

The Healthy Communities Study: How Community Programs and Policies are Related to Children's Health

Connect & Explore Webinar Q&A

On September 25, NCCOR hosted a Connect & Explore webinar on The Healthy Communities Study: How Community Programs and Policies are Related to Children's Health. The webinar provided a brief overview of the Healthy Communities Study, highlighted several findings from the study recently published supplement in *Pediatric Obesity*, and discussed opportunities to expand community programs and policies that can improve children's health. Speakers included **Sonia Arteaga, PhD**, Program Director, Division of Cardiovascular Sciences, National Heart, Lung, Blood Institute, National Institutes of Health; **Stephen Fawcett, PhD, MA**, Senior Advisor, Center for Community Health and Development, University of Kansas; **Russell Pate, PhD**, Director, Children's Physical Activity Research Group, Arnold School of Public Health, University of South Carolina; and **Lorrene Ritchie, PhD, RD**, Director, Nutrition Policy Institute, University of California Division of Agriculture and Natural Resources.

The presentations generated many thoughtful questions, some of which the presenters were unable to answer due to time constraints. As a follow-up to this webinar, the presenters answered all remaining questions posed by the audience during the webinar. Those answers follow.

Q1: Did you say that children's waistline measurements were taken? I didn't think that was a valid indicator of overweight/obesity.

A1: This was measured, not as a surrogate indicator of adiposity or weight status, but rather because it is a variable that has been found to be associated with cardiometabolic risk status (after adjustment for weight, BMI, or overall adiposity).

Q2: Where can I find out more about the kinds of interventions that were used at schools?

A2: For more information on the kinds of interventions please refer to the following manuscripts:

- Collie-Akers VL, Schultz JA, Fawcett SB, Obermeier SM, Pate RR, John LV, Weber SA, Logan A, Sonia Arteaga SS, Loria CM, Webb K; Healthy Communities Study Research Group. [The prevalence of community programmes and policies to prevent childhood obesity in a diverse sample of US communities: the Healthy Communities Study](#). *Pediatr Obes*. 2018 Oct 1.
- Collie-Akers VL, Schultz JA, Fawcett SB, Landry S, Obermeier S, Frongillo EA, Forthofer M, Weinstein N, Weber SA, Logan A, Arteaga SS, Nebeling L, Au LE; Healthy Communities Study Team. [Measuring the intensity of community programs and policies for preventing childhood obesity in a diverse sample of US communities: the Healthy Communities Study](#). *Pediatr Obes*. 2018 Jun 14.

Q3: I would also like to know more about the kinds of interventions that were used at the schools?

A3: Listing of specific types of physical activity interventions that were coded with Community Programs and Policies:

- Increase exposure to PE (frequency and/or duration)
- Increase MVPA in PE
- Increase PA during school recess or classroom instruction
- Increase participation in sports teams
- Increase participation in community-based sports teams
- Increase participation in community-based PA lessons, classes, or clubs
- Increase participation in home/family physical activity
- Increase PA in after school programs
- Decrease TV watching
- Decrease recreational computer/internet use
- Decrease time spent in playing inactive video/handheld electronic games
- Other

Listing of specific types of nutrition interventions that were coded:

- Increase fruit and vegetables
- Increase whole grain foods
- Increase breakfast
- Increase water
- Decrease sugar-sweetened beverages
- Decrease fast food
- Decrease dietary fat
- Decrease energy dense foods of minimal nutritional value
- Decrease total calories
- Increase breastfeeding/infant health
- Any other diet behavior related to obesity prevention

Q4: Can you comment on why you think BMI increased in some of the predominantly Hispanic/Latino communities? Did the key informant interviews in these communities provide any insights?

A4: More research needs to be done to better understand what is happening in predominantly Hispanic/Latino communities. The key informants provided information about programs and policies, but the study was not able to assess how well those programs and policies were implemented or received by the community. It may be that the programs and policies being implemented are not culturally appropriate, or they may not have been targeted to reach people in Hispanic communities. We need more research to better understand what is occurring in these communities.

Q5: Was the WIC program involved at all in the interventions?

A5: Yes, there was likely involvement of WIC in at least some communities.

Q6: Often it seems like funders want results in relatively quick timeframes (3-5 years). Do you have any recommendations that could be shared with funders to help them understand that achieving sustainable outcomes would require perhaps a 10-year commitment (or whatever other pearls of wisdom you have learned)?

