What Did We Learn About First 5 LA's Efforts to Reduce Early Childhood Obesity?

RECO
Reducing Early Childhood Obesity

Overview

Obesity is a major public health problem, and early childhood is recognized as a critical time for preventing obesity as many children enter school already overweight or obese. Early childhood obesity is linked to adverse health outcomes later in life. Strategies targeting obesity must begin with very young children and their families to have an early impact on children's healthy development.

First 5 LA focuses on the first five years of life as "establish[ing] the foundation for the future success of our children." The organization has funded a diverse portfolio of investments around children's health—among them a subset referred to collectively as the **Reducing Early Childhood Obesity (RECO)** portfolio.

The RECO investments adopted a wide variety of strategies to address early childhood obesity, with a particular focus on low-income communities across Los Angeles County. Strategies ranged from education and media campaigns to financial incentives to changes in the built environment such as gardens and parks. Together, they aimed to facilitate change at the individual, community, and policy/systems levels.

To help it understand the reach and impact of its RECO portfolio, First 5 LA commissioned research company Abt Associates and its partners to design and conduct an evaluation of the RECO investments. This brief summarizes findings from the evaluation's three components:

The **Reach Study** described where and when RECO activities took place across LA County.
The **County-Level Impact Study** assessed the impact of RECO on the early childhood obesity rate in LA County overall.
The **Community-Level Impact Study** examined whether impacts were concentrated when and where RECO activities occurred.

KEY FINDINGS

- RECO reached a majority of communities in LA County.
- RECO significantly reduced early childhood obesity in LA County overall.
- RECO effects were concentrated in the communities where RECO activities occurred.

ABOUT FIRST 5 LA: First 5 LA is a leading public grant maker and early childhood advocate organization created by California voters to invest Proposition 10 tobacco tax revenues in Los Angeles County. In partnership with others, First 5 LA strengthens families, communities, and systems of services and supports so that all children in L.A. County enter kindergarten ready to succeed in school and life. Please visit www.first5la.org

Methods

REACH STUDY

The study team reviewed grantee progress reports and conducted interviews with RECO grantee organization staff to understand their RECO activities and determine the timing and location of each. We assigned each activity to one or more communities (i.e., census tracts) to determine the geographic reach of the RECO activities.

COUNTY-LEVEL IMPACT STUDY

The unique characteristics of LA County, including its size and diversity, imply that no other single California county is an appropriate comparison, so for the County-Level Impact Study, we used the synthetic comparison group method.[1] First, we weighted a pool of other "donor" counties to create a synthetic county that was similar to LA County in terms of trends in early childhood obesity before RECO. We then compared LA County to the synthetic county after RECO, accounting for the expansion of RECO over time, to look for differences in early childhood obesity rates.[2] These differences we interpreted as the impact of RECO.

COMMUNITY-LEVEL IMPACT STUDY

Within LA County, RECO activities took place at different times and in different locations. For the Community-Level Impact Study, we used the comparative interrupted time series method, which takes advantage of this variation. In this method, we compared communities that received RECO activities at a certain time point to these same communities at time points when they did not receive RECO activities, and also to other communities that did not receive RECO activities.

OBESITY DATA SOURCES

- **County-level obesity data** from Kaiser Permanente Southern California
- **Community-level obesity data** from Public Health Foundation Enterprises Special Supplemental Nutrition Program for Women, Infants, and Children (PHFE WIC)

