Signs of Progress in Childhood Obesity Declines

Site Summary Report
Philadelphia, PA
2015

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Members of the NCCOR advisory team include: Tina Kauh, RWJF; Carrie Dooyema, CDC Division of Nutrition, Physical Activity and Obesity (DNPAO); Deborah Young-Hyman, NIH Office of Behavioral and Social Sciences Research (OBSSR); Jan Jernigan, CDC DNPAO; Laura Kettel-Khan, CDC DNPAO; Melissa Abelev, USDA Food and Nutrition Services (FNS); Rachel Ballard, NIH National Cancer Institute; Sonia Arteaga, NIH National Heart, Lung, and Blood Institute (NHLBI); Toija Riggins, USDA FNS; Veronica Uzoebo, USDA FNS; and William Dietz, Redstone Global Center, Milken Institute School of Public Health, The George Washington University.

Members of the ICF Macro project team include: Nicola Dawkins-Lyn, Phyllis Ottley, Carole Harris, Joe Fruh, Kate Reddy, Michael Greenberg, Stacey Willocks, and Stephanie Frost.

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We especially want to thank our main point of contact for the study in Philadelphia, Dr. Giridhar Mallya. Your graciousness in making the connections to others who could help paint the picture of the work in Philadelphia helped to shape this report that we hope can be a resource for others. Most of all, we thank you for your leadership every day in your work to realize a shared vision of health for children.

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EXECUTIVE SUMMARY

BACKGROUND OF CHILDHOOD OBESITY DECLINES PROJECT

The Signs of Progress in Childhood Obesity Declines (Childhood Obesity Declines Project [CODP]) seeks to document current and past initiatives implemented in a sample of sites reporting childhood obesity declines and to identify the contextual factors that may have facilitated or hindered the initiatives, particularly those that might help understanding of disparities. The work is a collaborative effort guided by members of the National Collaborative on Childhood Obesity Research (NCCOR),[1] funded by the Robert Wood Johnson Foundation (RWJF), and implemented by ICF Macro (an ICF International company). After a careful review of study data and confirmation of the statistical significance of the decline, Philadelphia was selected as one of four sites for the case study. ICF Macro team members applied the following methods:

- A review of published studies, grey literature, and site obesity data, using established inclusion and exclusion criteria to select sites for case studies
- A review of documents describing relevant strategies and initiatives implemented in each selected site prior to and during the period of reported declines
- An inventory of strategies, applied as a survey, for knowledgeable respondents within the selected sites to identify which strategies occurred during the period of interest
- A policy and contextual scan to identify relevant policies implemented in each site
- A site visit to each of the selected cities with interviews of respondents across multiple settings to describe the development and implementation of relevant strategies

Taken together, the information from each site (and the synthesis of information across sites) should provide initial insights about strategies that may contribute to declines as well as information about the ways in which those strategies were effectively implemented.

OBESITY DECLINES IDENTIFIED IN PHILADELPHIA

A Philadelphia study[2] examining measured heights and weights of students in traditional (noncharter) K-12 public schools operated by the School District of Philadelphia identified statistically significant declines in obesity among students in grades K-8 between the 2006–2007 and 2009–2010 school years. Obesity declined from 21.5% to 20.5% over this time, representing a 4.8% relative decrease (7.7% for severe obesity). Declines in obesity (and severe obesity) were significant for Hispanic girls and for African-American, non-Hispanic white and Asian (obesity only) boys, leading to a decline in disparities for children from the higher risk groups.[3] During this period, the total number of students aged 5 to 18 attending such schools varied from 189,913 in 2006–2007 to 177,499 in 2009–2010. In a later study published in August 2015, Philadelphia researchers examined trends between the 2006–2007 and the

[1] The four organizations represented in NCCOR are the Robert Wood Johnson Foundation (RWJF); the Centers for Disease Control and Prevention (CDC); the National Institutes of Health (NIH); and the United States Department of Agriculture (USDA).
[2] Robbins, J. M., Mallya G., Polansky M., & Schwarz D. F. (2012) Prevalence, disparities, and trends in obesity and severe obesity among students in the Philadelphia, Pennsylvania, school district, 2006–2010. *Preventing Chronic Disease, 9,* 120118.
[3] Among the four sites selected for case study, Philadelphia was the only site to attain a reduction in obesity disparities for children from higher risk groups.

2012–2013 school years.[4] They found similar significant declines in rates of obesity and severe obesity for African-American, non-Hispanic white and Asian boys. The significance dissipated for girls, however, and rates began to move upward for Hispanic girls. As our study data collection took place prior to the release of these findings, the majority of the data reflects the time period concluding in 2010.

POLICY LANDSCAPE

The policy review identified 17 State policies related to nutrition, physical activity, and the built environment enacted in Pennsylvania between 2003 and 2010 (and another 5 between 2010 and 2013). Of the 17 policies, 10 were related to nutrition, 4 addressed physical activity/physical education, and 3 addressed both nutrition and physical activity or wellness. All of these policies affected early care and education (ECE) and school settings.

ITEMS ENDORSED IN SITE STRATEGY INVENTORY

Through an inventory, we identified strategies implemented in four settings: (1) ECE, (2) schools, (3) community, and (4) health care, which addressed physical activity, healthy eating, or both. The strategies in the inventory included a broad range of activities such as programs, policies, initiatives, campaigns, and regulations. A total of 19 individuals completed the Philadelphia inventory of strategies (a 73% response rate). Table A presents the overall number of strategies identified per setting.

Table A: Results of Strategy Inventory in Philadelphia

Setting	Strategies That Address Physical Activity	Strategies That Address Healthy Eating	Strategies That Address Physical Activity and Healthy Eating
ECE	0	3	3
Schools	12	15	28
Community	27	29	Not included in inventory
Health care	4	0	19

SITE VISIT INTERVIEWS

In addition to the policy review and strategy inventory, more in-depth information was obtained about strategies through site visit interviews. The report presents results from the interviews, including strategies identified for focus and a timeline of strategies (Figure 1) developed by the site visit team. The interviews provided information for deeper descriptions of the strategies identified for focus. They also provided some information describing the site overall, including general uses of data within the site, respondents' reports of champions who helped advance specific or multiple initiatives, respondents' perceptions of factors leading to the declines in rates of childhood obesity in the city, and lessons learned that respondents considered worth sharing with others working to reduce rates of childhood obesity in their own sites.

Strategies Identified for Focus

A subset of the strategies were identified for more focused inquiry. These include initiatives known to have had broad reach into the population where statistically significant declines were documented.

[4] Robbins, J. M., Mallya, G., Wagner, A., & Buehler, J. W. (2015). Peer reviewed: Prevalence, disparities, and trends in obesity and severe obesity among students in the School District of Philadelphia, Pennsylvania, 2006–2013. *Preventing Chronic Disease, 12.*

These initiatives targeted children at the community- or district-wide levels so that potential exposure to the initiative was far-reaching. Some initiatives also were raised by respondents in the interviews as ones they considered important to understand in relation to the declines. Table B shows the strategies of focus, indicates those that most directly touched the population that experienced the declines, and provides information about the settings, focus areas, and types of approaches used for each.

Table B: Strategies Identified for Focus in Philadelphia

Name of Strategy	Most Directly Touched Population with Declines	Setting				Focus Area			Type		
		ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
1. Universal Feeding Program pilot (broadly increasing access to free and reduced-price lunch)	X		X			X			X	X	
2. EAT.RIGHT.NOW. Nutrition Education Program (using Supplemental Nutrition Assistance Program Education [SNAP Ed] funds)	X		X			X			X		
3. Ban on sugary drinks in schools	X		X			X				X	
4. Comprehensive districtwide school wellness policy (including switch from 2% to 1% and fat-free milk, deep fryer ban)	X		X			X	X		X	X	
5. Out of School Time program				X		X	X		X		
6. Healthy Corner Store initiative				X		X		X	X		
7. Philadelphia Urban Food and Fitness Alliance				X		X	X		X		

Additional Strategies Implemented

The strategies above were described in detail because they either directly targeted or had great reach to the population of school children wherein declines were found. In addition to these, however, we learned of several additional initiatives undertaken in Philadelphia in the ECE, health care, and community settings. We also learned of additional initiatives in the school setting that took place outside of school hours, occurred beyond the time period of focus, or may have reached fewer children. We learned of over 30 initiatives, some of which were implemented in multiple settings—12 in the school setting, 4 in the ECE setting, 17 in the community setting, and 7 in the health care setting. A list of all strategies discussed during the site visit, matrixed by setting and type, is in Appendix E.

Strategies Addressing Health Disparities

Additionally, in Philadelphia, many of the strategies implemented to address nutrition or physical activity, though not specifically targeting populations experiencing health disparities, would by design reach these individuals. As an example, among the strategies of focus, both the Universal Feeding Program and the EAT.RIGHT.NOW. Nutrition Education Program were designed to reach students in schools with majority low-income populations eligible for free or reduced-price lunch. With

significant declines in obesity and severe obesity for Hispanic girls and for African-American, non-Hispanic white and Asian (obesity only) boys, Philadelphia attained a reduction in obesity disparities for children from the higher risk groups.

SITE FINDINGS

Overall Site Use of Data

Interviewees' descriptions of the use of data spanned from broad to more limited applications. In one localized example, a couple of interviewees described having children in child care mark menus after tastings (in one center, by drawing smiling faces or frowning faces next to items), and using that data to inform menu decisions. In an example with broader implications, one interviewee described that during the effort to pass a tax on sugar-sweetened beverages, data on obesity rates in Philadelphia were used in testimony at Philadelphia City Hall in arguments supporting the tax. Various respondents discussed ways that study or evaluation data has been used in their work as well.

Site Reports of Champions

Interviewees talked about a broad array of individuals and organizations as having been champions for the various initiatives implemented in Philadelphia, helping to launch them or to advance their growth. While no specific individuals or organizations were named by a preponderance of respondents, several were named as having been champions for work occurring in the school, ECE, hospital, and community settings.

Respondent Perceptions of Factors Leading to Declines

Interviewees discussed a variety of topics as potential contributors to the declines in childhood obesity in Philadelphia. Several stated first that it is important to say they really do not know the cause of the declines, a few noting that more studies are needed to help make that determination. One researcher also thought it important to highlight the size of the decline, approximately a 1% real reduction, was small though noteworthy when compared to an increasing trend. Two individuals with a broad perspective of the range of work that had taken place in the city highlighted three initiatives as seeming more likely to have had an impact: the Universal Feeding Program, the EAT.RIGHT.NOW. Nutrition Education Program supported through SNAP Ed funding, and the comprehensive wellness and nutrition policy in schools. Each of these initiatives reached either all public school students or the public school students who were potentially at the greatest risk of obesity and obesity-related illness. The USDA Universal Feeding Program helped to bring more students into the school food program, and the wellness and nutrition policy initiatives raised the quality of the food offerings while the nutrition education taught students about healthful eating. Together the initiatives helped assure that all students in the low-income public schools had easy access to nutritious food and education about healthful eating and activity. Also, an attempted soda tax, though unsuccessful, was named for having raised awareness of and dialogue about the impact of sugar-sweetened beverages on health.

