.

Expanding Possibilities

"Rigorous evaluation of policy and environmental change is a key method of policy research, which often does not lend itself to traditional research methods like randomized clinical trials."

NIH Investigator

prevention policies, school policies, other government or health care programs and policies, and transportation policies or changes. See the chart below for examples.

Johns Hopkins Global Center on Childhood Obesity

The Johns Hopkins Global Center on Childhood Obesity (JHGCCO), an NCCOR-affiliated effort, issued a Request for Applications (RFA) on Feb. 15, 2012, to jumpstart pilot and feasibility research projects with timelines that do not allow funding through the regular NIH review cycles. JHGCCO is interested in supporting novel, rigorous projects that use systems science concepts and frameworks to understand the environmental mechanisms driving childhood obesity, and projects that can lead to the development or confirmation of effective interventions relevant to children's diet, physical activity, energy balance, and weight status. It has received a

significant interest in its first four rounds of funding, awarding nine grants, including three internationally-based projects. The studies assess bike policy changes, school-based nutrition and physical activity programs, and environmental interventions and changes.

NCCOR Makes an Impact

The rapid response mechanisms give investigators new options and greater flexibility to conduct childhood obesity research. In particular, they help agencies respond to new and ongoing opportunities to conduct natural experiments. With traditional funding mechanisms, investigators often do not have enough time to collect baseline data and secure support before the program or policy starts. Having baseline data is critical to observing and understanding changes as the program takes effect.

The NIH fast track mechanism allows investigators to more effectively conduct those studies, which can yield immediate and practical evidence for what works and is acceptable in real-world settings and populations. Support from the JHGCCO pilot study mechanism will also enable researchers to successfully compete for additional funding at NIH or elsewhere and to collect followup data and complete evaluations of policy and/or environmental changes.

RAPID RESPONSE PROJECTS

NIH-Funded

Impact of NYC Sugar- Sweetened **Beverage Policy on Calories Purchased and Consumed**

The study will examine any changes in adults' calorie purchasing and consumption at fast food restaurants, resulting from New York Citv's ban of the sale of sugar-sweetened beverages in serving sizes greater than 16 ounces at restaurants and other foodservice establishments. Two areas in New Jersev that statistically match NYC will be used as non-treated comparison communities.

Evaluating a Food Hub's Impact on Food Access, Diet, and Weight in a Food Desert

The study will assess the impact of a food hub introduced into a food desert community in South Carolina. The food hub will include a farmers' market, urban farm. mobile market, cafe, and classrooms for community nutrition education and culinary arts job training. The study will compare changes in dietary intake, weight, and shopping habits with a distant control community.

JHGCCO-Funded

Does an Activity-Friendly Community Improve Children's Physical Activity? Where, When, and How?

The study examines whether moving into a new, certified sustainable and healthy community increases children's physical activity, improves relevant personal attitude and social environments, and reduces physical activity disparities among its mixedincome residents, through pre- and post-move data. For each case subject, a "control" subject will be recruited from the same/similar premove neighborhood with matching socio demographic characteristics.

Evaluation of the Policy Effectiveness of "Three-Class, One Exercise, and Two Opening Activities" on Control of Childhood Obesity in Shanghai, China

The study will evaluate a physical exercise promotion program in primary schools in urban and suburban Shanghai. It will compare the changes in these schools at different stages of implementation. Additionally, it will analyze comprehensive annual physical examination data covering all children to reveal any changes in childhood overweight and obesity before and after policy implementation.