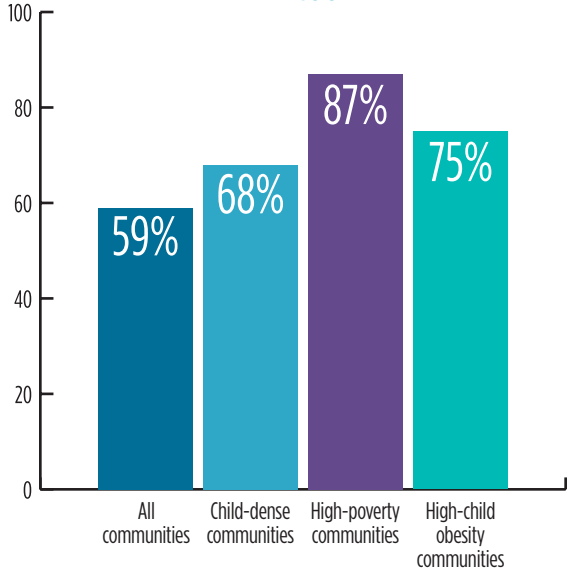
Findings

REACH STUDY

RECO activities occurred in a majority of communities in LA County, with greater reach among high-need communities, as defined by child density, poverty, and child obesity. RECO reached 59 percent of all communities; 68 percent of child-dense communities (communities where children under age 5 make up more than 10 percent of the population); 87 percent of high-poverty communities (communities where more than 30 percent of the population have incomes at or below the federal poverty level); and 75 percent of high–child obesity communities (communities where more than 20 percent of children ages 2–5 participating in the Special Supplemental Nutrition Program for Women, Infants, and Children, or WIC, were obese).

Grantees and community members alike agreed that partnerships and relationships with community members, policy-makers, and other stakeholders were key to achieving this reach.

COMMUNITIES REACHED BY RECO IN LA COUNTY



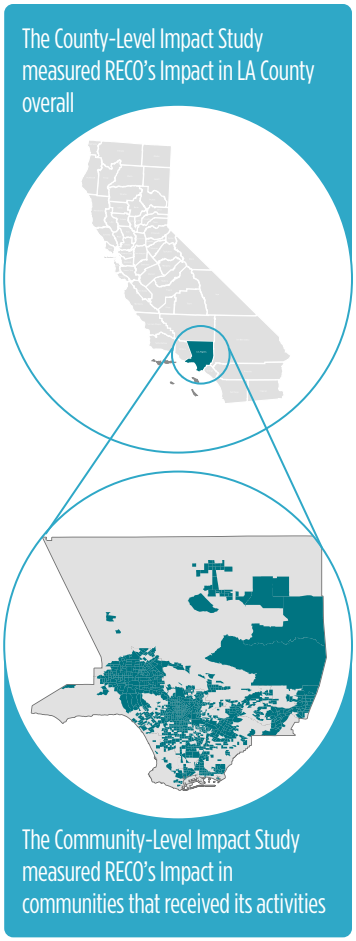
COUNTY-LEVEL IMPACT STUDY

We found a statistically significant county-level impact of RECO on early childhood obesity. At the height of RECO (when 44 percent of children under age 5 in LA County were expected to be potentially affected by its activities), we estimated the percentage of obese young children in LA County to be 0.67 percentage points lower than the percentage of obese children in the synthetic comparison county.

COMMUNITY-LEVEL IMPACT STUDY

Looking within LA County at communities that received RECO activities, we again found a statistically significant impact of RECO on early childhood obesity. RECO activities reduced early childhood obesity rates by 0.59 percentage points, on average, in communities when and where RECO activities occurred.

When looking at the different strategies used by RECO activities, we found no difference in impact between them. However, when looking at different types of communities (based on racial/ethnic composition, percentage under age 5, baseline child obesity rates, and poverty rates), we found that RECO had greater impacts on reducing early childhood obesity in majority non-White communities. We found no evidence that the impact of RECO varied based on the other community characteristics.



Conclusions

Our evaluation found that the RECO activities reached a majority of communities across LA County, with an even greater reach among high-need communities. Correspondingly, we found very promising evidence on the effectiveness of RECO at the county and the community level. These findings show that it is possible for a set of investments using a variety of strategies at different times and in different locations to achieve both county- and community-wide impacts on early childhood obesity.

As rates of obesity in young children continue to be a public health concern in LA County and across the country, this evaluation offers several lessons learned. To better address early childhood obesity, partnerships should be expanded among organizations doing this work. Increased partnerships and collaboration could allow for a more coordinated set of strategies with greater reach, targeting high-need, underserved areas. Given the impacts we have seen at both the county and community levels in LA County, we have reason to believe that greater reach could lead to even greater impacts.

For more information on the RECO project see the project website: https://www.abtassociates.com/projects/reducing-early-childhood-obesity-reco-evaluation.

[1] Abadie, A., Diamond, A., & Hainmueller, J. (2010). Synthetic control methods for comparative case studies: Estimating the effect of California's tobacco control program. *Journal of the American Statistical Association, 105*(490), 493-505.

[2] Ben-Michael, E., Feller, A., & Rothstein, J. (2019). The augmented synthetic control method. UC Berkeley Working Paper. https://eml.berkeley.edu/~jrothst/workingpapers/BMFR_Synth_Nov_2018.pdf

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