Lessons Learned for Other Sites

Interviewees also shared various lessons they had learned in the course of their efforts that they thought might be of value to other areas working to address childhood obesity. Reflecting a thought noted in the perception of factors leading to the declines, one interviewee explained it is important not to expect that a single intervention will fix the problem. Instead, interventions need to be implemented across multiple settings, for example, in schools but also in communities, so that children

are blanketed with the health-promoting initiatives and change might take place at a population level. Interviewees also described the importance of interventions tackling both environment/policy and knowledge/behavior. Another related theme was the presence of cross-sector partnerships in the work in Philadelphia. Multiple interviewees described working in partnership with others to pursue grants and to implement specific initiatives, including representation from sectors such as health, nonprofit, education, parks and recreation, nutrition, academia, health care, government, industry, and others. The partnerships provided a range of supports—from political support when needed for funding or to establish policies, to institutional support in schools or ECE settings, to industry, academic, and community support to implement and sustain initiatives. The collaborative work also provided consistency and breadth in messaging, making it difficult for the audience to miss the meanings.

Limitations

While the Philadelphia site visit illuminated many policies and strategies that likely impacted obesity declines among school-aged children, some factors associated with the data collection and analysis do create limits to consider with respect to the study's findings. First, this study was exploratory in nature and could not explore causal relationships. That is, through interviews, policy scans, and document reviews many items emerged that likely impacted childhood obesity declines in Philadelphia, but the study methods do not allow for drawing direct causal conclusions about what led to those declines. Further, snowball sampling and a limited timeframe meant that the study team was limited in how many individuals could be engaged to complete the inventory worksheet and to be interviewed during the study period. Our team was only able to speak to a small subset of the hundreds of individuals in the public, private, and nonprofit sector who likely played a role in advancing changes that brought about obesity declines.

Also, the information gleaned from this study is likely only characteristic of the types of policies, strategies, challenges, and facilitators related to combating obesity declines in Philadelphia. Despite the wealth of data acquired before, during, and after the site visit, this information cannot be considered comprehensive. Finally, a great deal of the information collected was retrospective. Interviewees responded to the best of their abilities as to strategies undertaken 5 to 15 years prior, but their memories may not always be complete or precise when it comes to the specifics and timeframe of developing and implementing various strategies. When possible, the study team used documented reports to try to confirm details and timing of policy changes and strategy implementation.

CONCLUSION

Over the course of time reviewed for this study, a broad array of initiatives, policies, and programs were implemented in Philadelphia that may have influenced the observed declines in childhood obesity rates. These initiatives occurred at multiple levels, with policies being implemented at the national and State levels complementing those being implemented locally across the city and within specific neighborhoods. Local initiatives also were implemented across settings, with activities in schools, communities, hospitals, and in ECE facilities. Those working to improve nutritional quality and increase access and to ensure greater opportunities for physical activity worked in tandem to reach the target population. Partners often overlapped across initiatives, working together in close accord and with consistent messaging and goals. According to respondents, factors leading to the decline in obesity rates seen among Philadelphia school children included the collaboration across sectors, the multilevel and multicomponent approaches taken to reach parents and children with health promoting messages, and the strategic policy and environmental interventions championed to facilitate healthy physical activity and nutritional choices.

I. BACKGROUND AND PURPOSE OF CHILDHOOD OBESITY DECLINES PROJECT

PROJECT BACKGROUND

As the search for ways to address childhood obesity continues, organizations and communities across the country are experimenting with various strategies aimed at changing children's environments to prevent obesity. The project, *Signs of Progress in Childhood Obesity Declines* (Childhood Obesity Declines Project [CODP]), was conceived and implemented to identify and describe local-level strategies that have been implemented in municipalities that have experienced declines in rates of childhood obesity. The work is a collaborative effort guided by members of the National Collaborative on Childhood Obesity Research (NCCOR),[1] funded by the Robert Wood Johnson Foundation (RWJF), and implemented by ICF Macro (an ICF International company).

The CODP was conceived to help provide the field with a better understanding of how jurisdictions are operationalizing and implementing obesity prevention and reduction strategies. The project has sought to systematically document current and past initiatives implemented in a small sample of sites reporting childhood obesity declines and to identify the contextual factors that may have facilitated or hindered the initiatives, particularly those that might help understanding of the disparities that continue to persist in most sites. The CODP also collected information on how initiatives have been implemented and who the primary supporters have been. This project was conceived as an initial step in building knowledge about what may be working in sites reporting obesity declines. It will thus serve to supplement other work on this topic that is in progress but for which findings will not be available for some time.

Participating NCCOR members also engaged an expert panel to advise on the study. (See Appendix A for a full list of the expert panelists.) The multidisciplinary expert panel comprises 15 individuals with diverse yet complementary expertise and experiences. The panel has provided guidance and suggestions about the methodology of the project. Panel members represent academics, evaluators, researchers, Federal Government personnel, topic experts (e.g., nutrition, physical activity, and evaluation), practitioners, and program directors (of obesity reduction programs). In addition, expert panel members possessed substantial familiarity with the diverse settings (e.g., schools, communities, early childhood programs, and health care) in which obesity initiatives have been implemented.

PROJECT PURPOSE

As an exploratory endeavor, the CODP will provide the opportunity to examine strategies being implemented in jurisdictions that have had attained declines in rates of childhood obesity. The goal of the CODP is to systematically explore the factors that may be contributing to reported declines in childhood obesity in a small sample of these jurisdictions. Specifically, this project aims to gain a better understanding of the initiatives, strategies, and practices that occurred in municipalities reporting childhood obesity declines, along with the contextual factors that may have influenced these efforts. Another goal is to identify commonalities and differences in approaches and strategies, in populations and disparities, and in implementation of obesity prevention efforts across the selected jurisdictions.

[1] The four organizations represented in NCCOR are the Robert Wood Johnson Foundation (RWJF); the Centers for Disease Control and Prevention (CDC); the National Institutes of Health (NIH); and the United States Department of Agriculture (USDA).

The CODP also will help to increase our knowledge about how obesity prevention efforts operate in conjunction with other health promotion efforts.

The primary questions for the CODP include the following:

1. What current and past initiatives, strategies, practices, and contextual factors are occurring in selected sites with reported childhood obesity declines?
2. What have selected sites reported in terms of reductions among diverse populations (e.g., racial/ethnic groups, low-income populations, underserved communities), and how does this address health disparities?
3. In what ways are obesity reduction initiatives and practices integrated with other health promotion efforts, and how have contextual factors played a role?
4. To what extent have selected sites employed similar or different obesity reduction/prevention strategies?[2]

Through the methods being employed, the CODP will provide information about the reported presence or absence of a broad range of strategies in the selected sites during the period of the declines, including strategies recommended by groups like the Institute of Medicine and CDC. Through closer examination, the project also will provide information about characteristics of a subset of these strategies and the process of developing and implementing particular initiatives.

PROJECT COMPONENTS

With initial input from the expert panel, ICF Macro and NCCOR CODP team members determined five primary project components. Through a review of published studies and grey literature, sites reporting declines in rates of childhood obesity were identified. ICF Macro team members then applied the following methods:

- A review of the studies and of site obesity data, using established inclusion and exclusion criteria to confirm the statistical significance of the decline and select sites for case studies
- A review of documents accessible through the academic and grey literature describing relevant strategies and initiatives implemented in each selected site prior to and during the period of reported declines
- An inventory of strategies, applied as a survey, for knowledgeable respondents within the selected sites to identify which occurred during the period of interest
- A policy and contextual scan for each selected site to identify relevant policies implemented prior to and during the period of reported declines
- A site visit to each of the selected sites with interviews of respondents across multiple settings to describe the development and implementation of relevant strategies during the period of interest.

[2] Question #4 will be addressed in a synthesis report of the study that examines similarities and differences across the four sites: ICF Macro (2015). *Signs of progress in childhood obesity declines: Synthesis report*. Unpublished Report.

Taken together, the information from each site (and the synthesis of information across sites) should provide initial insights about strategies that may contribute to declines as well as information about the ways in which those strategies were effectively implemented.

METHODS AND BACKGROUND FINDINGS

The study team conducted data reviews to aid in site selection and document reviews to obtain background information about the site and the various implemented strategies. A Philadelphia study[3] examining measured heights and weights of students in traditional (noncharter) K-12 public schools operated by the School District of Philadelphia identified statistically significant declines in obesity among students in grades K-8 between the 2006–2007 and 2009–2010 school years. Obesity declined from 21.5% to 20.5% over this time, representing a 4.8% relative decrease (7.7% for severe obesity). Declines in obesity and severe obesity were significant for Hispanic girls and for African-American and non-Hispanic white boys, and in obesity only for Asian boys, leading to a decline in disparities for children from the higher risk groups.[4] During this period, the total number of students aged 5 to 18 attending such schools varied from 189,913 in 2006–2007 to 177,499 in 2009–2010.

In a later study published in August 2015, Philadelphia researchers examined trends between the 2006–2007 and the 2012–2013 school years.[5] They found similar significant declines in rates of obesity and severe obesity for African-American, non-Hispanic white and Asian boys. The significance dissipated for girls, however, and rates began to move upward for Hispanic girls. As our study data collection took place prior to the release of these findings, the majority of the data collected reflects the time period concluding in 2010. However, information captured in interviews that extended beyond 2010 is reflected in the post-study period of the timeline in Figure 1. The methods outlined in this section detail how the ICF Macro study team focused our investigation on this population and timeframe.

Site Strategy Inventory

In addition to reviewing information in documents about strategies implemented in sites with reported declines, the CODP team members developed an approach for documenting the numerous strategies that occurred in a site during the period through an online site strategy inventory. Team members from CDC's DNPAO identified strategies in the inventory through a review of several publications identifying evidence-based policy recommendations, promising actions, and strategies to address childhood obesity. The publications included reports that recommended policies and actions over the last decade to decrease childhood obesity at the population level, including Institute of Medicine childhood obesity reports, the Guide to Community Preventive Services, and multiple CDC nutrition and physical activity guidance documents. Respondents to the inventory were asked to note, to the best of their knowledge, the presence or absence of each listed strategy in the city during the period of the reported declines. Respondents were identified through a snowball sampling technique, beginning with the authors of the studies reporting the declines, then broadened to include those referred to the CODP team members as individuals knowledgeable about strategies implemented in each of the four settings (early care and education [ECE], schools, community, and health care).

[3] Robbins, J. M., Mallya, G., Polansky, M., & Schwarz, D. F. (2012). Prevalence, disparities, and trends in obesity and severe obesity among students in the Philadelphia, Pennsylvania, school district, 2006–2010. *Preventing Chronic Disease, 9,* 120118.
[4] Among the four sites selected for case study, Philadelphia was the only site to attain a reduction in obesity disparities for children from higher risk groups.
[5] Robbins, J. M., Mallya, G., Wagner, A., & Buehler, J. W. (2015). Prevalence, disparities and trends in obesity and severe obesity among students in the School District of Philadelphia, Pennsylvania, 2006–2013. *Preventing Chronic Disease, 12,* 150185.

Policy and Contextual Data Reviews

To help understand the policy and environmental context in which strategies were implemented, we conducted a scan of the food, physical activity, and policy environments over the study time period, as well as an assessment of key demographic characteristics at baseline (2007) and follow-up (2010). To assess policy impacting childhood obesity, nutrition, and physical activity, ICF Macro study team members gathered policy information at both Federal and State levels. For Federal policies, we examined policies and programs noted in the 2004-2012 *F as in Fat* reports[6] as well as other reports[7] of Federal obesity prevention policy. To identify State policy over the study time period, we captured policies from existing databases (e.g., CDC's Chronic Disease State Policy Tracking System[8]) and policy updates from the National Conference of State Legislatures.[9] In addition to these sources, we also documented childhood obesity legislation noted in Bridging the Gap's review of State obesity-related policies[10] and the National Resource Center for Health and Safety in Child Care and Early Education's report on child care regulations.[11,12] It is important to note that we were not able to conduct a full policy search and extraction through Westlaw or similar legal research databases, given the resources that would have been required to conduct, extract, and code policies over the timespan across sites. However, we used multiple sources to arrive at a comprehensive snapshot of the policy context during the study period. Local-level policies (county, municipality, or school district) were captured through the site strategy inventory sent to stakeholders or during site visit interviews.

