

What is the community challenge?

Obesity rates of children and adolescents in the United States have risen over the past 25 years and remain high despite attempts to counter them. Among all states, North Carolina is among the top half of states reporting the highest obesity rates among children 10–17 years old. Statewide, almost a third (30%) of children age 2–4 are overweight or obese (Trust for America’s Health and the Robert Wood Johnson Foundation, 2016). Obese children and adolescents face significant health risks and are about five times more likely to be obese as adults than their counterparts who are not obese. Adults who are obese are at risk for serious diseases including cardiovascular disease, kidney disease, diabetes, and cancer. These findings underscore the need for obesity prevention efforts to reduce the likelihood of obesity-related health risks that begin in childhood from continuing into adulthood.

Program At-a-Glance

CNCS Program: Social Innovation Fund

Intervention: Shape NC

Grantee: North Carolina Partnership for Children (NCPC)

Focus Area(s): Healthy Futures

Focus Population(s): Child care sites and children in these centers, aged 2-4

Community(ies) Served: Four counties in North Carolina: Randolph, Durham, Wake, Wilson

What is the promising solution?

Child care centers are in a prime position to instill healthy practices and nutrition from an early age. Children in care not only receive nutrition and physical activity, they learn from the example of adults and develop habits that can last a lifetime. In four counties in North Carolina, Randolph, Durham, Wake, and Wilson, Shape NC integrates tools and best practices from Be Active Kids (BAK); Nutrition and Physical Activity Self-Assessment for Child Care (Go NAP SACC); and Preventing Obesity by Design (POD). Shape NC aims to increase the number of health and nutrition best practices implemented in participating childcare sites and increase the number of children at a healthy weight, as well as improve attitudes toward healthy food choices and physical activity among 2-4-year old children.

What was the purpose of evaluation?

The evaluation of North Carolina Partnership for Children (NCPC)’s Shape NC by Westat began in 2016 and finished reporting in 2020. The evaluation assessed the impact of Shape NC TA on child care sites and the children enrolled in these sites in four counties in North Carolina. There were three research questions:

1. What is the impact of Shape NC TA on the number of health and nutrition best practices implemented in participating childcare sites receiving 1 or 2 years of treatment relative to comparison sites?
2. What is the impact of Shape NC TA on the physical activity of children in participating childcare sites receiving 1 or 2 years of treatment relative to children in comparison sites?
3. What is the impact of Shape NC TA on the percentage of participating children at a healthy weight as measured by child body mass index (BMI) status relative to children in comparison sites?

Using a delayed treatment quasi-experimental design, child care sites participated in the study as cohorts, with comparison cohorts moving into treatment after one year. A total of 910 children received 1 year of treatment. A total of 210 children received 2 years of treatment. The comparison group included 468 children in year 1 and 456 children in year 2. The methodological approach included index scores; propensity score matching and hierarchical linear modeling to assess both site- and child-level impacts after 1 and 2 years of treatment.

What did the evaluation find?

As a grantee of CNCS's Social Innovation Fund, North Carolina Partnership for Children engaged an independent evaluator to evaluate Shape NC. The impact evaluation did not find significant effects of Shape NC TA on children's BMI, and on the number nutrition policies and best practices after 1 or 2 years of implementation. Shape NC TA had a significant positive impact on the number and types of indoor and outdoor physical activities available to children at treatment sites after 2 years of implementation.

Notes on the evaluation

North Carolina Partnership for Children's evaluation of Shape NC experienced several disruptions to the evaluation plan. Due to congressional sun-setting of the Social Innovation Fund program, the evaluation period was shortened by ten months and no continuation funding was awarded. Final data collection, scheduled for Spring 2020, did not occur due to the COVID-19 pandemic. Due to the resulting large amount of missing implementation data in year 2, Westat was not able to conduct a planned implementation. In addition to disruptions caused by COVID-19, a combination of ceiling and testing effects led Westat to discontinue direct data collection with 2-year-old children on their food and activity preferences using an interview protocol. This change eliminated the opportunity to examine whether evidence indicated Shape NC TA produced short-term outcomes (attitude changes) at the child-level, leaving the less sensitive body mass index (BMI) outcome as the sole child-level outcome measure.

How is [Grantee/Subgrantee] using the evaluation findings to improve?

The North Carolina Partnership for Children learned that Shape NC is a model better suited to achieve promising outcomes at the center-level and not at the child-level. The crux of the Shape NC model is information dissemination through intensive learning opportunities: the Provider and Technical Assistance Collaboratives, the Shape NC Summit, and the Shape NC track at the National Smart Start Conference. All training opportunities are supported by coaching and technical assistance to embed learned best practices.

With Shape NC sunsetting in 2021, NCPC will scale coaching and TA across the Smart Start network through a project called Beyond Shape: Coaching for Technical Assistants. The goal of Beyond Shape is to support the 150 technical assistants in the Smart Start network via coaching toward new and enhanced policies, collaborations, and environments that will influence a wide range of child and family outcomes. NCPC will facilitate individual professional growth and convene professional learning communities and will curate and create content that expands competencies for mentoring, coaching, and consultation in childcare.

Evaluation At-a-Glance

Evaluation Design(s): Quasi-experimental impact evaluation

Study Population: Child care sites and 2-4-year-old children enrolled at these sites

(Independent) Evaluator(s): Westat

This Evaluation's Level of Evidence*: Preliminary

*SIF and AmeriCorps currently use different definitions of levels of evidence.

The Social Innovation Fund (SIF), a program of the Corporation for National and Community Service (CNCS), combines public and private resources to grow the impact of innovative, community-based solutions that have compelling evidence of improving the lives of people in low-income communities throughout the U.S. The SIF invests in three priority areas: economic opportunity, healthy futures, and youth development.

The content of this brief was drawn from the full evaluation report submitted to CNCS by the grantee/subgrantee. The section of the brief that discusses evaluation use includes contribution of the grantee/subgrantee. All original content from the report is attributable to its authors.

To access the full evaluation report and learn more about CNCS, please visit nationalservice.gov/research.