A6: In the Healthy Communities Study, community efforts were assessed over the prior 10 years. Associations between community programs and policies and BMI, nutrition, and physical activity outcomes were most evident over longer rather than shorter periods of time (e.g., 4 -6 years and beyond). These results suggest that funders should consider longer-term investments to achieve measurable impacts on obesity-related outcomes.

Q7: Did the PA study also look at children with disabilities that may preclude them from walking or biking?

A7: Children were included in the study regardless of their disability status, if they were able to participate in the study protocol. To date, we have not conducted analyses in sub-groups of children based on disability status.

Q8: I'm unclear what you mean by focusing on behaviors vs. strategy. Isn't strategy to influence specific behaviors? How do you focus on behavior without a strategy?

A8: Each identified community program or policy was characterized by a number of attributes, such as the behavior change strategy used (e.g., providing information and enhancing skills; modifying barriers and opportunities). They were also characterized by the particular behaviors targeted for change (e.g., Nutrition—increasing consumption of fruits and vegetables; Physical Activity—increased PA after school; see response to question 3 above). So not behaviors vs. strategies but rather, in the logic model, the strategies were seen as directed toward target behaviors for each goal area a (Nutrition or Physical activity).

Q9: Did you look at policies that impacted healthy food availability, i.e. impacting food deserts?

A9: Yes, examples of documented Community Policies and Programs (CPPs) of this type included community gardens and farm-to-school programs. Also see response to question 2.

For more information, please refer to the following publications:

Methods:

Arteaga SS, Loria CM, Crawford PB, Fawcett SB, Fishbein HA, Gregoriou M, John LV, Kelley M, Pate RR, Ritchie LD, Strauss WJ. The Healthy Communities Study: Its Rationale, Aims, and Approach. *Am J Prev Med.* 2015 Oct;49(4):615-23.

Fawcett SB, Collie-Akers VL, Schultz JA, Kelley M. Measuring Community Programs and Policies in the Healthy Communities Study. *Am J Prev Med.* 2015 Oct;49(4):636-41.

Frongillo EA, Fawcett SB, Ritchie LD, Sonia Arteaga S, Loria CM, Pate RR, John LV, Strauss WJ, Gregoriou M, Collie-Akers VL, Schultz JA, Landgraf AJ, Nagaraja J. Community Policies and Programs to Prevent Obesity and Child Adiposity. *Am J Prev Med.* 2017 Nov;53(5):576-583.

John LV, Gregoriou M, Pate RR, Fawcett SB, Crawford PB, Strauss WJ, Frongillo EA, Ritchie LD, Loria CM, Kelley M, Fishbein HA, Arteaga SS. Operational Implementation of the Healthy Communities Study: How Communities Shape Children's Health. *Am J Prev Med.* 2015 Oct;49(4):631-5.

Pate RR, McIver KL, Colabianchi N, Troiano RP, Reis JP, Carroll DD, Fulton JE. Physical Activity Measures in the Healthy Communities Study. *Am J Prev Med.* 2015 Oct;49(4):653-9.

Pate RR. Overview of the Protocol Manuscripts for the Healthy Communities Study. *Am J Prev Med.* 2015 Oct;49(4):614.

Ritchie LD, Wakimoto P, Woodward-Lopez G, Thompson FE, Loria CM, Wilson DK, Kao J, Crawford PB, Webb KL. The Healthy Communities Study Nutrition Assessments: Child Diet and the School Nutrition Environment. *Am J Prev Med.* 2015 Oct;49(4):647-52.

Sroka CJ, McIver KL, Sagatov RD, Arteaga SS, Frongillo EA. Weight Status Measures Collected in the Healthy Communities Study: Protocols and Analyses. *Am J Prev Med.* 2015 Oct;49(4):642-6.

Strauss WJ, Sroka CJ, Frongillo EA, Arteaga SS, Loria CM, Leifer ES, Wu CO, Patrick H, Fishbein HA, John LV. Statistical Design Features of the Healthy Communities Study. *Am J Prev Med.* 2015 Oct;49(4):624-30.

Results:

Au LE, Crawford PB, Woodward-Lopez G, Gurzo K, Kao J, Webb KL, Ritchie LD. School Wellness Committees Are Associated With Lower Body Mass Index Z-Scores and Improved Dietary Intakes in US Children: The Healthy Communities Study. *J Sch Health.* 2018 Sep;88(9):627-635.

Au LE, Gurzo K, Gosliner W, Webb KL, Crawford PB, Ritchie LD. Eating School Meals Daily Is Associated with Healthier Dietary Intakes: The Healthy Communities Study. *J Acad Nutr Diet.* 2018 Aug;118(8):1474-1481.