ICF Macro study team members also collected sociodemographic and food and physical environment data for each site for baseline and follow-up years to better understand contextual factors in the community that may affect the population and any changes in health outcomes. Sociodemographic data were based on the U.S. Census American Community Survey,[13] and food and physical activity environment data were taken from the U.S. Census County Business Patterns,[14] for Philadelphia's baseline and follow-up years. Sociodemographic, and food and physical environment contextual data can be found in Appendix B.

Site Visit and Interviews

The site visit to Philadelphia took place May 11–15, 2015. Using semistructured interview guides, the site visit team conducted a total of 22 interviews with 23 people: one group interview with two people, and 21 individual interviews. (See Appendix C for a list of those interviewed for the study.)

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[6] Trust for America's Health (2009). *F as in fat. How obesity policies are failing in America*. Washington, DC: Author. Retrieved September 14, 2015, http://healthyamericans.org/reports/obesity2009/

[7] Brill, A. (2013). *The long-term returns on obesity prevention policies.* Retrieved September 14, 2015, from https://depts.washington.edu/waaction/tools/docs/rwjf_returns_report.pdf

[8] Centers for Disease Control and Prevention. (n.d.). *Chronic Disease State Policy Tracking System.* Retrieved September 14, 2015, from http://nccd.cdc.gov/CDPHPPolicySearch/Default.aspx.

[9] National Conference of State Legislatures. (2014). *Childhood obesity legislation policy update.* Retrieved September 14, 2015, from http://www.ncsl.org/research/health/childhood-obesity-legislation-2013.aspx

[10] Bridging the Gap. (2014). *State obesity-related policies.* Retrieved September 17, 2015, from http://www.bridgingthegapresearch.org/research/state_obesity-related_policies/.

[11] National Resource Center for Health and Safety in Child Care and Early Education, University of Colorado Denver. (2011). *Achieving a state of healthy weight: A national assessment of obesity prevention terminology in child care regulations 2010.* Aurora, CO: Author. Retrieved September 14, 2015, from http://nrckids.org/default/assets/File/Products/ASHW/regulations_report_2010.pdf

[12] National Resource Center for Health and Safety in Child Care and Early Education, University of Colorado Denver. (2013). *Achieving a state of healthy weight 2012 update*. Aurora, CO: Author. Retrieved September 14, 2015, from http://nrckids.org/default/assets/File/Products/ASHW/ASHW%202012%20Final%20Report%209-18-13%20reduced%20size.pdf

[13] U.S. Census American Community Survey. *American fact finder.* Retrieved September 17, 2015, from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t.

[14] U.S. Census. (2015). *County business patterns.* Retrieved September 17, 2015, from http://www.census.gov/econ/cbp/.

II. SITE STRATEGY FINDINGS

The ICF Macro team explored data sources to collect information on strategies implemented in Philadelphia during and immediately preceding the period of time when a statistically significant decline in rates of childhood obesity had been reported. For Philadelphia, the study period is between the 2006–2007 and 2009–2010 school years.[1] To assess the policies, programs, initiatives, and strategies implemented during this period, we reviewed data 2 years prior to the study period (2004) to account for potential lag time between policy enactment and implementation. Because we had an opportunity to learn more onsite during site visits, we also asked respondents to discuss strategies implemented during the pre- and poststudy period. This section presents findings identified through policy reviews, the site strategy inventory, and the site visit interviews.

SITE CONTEXT

Founded in 1682, Philadelphia is one of the oldest cities in the United States. It is the seat of its own county, and with about 1.56 million residents in 2014, it is the fifth most populous city in the country. Philadelphia is also a racially and ethnically diverse city. In 2010, at the close of the study period, the population was 43.8% African American, 41.5% White, and 6.4% Asian, and 12.3% of its residents were Hispanic/Latino. Philadelphia has the second-largest Irish and Italian populations in the United States, and South Philadelphia is one of the largest Italian neighborhoods in the country. Philadelphia also has the third-largest African-American population in the country, with West Philadelphia and North Philadelphia historically being largely black neighborhoods including significant Caribbean and African populations. Philadelphia also has significant Asian populations, primarily from India, China, Vietnam, and South Korea. Chinatown and the Northeast have the largest Asian presences, and South Philadelphia is also home to large Cambodian, Vietnamese, and Chinese communities.

The School District of Philadelphia is the eighth largest school district in the nation, by enrollment. During the study period, the total number of students aged 5 to 18 attending K-12 public schools varied from 189,913 in 2006–2007 to 177,499 in 2009–2010. Charter school enrollment began to increase during this time, drawing away some of the public school student population. The School District is governed by a five-member School Reform Commission, established in December 2001, and the governor and mayor appoint members of the commission. Among registered voters, 78.5% were registered Democratic in 2010. Michael Nutter has been the mayor of Philadelphia since 2008. Prior to that time, John Street had been mayor since 2000. The median household income in Philadelphia in 2013 was $36,836 (by comparison with a median household income among metropolitan areas of $60,482). There is disparity in wealth across neighborhoods, with residents in Society Hill reporting a median household income of $93,720 and residents in one of North Philadelphia's districts reporting a median household income of $14,185. The unemployment rate was 10.7% in 2007 and 15.8% in 2010, and in 2010, 26.7% of the population lived below the poverty level.

POLICY LANDSCAPE

Federal policy. Between 2000 and 2012, several notable Federal policies were passed impacting efforts to address childhood obesity at the State and local levels. First, in 2004, Reauthorization of the Child Nutrition and WIC Act included a requirement that all local education agencies participating in the National School Lunch Program would establish a local wellness policy by the start of the 2006–2007 school year. These policies required school districts to address the following: (1) goals for nutrition education, physical activity, and other school-based activities; (2) nutrition guidelines for all foods sold

on school campus during the school day to promote health and reduce obesity; (3) a plan to ensure implementation of the policy; (4) involvement of parents, students, and representatives of the school administration and staff as well as the public in a local wellness committee; and (5) guidelines for reimbursable school meals that are not less restrictive than national guidelines. In addition to the local wellness policies, the 2004 reauthorization revised the requirements of the fruit and vegetables program. It emphasized that the majority of schools participating should be low income (at least 50% of students receiving free or reduced-price lunch), and it provided funds for districts and schools related to farm-to-school programs as well as nutrition education (e.g., Team Nutrition grants). In 2007, Federal legislation was passed addressing requirements for the Child and Adult Care Food Program, including standards for the nutritional content of foods served and portion sizes. Funding was also provided to USDA to support centers in increasing physical activity and decreasing sedentary time. Lastly, the Healthy, Hunger-Free Kids Act (HHFKA) was passed in 2010. It reauthorized several child nutrition programs, outlined standards for the nutritional content of foods and beverages sold outside the school meals program, and updated nutrition standards for school meals. The HHFKA also updated requirements for the content and tracking of local wellness policies.

State policy. The policy review identified 17 State policies related to nutrition, physical activity, and the built environment in Pennsylvania between 2003 and 2010. Of the 17 policies, 10 were related to nutrition, 4 addressed physical activity/physical education, and 3 addressed both nutrition and physical activity or wellness. All of these policies affected the ECE and school settings. For more information on these policies, see the timeline provided in Figure 1 and a complete list of the policies in Appendix D.

Local-level policy. Due to resource limitations, the ICF Macro team could not conduct a comprehensive scan of local-level policies. However, we used the site strategy inventory and site visit interviews to capture key policies enacted or implemented during the study time period.

ITEMS ENDORSED IN SITE STRATEGY INVENTORY

Through the inventory, we identified strategies that addressed physical activity, healthy eating, or both, that were implemented in the ECE, schools, community, and health care settings. The strategies might include a broad range of activities such as programs, policies, initiatives, campaigns, and regulations. A total of 19 individuals completed the Philadelphia strategy inventory (a 73% response rate). Table 1 shows the overall number of strategies identified per setting.

Table 1: Results of Strategy Inventory in Philadelphia

Setting	Strategies That Address Physical Activity	Strategies That Address Healthy Eating	Strategies That Address Physical Activity and Healthy Eating
ECE	0	3	3
Schools	12	15	28
Community	27	29	Not included in the inventory
Health care	4	0	19

SITE VISIT INTERVIEWS

In addition to the policy review and strategy inventory, more in-depth information was obtained about strategies through site visit interviews. This section presents results from the interviews, including the strategies identified for focus and a timeline of strategies developed by the site visit team. The

interviews also provided information for the next section, which presents deeper descriptions of the focal strategies. A later section presents information taken from the site visit interviews to describe the site overall, including general use of data within the site, respondents' perceptions of factors leading to the declines in rates of childhood obesity in the city, and lessons learned that respondents share for other sites that might be working to reduce childhood obesity.

Strategies Identified for Focus

A subset of the strategies were identified for more focused inquiry. These include initiatives known to have had broad reach into the population where statistically significant declines were documented. These initiatives targeted children at the community- or district-wide levels so that potential exposure to the initiative was far-reaching. Some initiatives also were raised by respondents in the interviews as important to understand in relation to the declines, similarly for their relevant community- or student-level focus. Table 2 shows the strategies of focus, indicates those that most directly touched the population that experienced the declines, and provides information about the settings, focus areas, and types of approaches used for each.

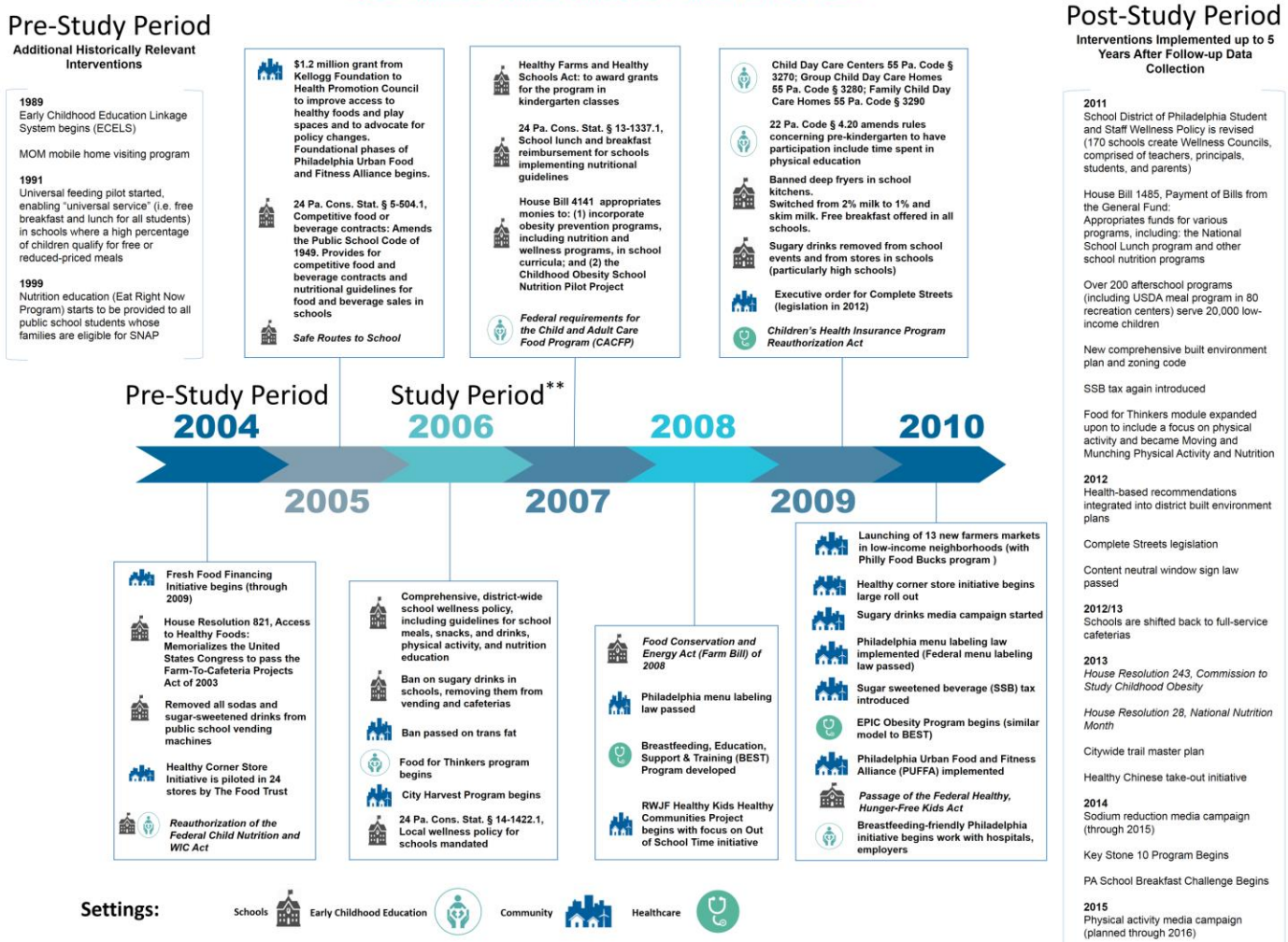
Table 2: Strategies Identified for Focus in Philadelphia

Name of Strategy	Most Directly TArgeted Population with Declines	Setting				Focus Area			Type		
		ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
1. Universal Feeding pilot (broadly increasing access to free and reduced-price lunch)	X		X			X			X	X	
2. EAT.RIGHT.NOW. nutrition education program (using Supplemental Nutrition Assistance Program Education [SNAP Ed] funds)	X		X			X			X		
3. Ban on sugary drinks in schools	X		X			X				X	
4. Comprehensive districtwide school wellness policy (including switch from 2% to 1% and skim milk; deep fryer ban)	X		X			X	X		X	X	
5. Out of School Time program				X		X	X		X		
6. Healthy Corner Store initiative				X		X		X	X		
7. Philadelphia Urban Food and Fitness Alliance				X		X	X		X		

Strategy Timeline

A number of relevant initiatives addressing multiple strategies were reported during and prior to the period of documented childhood obesity declines. Site visit team members shared a draft of a timeline with interviewees prior to the interviews and reviewed the document with them during the interview. As additional initiatives were raised by interviewees, site visit team members revised the timeline to include them. The timeline in Figure 1 presents these identified strategies in the ECE, school, community, and health care settings.

Figure 1: Timeline of Identified Strategies in Philadelphia, 2004–2010*



* The timeline represents state and local policies and programs. Key Federal policies are italicized.
** The study period is the period of time where the childhood obesity declines were noted . For Philadelphia, this period is between 2006 – 2010.

III. FOCAL STRATEGY DESCRIPTIONS

This section presents a more in-depth description of each strategy of focus, including settings they addressed; their strength, reach, and target audiences; barriers and facilitators encountered in their implementation; and the role of partners in carrying them out. As noted above, these strategies are described in more detail because they directly targeted and had the greatest reach to the population of children wherein declines were found, or they were raised by respondents as important to understand in relation to the declines.

Specifically, in Philadelphia, statistically significant declines were identified in rates of obesity among students in grades K-8. Declines in obesity and severe obesity were significant for Hispanic girls and for African-American and non-Hispanic white boys, and in obesity only for Asian boys. In this section, we begin by describing some of the initiatives occurring during this time period (between the 2006–2007 and 2009–2010 school years) that were more likely to reach this population of children in Philadelphia public schools. These include: 1) a Universal Feeding pilot (a USDA pilot program that broadly increased access to free and reduced-price lunch), and 2) the EAT.RIGHT.NOW. nutrition education program (implemented through use of SNAP Ed funds). In particular, these two initiatives would have reached students in public schools in low-income communities where a majority of the student population is eligible to receive free or reduced-price lunches. Two other initiatives taking place in Philadelphia public schools include: 3) a ban on sugary drinks in schools, and 4) a comprehensive districtwide school wellness policy. Following the description of those initiatives, we describe in detail three additional programs that, though not occurring in public schools, were more likely to reach children who experienced declines due to their affiliation with schools in low-income areas: 5) the Out of School Time program (which took place outside school hours in locations within and beyond public schools), 6) the Healthy Corner Store initiative (improving the quality of food offerings in corner stores, particularly those near schools in low-income communities), and 7) the Philadelphia Urban Food and Fitness Alliance program (a community initiative focused on engaging school-aged youth in grades K-12 for system and environmental improvements).

Following the detailed descriptions of these initiatives, we note additional strategies that took place across the school, ECE, health care and community settings in Philadelphia. We also note ways these strategies may have addressed children from populations experiencing health disparities.

STRATEGY #1: UNIVERSAL FEEDING PILOT

The School District of Philadelphia launched a Universal Feeding Pilot in 1991 and was the first school district in the country allowed to do so by the USDA. This pilot streamlined the process of counting and claiming meals served to low-income students via the National School Lunch and School Breakfast Programs. This approach enabled thousands more children to receive free and reduced-cost meals and greatly reduced the burden on school administrators and parents/guardians to obtain, submit, and review the necessary paperwork. By bringing many more children into the school meal programs, universal feeding enabled later improvements in school food quality to have broad reach, particularly for those low-income students at higher risk for obesity. Assuring food security for low-income children was more of a primary focus for the strategy.

Household incomes below 185% of the Federal poverty level (FPL) qualify students for discounted school meals. Students with household incomes below 130% of the FPL qualify for free meals, and

those living in households that receive public assistance or food stamps are automatically eligible for free meals.

A school's eligibility to qualify for the Universal Feeding Program is similar to the eligibility requirements for a school to receive SNAP Ed dollars (discussed below), but uses a socioeconomic study to determine the percentage of students at each school who are eligible for free or reduced-cost school meals. First, using State records, researchers identify all students automatically eligible for free or reduced-price lunches. Then, researchers survey a statistically valid sample of the remaining students to determine their household incomes and family sizes. By combining the data on automatic eligibility with the survey data, the overall eligibility rate for free and reduced-price meals is calculated for each school. The school district can then select an eligibility percentage that, if exceeded in a particular school, will trigger Universal Feeding. When that high percentage of students in a given school qualify for free or reduced-cost meals, then the entire school receives "universal service," or free meals for all students.

In 2006, The Reinvestment Fund led another socioeconomic study approved by USDA for the school district. The study surveyed 1,952 households and found that 79.6% of students were eligible for subsidized meals. Based on these data, Philadelphia designated about 200 schools as Universal Feeding sites, about two-thirds of the city's public schools at that time. This sustained from 2006 to 2010, and as part of Child Nutrition Reauthorization 2010, Philadelphia's Universal Feeding Program was included and made permanent in the Healthy, Hunger-Free Kids Act. The Universal Feeding Program is still in effect and reaches all students at qualifying schools in grades K-12. Participation is mandatory for the qualifying schools.

As of the 2010–2011 school year, free breakfast is provided in all Philadelphia public schools. At that time about 50,000 students received a breakfast each day. Starting in the 2013–2014 school year, all Philadelphia public schools began offering free breakfast and lunch to all of their approximately 140,000 public school students. In the 2013–2014 school year, about 60,000 students received free breakfast each day, and 100,000 received free lunch each day.

Studies of the Universal Feeding Program examined the feasibility of the survey approach for estimating income-eligibility for free- and reduced-priced meals as compared with the traditional method of individual applications. Surveys were conducted in 1991, 1994 and 2006-2007. The 2006-2007 study found higher percentages of students that were income-eligible for free lunch in those strata where higher percentages of directly-certified students also were observed, confirming the validity of the survey approach. The results of using the survey-based method have been increased enrollment of low-income, eligible children in both the lunch and breakfast programs, more accurate program data (and, associated, improved program integrity), and substantial financial savings to the School District of Philadelphia.[19]

Strategy Barriers and Facilitators

Facilitators

[19] The Reinvestment Fund. (2007). *Estimating the percentage of students income-eligible for free and reduced price lunch*.. Philadelphia, PA: The Reinvestment Fund. Retrieved May 13, 2015 from https://www.reinvestment.com/wp-content/uploads/2015/12/Estimating_the_Percentage_of_Students_Income_Eligible_For_Free_and_Reduced_Price_Lunch-Report_2009.pdf

A solution for multiple challenges. One facilitator of the Universal Feeding Pilot was that it met multiple goals for the school district. That is, more children who needed access to food could get it, administrative burden (caused by processing applications to determine individual student eligibility to receive free or reduced-price meals) was reduced, and the schools received more money because each additional child that participated brought in an additional $1.50 in revenue per meal that the school district could use toward overhead operating costs. Further, allowing all students at qualifying schools to take a free or reduced-price lunch removed the stigma associated with receiving a free meal. This pilot demonstrated to USDA that a program like this could be successful and thus enabled other school districts to experiment with similar universal feeding programs.

Champions across multiple sectors. From outside the school district, there was some pushback from those who believed that providing free and reduced-price meals to every student in a given school was not an appropriate use of Federal dollars. In August 2008, USDA informed the Pennsylvania Department of Education that it intended to terminate the program as of the 2010–2011 school year. Several groups spoke out, including the School District of Philadelphia; nonprofits Community Legal Services, Public Citizens for Children and Youth, and The Food Trust; the federally certified community development financial institution (CDFI) The Reinvestment Fund; local news media; and politicians like Governor Ed Rendell and Pennsylvania Senators Arlen Specter and Robert Casey, Jr. The latter two led the successful political effort to include Universal Feeding in the 2010 Child Nutrition Reauthorization.

Barriers

Differing leadership priorities. Within the school district and specifically for universal breakfast in all schools, some principals were noted as presenting barriers. That is, interviewees indicated that some principals felt it is the parents' job to feed their children breakfast in the morning. Further, principals may be more concerned with improving students' test scores than making sure they eat breakfast. Prior to offering breakfast in all schools, some principals would only offer breakfast during testing week.

Conflicting messages. Getting children to school on time to receive a free breakfast also was stated as a barrier. One interviewee noted that parents are inundated with messages about the importance of children eating a nutritious breakfast, but also ensuring children get enough sleep each night. Students who must be on a bus by 7 a.m. to eat breakfast before class begins may be exhausted. Further, parents are encouraged to enroll their children in various sports and other afterschool activities to keep them physically active, which may cut into the time a child can sleep each night. The interviewee highlighted the difficulty in balancing all the various factors in raising healthy children within an imperfect system.

Physical facility limitations. Another noted barrier was that about 70% of Philadelphia public schools do not have full-service kitchens. Having breakfast and lunch delivered from satellite sites to all other schools the evening before service means that students do not get to eat freshly prepared food and usually have fewer choices for entrees compared to students who go to schools with full-service kitchens. However, the School District of Philadelphia is now in the process of reopening many schools' kitchens that were shut down during the budget crisis in 2011.