Collie-Akers VL, Schultz JA, Fawcett SB, Landry S, Obermeier S, Frongillo EA, Forthofer M, Weinstein N, Weber SA, Logan A, Arteaga SS, Nebeling L, Au LE; Healthy Communities Study Team. Measuring the intensity of community programs and policies for preventing childhood obesity in a diverse sample of US communities: the Healthy Communities Study. *Pediatr Obes.* 2018 Jun 14.

Collie-Akers VL, Schultz JA, Fawcett SB, Obermeier SM, Pate RR, John LV, Weber SA, Logan A, Sonia Arteaga SS, Loria CM, Webb K; Healthy Communities Study Research Group. The prevalence of community programmes and policies to prevent childhood obesity in a diverse sample of US communities: the Healthy Communities Study. *Pediatr Obes.* 2018 Oct 1.

Kaczynski AT, Besenyi GM, Child S, Morgan Hughey S, Colabianchi N, McIver KL, Dowda M, Pate RR. Relationship of objective street quality attributes with youth physical activity: findings from the Healthy Communities Study. *Pediatr Obes.* 2018 Jun 14.

Pate RR, Frongillo EA, McIver KL, Colabianchi N, Wilson DK, Collie-Akers VL, Schultz JA, Reis J, Madsen K, Woodward-Lopez G, Berrigan D, Landgraf A, Nagaraja J, Strauss WJ; Healthy Communities Study Research Group. Associations between community programmes and policies and children's physical activity: the Healthy Communities Study. *Pediatr Obes.* 2018 Jun 13.

Ritchie LD, Woodward-Lopez G, Au LE, Loria CM, Collie-Akers V, Wilson DK, Frongillo EA, Strauss WJ, Landgraf AJ, Nagaraja J, Sagatov RDF, Nicastro HL, Nebeling LC, Webb KL; Healthy Communities Study Team. Associations of community programs and policies with children's dietary intakes: the Healthy Communities Study. *Pediatr Obes.* 2018 Jul 10.

- Sagatov RDF, John LV, Gregoriou M, Sonia Arteaga S, Weber S, Payn B, Strauss W, Weinstein N, Collie-Akers V. Recruitment outcomes, challenges and lessons learned: the Healthy Communities Study. *Pediatr Obes.* 2018 Sep 12.
- Saunders RP, Dowda M, Mclver K, Pate RR; Healthy Communities Study Research Group. Regional comparisons of walking or bicycling for fun or exercise and for active transport in a nationally distributed sample of community-based youth. *Pediatr Obes.* 2018 Jun 14.
- Schultz JA, Collie-Akers VL, Fawcett SB, Strauss WJ, Nagaraja J, Landgraf AJ, Mclver KL, Weber SA, Arteaga SS, Nebeling LC, Rauzon SM; Healthy Communities Study Team. Association between community characteristics and implementation of community programmes and policies addressing childhood obesity: the Healthy Communities Study. *Pediatr Obes.* 2018 Jun 19.
- Strauss WJ, Nagaraja J, Landgraf AJ, Arteaga SS, Fawcett SB, Ritchie LD, John LV, Gregoriou M, Frongillo EA, Loria CM, Weber SA, Collie-Akers VL, Mclver KL, Schultz J, Sagatov RDF, Leifer ES, Webb K, Pate RR; Healthy Communities Study Team. The longitudinal relationship between community programmes and policies to prevent childhood obesity and BMI in children: the Healthy Communities Study. *Pediatr Obes.* 2018 Feb 28.
- Webb KL, Hewawitharana SC, Au LE, Collie-Akers V, Strauss WJ, Landgraf AJ, Nagaraja J, Wilson DK, Sagatov R, Kao J, Loria CM, Fawcett SB, Ritchie LD; Healthy Communities Study Team. Objectives of community policies and programs associated with more healthful dietary intakes among children: findings from the Healthy Communities Study. *Pediatr Obes.* 2018 Jun 19.
- Woodward-Lopez G, Gosliner W, Au LE, Kao J, Webb KL, Sagatov RD, Strauss WJ, Landgraf AJ, Nagaraja J, Wilson DK, Nicastro HL, Nebeling LC, Schultz JA, Ritchie LD; Healthy Communities Study Team. Community characteristics modify the relationship between obesity prevention efforts and dietary intake in children: the Healthy Communities Study. *Pediatr Obes.* 2018 Jul 10.