Lack of focus on food appeal. Respondents wondered whether there had been issues with food waste earlier in the program. While schools receive reimbursement for the number of meals/trays being taken through the cafeteria line, there is no incentive to ensure the students actually eat the food.

Eventually, the school district recognized the importance of not only making food available for all their students, but also making it appealing to students to encourage their eating.

Role of Partners

The School District of Philadelphia's Division of Food Services was a primary advocate for instituting the Universal Feeding Pilot. Interviewees frequently noted their support and desire to bring nutritious meals to as many students in Philadelphia as possible. Community Legal Services (CLS) was a key partner in pushing the school district to do a better job of making sure eligible children were getting meals. In 1991, the school district was considering shutting down some of the lunch programs in schools because of rioting and other concerns. CLS stepped in and threatened to sue the school district on civil rights grounds, stating that the school district would be denying a Federal program to mostly minority students because it was easier for them to close lunch rooms than to directly address the violence and implement a plan.

The Coalition Against Hunger (CAH) has been a "*true champion for the students,*" according to one interviewee. CAH worked to get the Universal Feeding Pilot adopted, made sure that the School District of Philadelphia received legislative and political support, and helped ensure that the schools received the appropriate Federal reimbursements for the meals. Also, CAH and Public Citizens for Children and Youth (PCCY) worked together to help with the universal feeding and the community eligibility provision, which brought in more Federal dollars to the school district.

Key partners that worked toward getting free breakfast in all Philadelphia public schools include PCCY, CLS, CAH, Center for Hunger-Free Communities, and the Health Promotion Council (HPC). Several individuals from these groups joined forces and testified in front of the School Reform Commission about the importance of school meals. This work then led to the PCCY, CLS, and CAH building a closer relationship with the school district's Division of Food Services, which supported the policies that these partners sought to implement.

STRATEGY #2: EAT.RIGHT.NOW. NUTRITION EDUCATION PROGRAM

Strategy Description

The School District of Philadelphia's EAT.RIGHT.NOW. (ERN) Nutrition Education Program is a part of the Pennsylvania Nutrition Education TRACKS, a statewide program that uses SNAP Ed funding to provide nutrition education to individuals and families who are eligible to receive SNAP benefits. In 1999, the School District of Philadelphia began providing the ERN Nutrition Education Program via their partner organizations (discussed below) to all students in grades K-12 in schools where 50% or more of the student population is eligible to receive free or reduced-price lunches under the National School Meals Program. Other funds come from nonfederal partner matches, like the School District of Philadelphia. The total budget for ERN with all the partner budgets included is $11,578,000. The match from the School District is $11,166,000. This match consists primarily of in-kind salaries from hours spent by teachers, nurses, etc. delivering nutrition education in addition to their normal education plans. Teachers in the schools may do follow-up lessons in many cases or are given materials to use when delivering nutrition education without the help of ERN educators. Roughly 90% of Philadelphia public schools receive nutrition education annually through ERN. During 2006 to 2010 when the obesity declines were observed, approximately 180,000 students were receiving the nutrition education. The public school population has declined in recent years, as some

students have migrated to charter schools. While not mandatory, all eligible schools participate in ERN. Once offered, all students within the school are required to participate in the ERN curriculum.

The nutrition education delivered varies by school, the partner organization delivering the education, and target audience, but it reaches approximately 90% of students in grades K-12 who attend schools eligible to receive SNAP Ed funding (i.e., schools where 50% or more of the student population are eligible to receive free or reduced-price lunches under the National School Meals Program). Students are exposed to the ERN Nutrition Education Program each year through various modules as they progress from elementary school through high school. Nutrition education lessons occur at least monthly for all grade levels and focus on a variety of topics, such as the importance of eating a healthy breakfast, learning about food groups, and teaching students about the importance of limiting foods high in fat and sodium. Some education modules occur more frequently.

While the ERN program has the most direct impact on public school children, SNAP Ed funding is also used to provide nutrition education in communities. ERN reaches community members through various programs. ERN educators attend school health fairs to provide nutrition information to schools and their communities. ERN also funds assembly programs for elementary school students performed by groups such as the Walnut Street Theatre, Young Audiences, Sterlen Barr, and Taddo the Magician, that convey healthy lifestyle messages in an entertaining way. Also, at various times throughout the year, participating schools will offer fresh fruits and vegetables for sale to students and their families. ERN offers this program in conjunction with SHARE, a regional network of community organizations engaged in food distribution, education, and advocacy. ERN also distributes monthly newsletters with information on eating healthy, food safety, and easy-to-prepare healthy recipes. Finally, ERN is able to provide nutrition education to the community through various after school programs, parent workshops, gardening programs, and visits to local farms. During the site visit, we did not learn of any evaluations conducted to assess the effectiveness of the ERN program. However, it was noted by respondents as having been important for educating students about proper nutrition.

Strategy Barriers and Facilitators

Facilitators

Experienced educators. One interviewee noted that, at least in the early child care setting, the nutrition educators have a great deal of experience and have a passion for what they are doing. The support staff, early childhood nurses, and field representatives are very supportive of the goals of the Office of Early Childhood Education of the School District of Philadelphia and are dedicated to providing quality education to young children about the importance of eating a healthy diet and remaining physically active.

Enjoyable programming. Also, both parents and children enjoy the Eating the Alphabet Program that is one of the nutrition education programs. This program, delivered once per week by various ERN partners, allows young children to learn about and taste a new healthy food item each week that corresponds to a letter of the alphabet (e.g., A for asparagus and Q for quinoa). The children love learning about new foods like edamame. As an example, one presenter brought a variety of colored carrots as part of her lesson, which the students enjoyed learning about.

Barriers

Managing network of providers. One barrier noted was the complexity involved in funding and managing a network of partners providing nutrition education at hundreds of locations throughout Philadelphia. Ultimately, Pennsylvania State University (Penn State) was brought on board to be the management entity for the TRACKS program that would oversee and manage the individual partner organizations delivering the ERN nutrition education curricula in schools and other settings. Penn State's involvement simplified the process of managing and coordinating the work with all the various partners.

Role of Partners

The School District of Philadelphia uses many partners to bring nutrition education into the classroom. These partners include Drexel University Nutrition Center, Albert Einstein Medical Center, The Food Trust, Health Promotion Council, and Urban Nutrition Initiative. Each of these partners and contractors is allotted a certain number of schools in the Philadelphia school district in which to deliver nutrition education. Each partner is given leeway in the methods they can use to provide nutrition education lessons in schools, but they must follow an "acceptable curriculum" that aligns with the school district's wellness and beverage policies and the USDA's National School Lunch Program guidelines.

STRATEGY #3: BAN ON SUGARY DRINKS

Strategy Description

Growing concern over high childhood obesity rates and a proposed $43 million exclusive "pouring contract" (i.e., the school district receives money in exchange for marketing and selling specific brands of beverages) for Philadelphia schools led The Food Trust to convene a Comprehensive School Nutrition Task Force in 2001. This task force was made up of over 40 groups and individuals, including the Pennsylvania Departments of Health and Education, Philadelphia Department of Public Health, Presbytery of Philadelphia, Archdiocese of Philadelphia, University of Pennsylvania's Schools of Nursing and Medicine, Thomas Jefferson University's Community Prevention Program, School District of Philadelphia's Food Services and Curriculum Divisions, school nurses, teachers, and parents (the work of this task force is discussed in more detail below, as it was instrumental in the development and implementation of the Comprehensive District Wellness Policy). Concerned that the pouring contract would lead to greater marketing to and consumption of unhealthy beverages by students, parents, health professionals, and the task force were galvanized to promote healthier nutrition in schools and hopefully prevent future contracts that might create a pipeline for unhealthy foods into public schools.

In 2004, Philadelphia became one of the first school districts in the country to remove all sodas and sugar-sweetened beverages from vending machines in public schools. The Philadelphia School District approved a policy that was consistently applied in all schools, replacing all sugar-sweetened beverages in vending machines and school cafeterias with water, 100% juice, and low-fat milk (i.e., skim and 1%). Beginning in 2004, sugar-sweetened beverages could no longer be sold in any school stores or during any school events during or outside of normal school hours. At this time, the School Reform Commission also adopted a snack policy outlining the nutritional requirements for food for purchase in schools. Also in 2004, Congress passed the Child Nutrition and Special Supplemental Nutrition Program for Women, Infants and Children (WIC) Reauthorization Act requiring that all local education agencies participating in the National School Lunch Program or other child nutrition programs create local school wellness policies by the 2006 school year. The Philadelphia School Board-

approved beverage policy would become part of the local school wellness policy (discussed further below) in 2006. The School Board officially approved the snack policy in 2006 when it was incorporated into the local wellness policy along with the beverage policy.

The sugar sweetened beverage ban reaches all public school children in grades K-12 in Philadelphia. During 2006 to 2010 when the obesity declines were observed, there were about 200,000 children in Philadelphia public schools. This number has since declined, as many children have moved to charter schools. However, this ban is still in effect and reached the roughly 140,000 children in grades K-12 in the 2014-2015 school year in Philadelphia public schools. We did not learn of specific evaluations of the ban on sugary drinks in Philadelphia public schools. Respondents, however, perceived it as a likely contributor to the obesity declines.

Strategy Barriers and Facilitators

Facilitators

Cross-sector partners. Collaborative discussions between partners in the health department, the private sector, and school nutrition and physical education staff helped pave the way for the ban on sugary drinks in school vending machines. Leaders from outside the school district who supported the sugary beverage ban were already providing some services to the school district and thus already had established some credibility among leaders and staff in the schools.

Barriers

Hesitance to remove popular vending products. Prior to the passage of a Comprehensive District Wellness Policy in 2006 (described below), the sugary drink ban was already in effect in Philadelphia public schools. Schools hesitated to remove popular, even if unhealthy, items from their vending machines because they generated a lot of revenue for the schools. The superintendent, community members, and other city agencies worked collaboratively to educate and also pressure the school district into increasing compliance with the various nutrition policies developed by the Comprehensive School Nutrition Policy Task Force.

Role of Partners

The Comprehensive School Nutrition Policy Task Force began piloting nutrition and physical activity policies, including the sugary drink ban, in a small number of schools in 2001. From 2002 to 2005, the Task Force, administered by The Food Trust, received a Federal grant to expand the pilot and performed a 2-year study[20] that examined five schools implementing these pilot policies and five comparison schools. Each school that participated in the School Nutrition Policy Initiative implemented a school self-assessment, nutrition education, nutrition policy, social marketing, and parent outreach. The Food Trust led the intervention and partnered with Temple University's Center for Obesity Research and Education for the research component of the study. The task force conducted the study during the 2003–2004 and 2004–2005 school years. After 2 years, only 7.5% of children became overweight in intervention schools, compared with 15% of children who became overweight in control schools. Overall, the intervention resulted in a 50% reduction in the incidence of overweight. Those policies formed the basis for what would become the Comprehensive District

[20] Foster G. D., Sherman S., Borradaile, K. E., Grundy, K. M., Vander Veur, S. S., Nachmani, J., et al. (2008). A policy-based school intervention to prevent overweight and obesity. *Pediatrics,* 121(4), e794–e802.

Wellness Policy, which went into effect in 2006. The role that partners played in this policy initiative is discussed further below, under the Comprehensive Districtwide School Wellness Policy.

STRATEGY #4: COMPREHENSIVE DISTRICTWIDE SCHOOL WELLNESS POLICY

Strategy Description

When it went into effect in 2006, the districtwide school wellness policy included guidelines for school meals, snacks, drinks, physical activity, and nutrition education. The 2006 policy contained only minor adjustments from piloted nutrition policies. The wellness policy ultimately established the following:

- Coordinated school wellness councils (using the CDC Coordinated School Health Program Model as a template for wellness council development);
- Nutrition standards for all foods available on school property during the school day (e.g., snacks with total fat content limited to 7 grams or less per serving and sodium content less than or equal to 360 mg per day, offering only skim and 1% milk, and banning the sale of candy during the school day)
- Nutrition education (e.g., promoting fruit, vegetables, whole-grain products, low-fat and fat-free dairy products, healthy food preparation methods, health-enhancing nutrition practices, and emphasizing caloric balance between food intake and energy expenditure)
- Physical education (e.g., curriculum including a physical fitness assessment for each student; using a fitness assessment tool for grades 3 through 12, including components related to self-management, movement, cooperation, fair play, and social skills; devoting at least 50% of physical education class time to moderate to vigorous physical activity [It did not, however, have a minute-based physical activity requirement.])
- Physical activity (e.g., elementary students are given "movement breaks" for every 90 minutes of seat time, time is devoted in the elementary schedule for supervised and safe recess, and students will acquire knowledge and skills to understand the benefits of being physically active)
- Other school-based activities (e.g., a nonstigmatizing atmosphere is provided for all students, screenings are provided for students for optimum health, and care is provided to students for chronic conditions)

Now, the Comprehensive Districtwide School Wellness Policy is mandatory for all public schools in Philadelphia and thus reaches over 140,000 students in 218 schools. The Wellness Policy was most recently revised in 2011. An evaluation was conducted examining effects of the Comprehensive Wellness Policy on children in grades 4 through 6. While no differences were found in incidence or prevalence of obesity, the evaluation found a 50% reduction in the incidence of overweight, and significantly fewer children in the intervention schools (7.5%) than in the control schools (14.9%) became overweight after 2 years.[21]

[21] Foster G. D., Sherman S., Borradaile, K. E., Grundy, K. M., Vander Veur, S. S., Nachmani, J., et al. (2008). A policy-based school intervention to prevent overweight and obesity. *Pediatrics*, 121(4), e794–e802.

Strategy Barriers and Facilitators

Facilitators

Cross-sector partners. Interviewees noted the collaborative effort of an interdisciplinary group representing multiple sectors in developing the wellness policy as a key facilitator. The Comprehensive School Nutrition Task Force was divided into subcommittees that addressed food and snacks, wellness, and research, among others. The overall task force met four times per year, but these subcommittees met more frequently. During the wellness policy pilot from 2002 to 2005, teachers, food service nurses, and custodians "were critical to the effort" and met monthly to develop and implement their action plans.

Supportive district leadership. Respondents noted that the school district superintendent at the time of the wellness policy pilot, Paul Vallas, understood the importance of getting rid of unhealthy options in schools. He focused his efforts on improving the health of school children in Philadelphia rather than obtaining profits from sole-source vending contracts (e.g., a pouring contract with the Coca-Cola Company) and stocking snack bars and vending machines with unhealthier items that sell more quickly and make more revenue for the school district.

Barriers

Resistance to changing food and beverage items. Early on, school food service administrators presented a barrier due to their resistance to change and to the wellness policy guidelines. Some of the food and beverage items that had been sold generated significant revenue for schools, and there was a great deal of pushback from food service administrators to prevent serving and selling healthier items. It took a great deal of effort from the health department, the superintendent, the community, and other city agencies to push the schools toward a higher rate of compliance. Through a coordinated effort to educate the public and school administrators, key partners were eventually able to increase compliance and adoption of the wellness policy guidelines.

Role of Partners

The School District of Philadelphia Wellness Policy grew out of the work of The Food Trust-led Comprehensive School Nutrition Task Force in 2001 (specific members of the task force are listed above under Ban on Sugary Drinks). Parents and teachers were also noted as being heavily involved in developing, implementing, and increasing public awareness about the wellness policy. Finally, there was a coordinated effort between the public relations department of the school district, school members, city officials, and State legislators to increase public awareness about the wellness policy by running radio and television public service announcements. The task force spent 1 year developing the school nutrition policy, which they modeled after CDC's Guidelines for Healthy Eating and Physical Activity.

Within the task force, committees were formed to help make recommendations based on the CDC guidelines and to work collaboratively with the school district's Division of Food Services to help ensure the policies were reasonable and could be implemented as planned. The committees included a committee on nutrition standards, committee on curriculum, committee on family and community involvement, and a research team. The Food Trust guided the committee work and coordinated the effort to have the policy approved by the Philadelphia School Board. Ultimately, the committees recommended that the task force implement the school nutrition policy, which included establishing School Health/Wellness Councils, completing the School Health Index and School Health Action

Plan, initiating social marketing, ensuring that all foods meet the nutrition standards outlined in the policy, integrating 50 hours of nutrition education into classroom lessons, conducting 10 hours of teacher nutrition training, and involving family members and the community.

STRATEGY #5: OUT OF SCHOOL TIME

Strategy Description

Though not occurring within the public schools, this initiative was targeted to school aged children like those who experienced obesity declines. Beginning in 2008, the City of Philadelphia Department of Human Services (DHS) launched their Healthy Kids, Healthy Communities project using funding from the Robert Wood Johnson Foundation. The Public Health Management Corporation (PHMC), which has a large contract to manage all of the DHS-funded after school programs, and the Health Promotion Council (HPC), a nonprofit organization that addresses chronic disease prevention and management through direct service, capacity-building, and policy- and systems-change initiatives spent about 1 year developing guidelines to improve the nutrition and physical activity environment for children in programs taking place outside of normal school hours. This program, a component of the Healthy Kids, Healthy Communities program, became known as Out of School Time. The Healthy Kids, Healthy Communities program is no longer active, and beginning in 2013, PHMC was able to use SNAP Ed funding to continue providing the Out of School Time program.

Out of School Time reaches about 20,000 children in Philadelphia in grades K-12. There are roughly 100 sites offering 200 programs that fall under the umbrella of Out of School Time and that follow the nutrition and physical activity guidelines developed by the HPC and PHMC. Of the 200 programs, 105 serve elementary school children, 55 serve middle school children, and 40 serve high school students. Program sites are located across Philadelphia in a variety of locations, including public, private, parochial, and charter schools; churches; community-based centers; and also recreation centers. Out of School Time sites offer many activities, including sports and fitness, arts and life skills, academic enrichment and leadership development, and recreational and social activities. To receive funding as an Out of School Time vendor, the site must ensure water is always available, sugary drinks are not served, and that screen time is limited, among other guidelines. An evaluation was conducted of the overall Healthy Kids, Healthy Communities program, but not of the Out of School Time component implemented in Philadelphia.

Strategy Barriers and Facilitators

Facilitators

Ongoing funding. Interviewees noted that being able to find ongoing funding was a key facilitator in offering the Out of School Time program. When the RWJF funding ended in 2013, PHMC was able to secure temporary funding for 6 months from the Public Health Fund to keep the program going. Then, the HPC and PHMC submitted a grant package that would enable them to continue offering the program using SNAP Ed funding.

Credibility through community partnerships. Interviewees also noted that good partnerships and building a strong community network facilitated the implementation of Out of School Time. HPC spent a lot of time developing their network and building a community that wanted to work together. Their large network was open to various people and organizations. Building a large and supportive network with many different experts and stakeholders facilitated program implementation because

these relationships helped build parents' confidence in the program and increased the program's perceived credibility.

Barriers

Providing healthy and appealing meals. One barrier respondents noted was that while the nutrition guidelines implemented by Out of School Time providers was sound, the food in schools was not always particularly healthy or appealing to students. Food vendors often have difficulty preparing and delivering meals that are both healthy and tasty, given their limited financial resources.

Role of Partners

As mentioned above, key partners in the Out of School Time program included the City of Philadelphia DHS, PHMC, and the HPC. Other partners included The Food Trust, University of Pennsylvania, and the National Nursing Centers Consortium (a program of the PHMC). Faculty at the University of Pennsylvania helped with geographic information system (GIS) mapping to ensure Out of School programs were being offered in the poorest and neediest communities. Other partners included the various churches and community centers that offered their facilities as host sites for the program. The Food Trust, as well as some parents, health care providers, and Out of School Time staff, used their expertise to help refine and implement the various nutrition and physical activity guidelines of the program.

STRATEGY #6: HEALTHY CORNER STORE INITIATIVE

Strategy Description

Though not directly targeted to children for whom the declines were noted, this program may have indirectly influenced the declines by improving food offerings in corner stores near schools in low-income neighborhoods. The Food Trust piloted the Healthy Corner Store Initiative (HCSI) in 2004, which helped to motivate youths and adults to purchase healthier items through classroom education and direct marketing in the corner stores. The initiative has grown substantially since 2010, primarily due to a key partnership with the Philadelphia Department of Public Health's Get Healthy Philly initiative, which has now grown the program from a small pilot to a large citywide network of participating stores. Now, The Food Trust's work impacts over 600 corner stores around Philadelphia. During the piloting of the HCSI in 2004, 24 stores were targeted near public schools where 50% or more of the students were eligible for free and reduced-price lunches. The HCSI targets low-income ZIP codes using U.S. Census data. Now, 92% of participating corner stores are located in the 25 high-priority ZIP codes.

The HCSI increases the availability and awareness of healthy foods in corner stores in Philadelphia by using the following methods:

- Increasing store capacity to sell and market healthy items to improve healthy options in communities
- Training and offering technical assistance to store owners to provide the skills to make healthy changes profitable
- Marketing healthy messages to youths and adults to encourage healthy eating choices
- Hosting in-store community nutrition education lessons

- Educating youths in schools near targeted corner stores to reinforce healthy messages and provide nutrition education through the Snackin' Fresh program
- Linking corner store owners to community partners, local farmers, and fresh food suppliers to create and sustain healthy corner stores
- Offering free blood pressure checks and referrals by a Jefferson University health care provider to customers in select corner stores enrolled in the Heart Smarts program. These stores also receive in-store nutrition education lessons that include cooking demonstrations and free taste tests.

The Food Trust identifies stores to recruit by examining a list of SNAP- and WIC-certified businesses, as well as through street canvassing, sharing print materials, and making radio advertisements. Once recruited, participating stores progress through a five-phase approach that involves providing business training to the store owner and changing the offerings at the store. The five phases are as follows:

1. **Make inventory changes.** Stores introduce four new healthy products.
2. **Display marketing materials.** Stores display marketing materials, available in multiple languages, to help guide customers to make healthier decisions. If store owners satisfactorily complete phases 1 and 2, they are given a $100 incentive check each year to continue participating.
3. **Participate in business training.** Store owners receive one-on-one, in-store training on how to source healthy products and how to display and price their healthy offerings.
4. **Undergo a Philadelphia Healthy Corner Store Network Conversion.** Stores that meet their goals are eligible for various conversions, including the installation of small shelving and refrigeration units to increase the space for and prominence of healthy foods.
5. **Achieve Healthy Corner Store certification.** Stores that progress through Phase 4 are eligible to receive additional support and benefits. Certified stores agree to stock a larger healthy food inventory that includes produce, low-fat dairy, whole-grain products, lean proteins, water, and healthy snacks, and introduce new pricing and promotion strategies. Participating stores also agree to decrease promotion of tobacco products.

A randomized controlled trial evaluation was conducted of the Healthy Corner Store Initiative, examining the effects over a 2-year period on food and beverage purchases and on BMIs of fourth-, fifth-, and sixth-grade students across 10 schools. The study did not find significant changes in the energy content of the corner store purchases or in the student BMI measures.[22]

Strategy Barriers and Facilitators

Facilitators

Phasing store activity. A key facilitator is the phased-activity approach of the HCSI. This phasing allows time to build and nurture meaningful relationships with the store owners. This approach also gives the store owners time to receive training and technical assistance as they adjust to carrying a more varied inventory.

[22] Lent, M. R., Vander Veur, S. S., McCoy, T. A., Wojtanowski, A. C., Sandoval, B., Sherman, S., ... & Foster, G. D. (2014). A randomized controlled study of a healthy corner store initiative on the purchases of urban, low-income youth. *Obesity*, 22(12), 2494–2500.

Receptivity of store owners. Also, store owners are generally very receptive to the program. Interviewees noted that store owners want to do what is best for their communities and create a healthy environment for the people they serve.

Barriers

Language differences. Language can sometimes be a barrier. Most corner store owners in Philadelphia speak Spanish as a first language, therefore it is critical that project staff are able to speak Spanish and effectively communicate with the store owners to grow and nurture those relationships.

Identifying stores and navigating schedules. Identifying appropriate stores for participation can be difficult. For example, there is no universal definition for "corner store." Also, some SNAP and WIC lists are outdated or inaccurate. Further, store owners often work 7 days a week. With little free time, the HCSI had to move away from its original intention of delivering in-person group trainings to store owners. Now, trainings are conducted one-on-one with owners in their own stores.

Store owner turnover. A final barrier noted is the high rate of owner turnover. To aid in program continuity, store owners are visited every 6 weeks, and when a store changes ownership, the new owner is automatically enrolled in the program and will receive training to ensure they can continue to effectively sell and market healthy products.

Role of Partners

The Food Trust's primary partner in delivering the HCSI is the Philadelphia Department of Public Health, through the Get Healthy Philly initiative. Other partners include the Pennsylvania Department of Community and Economic Development, Representative Dwight Evans, the Philadelphia Department of Commerce, and the Jefferson Center for Urban Health.

The HCSI has also built an array of partners in the community and the grocery industry. The HCSI helps to link corner stores with produce distribution networks, wholesale markets, and urban gardens to help source and stock healthy items. The HCSI also connects stores to other community organizations that work to promote healthy change among their members.

STRATEGY #7: PHILADELPHIA URBAN FOOD AND FITNESS ALLIANCE (PUFFA)

Strategy Description

Though not occurring within the public schools, this initiative was targeted to school aged children like those who experienced obesity declines. In 2005, the HPC received a $1.2 million Food and Fitness grant (now called Food and Community) from the Kellogg Foundation to improve access to healthy foods and play spaces and to advocate for policy changes. This funding led to the formation of PUFFA, a community-driven initiative to explore where systems change could make a difference in Philadelphia. As part of the grant, HPC and its partners developed a community action plan. The action plan was community driven, youth led, and collaborative in nature. The overarching goals of PUFFA as described in the community action plan are to improve the food system in Philadelphia schools, create opportunities for active living in the natural and built environment, and create a healthy community food system. PUFFA convened multiple entities across multiple sectors with the goal of helping Philadelphia address childhood obesity, food access, and built environment through policy and system change interventions. The implementation phase of PUFFA began in early 2010, placing

the activities just outside the timeframe of noted obesity declines among Philadelphia youth from 2006 to 2010. However, the foundational work began before the period of noted declines.

While it is difficult to determine exactly how many Philadelphians are impacted by PUFFA's initiatives, much of their work targets high-poverty areas in West and South Philadelphia. South Philadelphia's demographics are an eclectic mix of Asian, Mexican, and African-American populations. In South Philadelphia, to target a Southeast Asian population, PUFFA established a joint use agreement with a Buddhist temple where community members would breakdance and participate in other kinds of physical activity. Also, in partnership with the Philadelphia Parks and Recreation Department, PUFFA translated signage into multiple languages that talked about the use of and accessibility to the area's parks. PUFFA also established community clean-up and park days where community members cleaned up vacant lots and helped build gardens.

While some PUFFA initiatives target adults or the community at-large, the majority of PUFFA's initiatives focus on youth engagement for school-aged children in grades K-12. PUFFA youths have written petitions, contacted legislators, and collaborated with the Philadelphia School District by proposing menu adjustments. Others have attended and spoken at various conferences and meetings, such as Temple University's Celebration of Black Writing and the Philadelphia School District's School Reform Commission. Some youths chose to participate in the 2011 PUFFA Summer Internship, a 6-week, 20-hour, paid program. Activities within that internship have included tours of farmers markets, community work days at Philabundance (the region's largest hunger relief organization, providing emergency food and access to services to three quarters of a million people in the Delaware Valley), youth-oriented urban agriculture and gardening, and a media camp. Others have joined with one of PUFFA's many partners, including Teens 4 Good, Fair Food, and the Philadelphia Horticulture Society.

PUFFA was also instrumental in the reversal of USDA's decision to end Universal Feeding and in getting an expansion of in-class breakfast in schools. In 2008, USDA informed the State Director for the Child Nutrition Programs in Pennsylvania that USDA intended to terminate the Universal Feeding Pilot Program. PUFFA and its network of partners came together and, through various outreach and lobbying efforts, helped prevent the dissolution of the Universal Feeding Pilot. We did not learn of an evaluation having been conducted for PUFFA.

Strategy Barriers and Facilitators

Facilitators

Division of labor. During the multiyear planning phase, action teams, cochaired by community members and partner organizations, were divided up to address each area of focus: built environment, nutrition, food access, and sustainability. This division of labor facilitated PUFFA's collective work and encouraged an even balance of power.

Support for partners' initiatives. In addition to factors that facilitated PUFFA's work, PUFFA shared their statement of need and other materials with stakeholders and partners, helping those other groups to focus their strategies and receive more Federal funding. For example, PUFFA shared their community needs assessment with the Philadelphia Department of Public Health, which the health department then built into their goals and strategies for their Communities Putting Prevention to Work (CPPW) activities. PUFFA also helped to start the Common Market, a food distributor that helps connect local farms to the community, by giving them their first grant.

Barriers

Developing trust to share power. Though division of labor facilitated collective work and a balance of power, one interviewee noted that not everyone, whether community members or organization representatives, valued the need for sharing power, and it took a couple of years to bridge that trust.

Community engagement and bridging adults and youth. One interviewee noted that community engagement was a barrier when this initiative began. Many of the partners in the group had not performed grass roots community engagement work before, which made it difficult initially to get the program off the ground. One interviewee noted that working to bridge the gap between adults and youth was difficult and that many meetings were implemented to try to address this challenge.

Understanding nature of work for policy change. One interviewee also noted that there was a challenge in orienting the group from focusing on community program-centric activities toward working on policy change issues. Further, community members initially expected to see immediate action and new programming in their communities. Interviewees noted that it took some time to educate the target community members that this program was about accomplishing policy and systems change and not just quickly rolling out new programs for the community.

Role of Partners

The Kellogg Foundation reached out to a number of nonprofits in Philadelphia, including HPC, The Food Trust, Urban Nutrition Initiative, and others, and invited these groups to collaborate to develop the grant package together. HPC managed the entire process while the Philadelphia Department of Public Health, White Dog Café Foundation, and Fair Food worked together to take the lead with other organizations playing a supporting role. These groups, as well as numerous community residents and youths in Philadelphia, formed a coalition to create a community action plan. The action plan sought to address childhood obesity by changing policies and environments to make it easier for people to engage in physical activity and to access healthy food.

The Enterprise Center Community Development Corporation is a key community partner in West Philadelphia. This partner helped establish a community farm in the Walnut Hill neighborhood. The farm allows for individuals to garden, but also hosts a youth farmers venture. In this program, local teens help to market and sell the produce grown at the farm. Another partner, the Philly Rooted Youth Growers' Cooperative, helps connect youths with appropriate farmers markets to expand their business.

PUFFA also has two primary evaluation partners: Thomas Jefferson University and the Public Health Management Corporation.

OTHER STRATEGIES ACROSS SETTINGS

As noted earlier, the focal strategies described above are some of the key strategies implemented in Philadelphia during the study period. Across settings, several other strategies were discussed during the site visit interviews. Some of these were programs, local policies, and initiatives. The reach of these strategies ranged from a few schools to community-wide initiatives to State and Federal policies implemented locally. Below, we discuss these by setting. Appendix E shows all the strategies reported from the site visit interviews, matrixed by setting and type.

School Setting

In addition to the strategies identified for focus, we learned of additional initiatives implemented in the school setting that took place outside of school hours, occurred beyond the time period of focus, or may have reached fewer children. These include programs such as the Pennsylvania farm-to-school initiative, Healthy Farms and Healthy Schools, which provided grants to educate kindergartners and their families about the importance of choosing healthy, locally produced foods while increasing awareness of Pennsylvania agriculture. Another initiative in the school setting is Students Run Philly Style, a running program that pairs students with mentors to complete a full or a half marathon. Also, the Healthy You. Positive Energy. (HYPE) campaign and youth leadership initiative was implemented by The Food Trust and the Philadelphia School District beginning in 2010 in 100 schools with CPPW funding provided through the Philadelphia Department of Public Health's Get Healthy Philly initiative. HYPE supports youth councils in middle and high schools to improve access to healthy foods, decrease the availability of unhealthy foods, and increase opportunities for physical activity.

Early Care and Education Setting

Initiatives also took place in the ECE setting. These include the Pennsylvania Keystone Standards, Training/Professional Development, Assistance, Resources and Support (STARS) program that provides certification levels for child care providers and includes environment rating and tips for increasing activity and nutrition guidelines. Additionally, the Early Childhood Education Linkage System (ECELS), a program of the Pennsylvania chapter of the American Academy of Pediatrics (AAP), provides consultation, training, and technical assistance about health and safety in child care, including resources for nutrition and physical activity. Some child care providers also implemented the I Am Moving, I Am Learning curriculum in Head Start programs. We also learned of individual child care centers, such as the Children's Village Childcare Center, that implemented programs and practices to improve the nutritional quality of foods served to children under their care.

Health Care Setting

Initiatives also were implemented in the health care setting. These include initiatives to address breastfeeding, such as the Breastfeeding Education Support and Training (BEST) program of the AAP and the Pennsylvania Department of Health's Educating Practices/Physicians in their Communities (EPIC) program, a statewide practice education program to promote initiation and increase the duration of exclusive breastfeeding. The Philadelphia Department of Health also worked with hospitals and the Maternity Care Coalition to implement the Breastfeeding Friendly Philadelphia program beginning in 2010 as part of the Get Healthy Philly initiative.

In addition to programs addressing breastfeeding, initiatives were implemented in the health care setting to address other aspects of obesity prevention for children. The AAP and Pennsylvania Department of Health implement an EPIC Pediatric Obesity program, providing trained teams of a physician and a registered dietitian to meet with physicians and practice staff at pediatric and family medicine offices to deliver training on current obesity prevention research and AAP Expert Committee recommendations. Saint Christopher's Foundation for Children (of the Saint Christopher's Hospital for Children) presents a 1-day conference, FreshRx: A Prescription for Health, to highlight best practices and provide practical strategies for incorporating a healthy living/active lifestyle agenda into health care practices. Also in the hospital setting, the Children's Hospital of Philadelphia has implemented a Healthy Weight Program with four components to conduct childhood obesity prevention research, provide education and training to health care professionals and families,

partner in community obesity prevention activities, and implement a Healthy Weight Clinic that works closely with children aged 2–18 and their families to actively manage children's weight.

Community Setting

Several initiatives also were implemented in the community setting. These include the Philly Food Bucks program, a healthy food incentive program of The Food Trust that encourages SNAP recipients to use their benefits to purchase fresh, local ingredients by providing customers a $2 Philly Food Bucks coupon for fresh fruits and vegetables for every $5 spent using SNAP at participating farmers markets. The effort increased in 2010 through funding from the CPPW initiative used to provide the Philly Food Bucks program in 13 additional farmers markets in low-income areas throughout the city. As another significant endeavor addressing low-income families, The Food Trust, in partnership with The Reinvestment Fund, implemented the Fresh Food Financing Initiative (FFFI), a grants and loan program that encourages the development of supermarkets and other retail to provide fresh foods in underserved areas. The State of Pennsylvania seeded the program with a $30 million grant, which The Reinvestment Fund leveraged with $145 million in additional investment to provide loans and grants for predevelopment, acquisition, equipment and construction costs, as well as for start-up costs such as employee recruitment and training—building or improving supermarkets and some corner stores to increase food access for families in Philadelphia.

Another program in the community setting, the City Harvest program run by the Pennsylvania Horticultural Society, receives crops from community gardens in Philadelphia that are set aside for the program, and oversees their distribution to food banks around the city. Another community program is the teenager-led countermarketing campaign, Shaping Our Health by Influencing Food Trends (SHIFT), supported by staff of the African American Collaborative Obesity Research Network. SHIFT works with teens to demonstrate the need and desire for a healthier mix of food and beverage options.

Also in the community setting, two large programs were initiated through grants from CDC to the Philadelphia Department of Health: the STEPS to a HealthierUS program and the later CPPW program. Through CPPW, the Philadelphia Department of Health implemented Get Healthy Philly, working in concert with many partner organizations to implement programs to improve nutrition and physical activity across the city. In addition to these programmatic efforts, a number of relevant policies also were implemented or attempted in the Philadelphia community setting. In February of 2007, a ban was passed on the use of oil containing more than half a gram of trans fat per serving in restaurants and other venues, including cafeterias in schools and businesses, mobile food vending carts, senior and child care centers, hospitals, and street fairs. Also, in January of 2010, Philadelphia's menu labeling ordinance went into effect, requiring chain restaurants or retail food establishments with 15 or more locations (locally or nationally) to post nutritional information for all food or beverage items listed for sale on their menus, menu boards or food tags. Finally, though unsuccessful, an attempt in May 2010 to pass a soda tax of between three-quarters and two cents per ounce on sugary beverages was noted by respondents as having raised awareness and dialogue on the impact of sugar-sweetened beverages on health.

STRATEGIES TARGETING POPULATIONS EXPERIENCING HEALTH DISPARITIES

In Philadelphia, many of the strategies implemented to address nutrition or physical activity, though not specifically targeting populations experiencing health disparities, would by design reach these individuals. As an example, among the strategies of focus, both the Universal Feeding Program and

the ERN Nutrition Education Program were designed to reach students in schools with majority low-income populations eligible for free or reduced-price lunch. As noted in the description of the Universal Feeding Program, a 2006 Reinvestment fund socioeconomic study found that 79.6% of students in the surveyed households were eligible for subsidized meals. Similarly, the ERN Nutrition Education Program is implemented for all students in grades K-12 in schools where 50% or more of the student population is eligible to receive free or reduced-price lunches.

Broad policy changes also would have reached students experiencing health disparities. For instance, the ban on sugary drinks in schools and nutritional components of the comprehensive districtwide school wellness policy (including a switch from 2% to 1% and skim milk), would have reached those participating in the National School Lunch Program and the School Breakfast Program.

Similarly, the Healthy Corner Store Initiative has been implemented in corner stores in low-income areas. During the Healthy Corner Store Initiative pilot in 2004, 24 stores were targeted near public schools where 50% or more of the students were eligible for free and reduced-price lunches. Now, 92% of participating corner stores are located in 25 high-priority, low-income ZIP codes. Also, initiatives of the PUFFA program primarily target high-poverty areas in West and South Philadelphia, with substantial Asian, Mexican, and African-American populations.

In addition to the strategies of focus, many other initiatives implemented in Philadelphia, particularly those in the school and community settings, would by design reach individuals in low-income areas. For example, the HYPE initiative uses tools like hip-hop, social marketing, and special events to engage youths through school leadership councils and to reach youths citywide, with more intensive programming in underserved areas.

In the community setting, several initiatives address individuals in low-income areas. The Food Trust's Philly Food Bucks program, for example, provides coupons for fresh fruits and vegetables at farmers' markets specifically to those using SNAP benefits. The City Harvest program provides donated crops to Philadelphia food banks. The SHIFT program works with students in predominately African-American communities. The Philadelphia Department of Public Health's STEPS program and more recent Get Healthy Philly initiative also were focused on people most burdened by chronic diseases, with intervention areas including those with a high proportion of racial/ethnic minority groups. In the STEPS program intervention area, 28% of residents lived below the FPL. Also, several of the projects of Get Healthy Philly were implemented in low-income areas, such as opening 10 new farmers' markets in low-income neighborhoods and piloting healthy produce carts in neighborhoods that lacked healthy food access. Further, the Fresh Food Financing Initiative provides grants and loans to encourage the development of supermarkets and other retail to provide fresh foods specifically in underserved areas identified through Limited Supermarket Access studies by The Reinvestment Fund. These studies define underserved areas as those in a low- or moderate-income census tract, an area of below average supermarket density, or an area having a supermarket customer base with more than 50% living in a low-income census tract or other area demonstrated to have significant access limitations due to travel distance.[23] One such study found that 133,019 people in Philadelphia lived in

[23] The Reinvestment Fund. (n.d.). *Fresh food financing initiative program guidelines.* Retrieved from www.trfund.com/healthy-food-financing-guidelines/. May 13, 2015

areas without easy access to healthy options in 2013, a decrease of 56% from 2005, when 301,397 lived in areas with limited supermarket access.[24]

[24] The Reinvestment Fund. (2015). 2014 *analysis of limited supermarket access: Summary brief.* Retrieved from http://www.trfund.com/wp-content/uploads/2015/04/LSA-2014-Summary_Final.pdf. May 13, 2015

IV. DISCUSSION

SCOPE AND SETTINGS OF STRATEGIES

A large number of strategies were implemented across all settings in Philadelphia prior to, during, and following the period of the noted declines. Strategies in the ECE setting included those with broader reach such as the Keystone STARS) program that provides certification levels for child care providers and includes environment rating and tips for increasing activity and nutrition guidelines. There also were more localized initiatives in the ECE setting among, for example, individual child care centers working to improve the nutritional quality of meals served to their children. In the hospital setting, we learned about a number of breastfeeding initiatives being championed both by individual physicians and by nonprofit groups focused on maternal and child care. Specific programs also were implemented in hospitals to reach overweight and obese children and provide behavioral and medical intervention.

In the community setting, a large number of strategies were implemented to improve the food environment and increase access to healthy options. These include efforts such as the Healthy Corner Store Initiative working to improve offerings particularly in corner stores near schools in low-income areas. The Fresh Food Financing Initiative and the Philly Food Bucks program in farmers markets also were substantial efforts to improve the food environment in low-income areas in Philadelphia. The menu labeling initiative also had broad reach, requiring chain restaurants or retail food establishments with 15 or more locations to post nutritional information for all their food or beverage items. In addition to working to increase access to healthy options, those in Philadelphia also worked to limit the presence of unhealthy options. Though not successful, the effort to pass a tax on sugar-sweetened beverages and the associated media and discourse were noted by respondents as being significant as they raised awareness among Philadelphia residents of the potential harms of added sugars.

Many strategies also were implemented to improve the food environment and increase access in the school setting. The policy change associated with the Universal Feeding program increased access for thousands of students by allowing for free and reduced-price lunches (and eventually breakfasts) for all students in over 200 eligible schools. As national policies mandated improvements in the quality of foods served in schools, many more children were reached under the umbrella of universal feeding. A comprehensive districtwide school wellness policy, an associated ban on sugary drinks in schools, the limiting of milk to 1% and skim, a ban on deep fryers—all of these initiatives improved the food environment in Philadelphia public schools. These efforts also were complemented for students through community efforts like the Out of School Time program and the PUFFA initiative, which brought attention to physical activity as well as improved nutrition.

Notably, childhood obesity was not a central focus for all of the strategies. For the USDA Universal Feeding Program, for example, assuring food security for low-income children was a core concern. Many of the strategies implemented in community settings also had other health promotion and wellbeing goals. For example, Philly Food Bucks also addressed food security, the PUFFA program addressed youth leadership, and the Fresh Food Financing Initiative worked to promote economic stability as well as providing options for healthier foods in low-income communities. In this way, childhood obesity prevention efforts were integrated into other health promotion and wellbeing goals.

Nature of Declines Identified

The declines in rates of childhood obesity in Philadelphia were observed among minority as well as white children. Declines in obesity and severe obesity were significant for Hispanic girls and for African-American and non-Hispanic white boys, and in obesity only for Asian boys. In a later study examining rates through the 2012–2013 school year, the significance dissipated for girls, particularly for Hispanic girls, among whom slight increases were found. Researchers did, however, find similar significant declines in rates of obesity and severe obesity for African-American, non-Hispanic white and Asian boys. Noting that the observed declines occurred in school-aged children in public schools, it is valuable to consider the scope, settings, and target audiences of the strategies implemented as described in the section above.

Examining Health Disparities

Many of the strategies implemented in Philadelphia were able to reach individuals from groups experiencing health disparities. Both the Universal Feeding Program and the ERN Nutrition Education Program were designed to reach students in schools with majority low-income populations eligible for free or reduced-price lunch. And as Universal Feeding brought more students into the school lunch and breakfast programs, broad policy changes to improve the quality of those meals, such as the ban on sugary drinks in schools and nutritional components of the comprehensive districtwide school wellness policy, also would reach low-income students.

A large number of community strategies also were implemented with a specific focus on neighborhoods in geographic areas with greater health disparities. Corner stores participating in the HCSI are primarily sited in low-income ZIP codes. Philly Food Bucks specifically reaches those using SNAP benefits with coupons for fresh fruits and vegetables at farmers markets. Further, the Fresh Food Financing Initiative provides grants and loans to encourage development of supermarkets and fresh food access specifically in underserved areas.

The Philadelphia Department of Public Health's STEPS program and more recent Get Healthy Philly initiative also were focused on people most burdened by chronic diseases. The intervention area defined for STEPS was predominately low income, and several of the projects undertaken as part of Get Healthy Philly were implemented in low-income areas.

Through this combination of efforts targeting those in communities experiencing health disparities, the work in Philadelphia may have encountered some success in beginning to address childhood obesity among minority children.

Cross-Sector Collaboration

One theme that emerged clearly in the interviews is the presence of cross-sector collaborative partnerships in the work that has been underway in Philadelphia. Multiple interviewees described working in partnership with others to pursue grants and to implement specific initiatives. Though there generally was a leading or convening organization, partnerships seemed to include representation from sectors such as health, nonprofit, education, parks and recreation, nutrition, academia, health care, government, industry, and others. With these partnerships, initiatives were able to obtain varying types of support—from political support when needed for funding or to establish policies, to institutional support in schools or ECE settings, to industry support for implementing some strategies

such as Fresh Food Financing, to academic support for evaluating initiatives and analyzing data, to community support to implement initiatives and to support and sustain them.

Interviewees talked about this collaboration and its benefit as well. One interviewee described the important consistency in messaging that comes from working collaboratively, noting that people were blanketed through the continuity of consistent messaging. This was considered key, and the connection among partners enabled the messaging to be consistent, making it difficult for the audience to miss the messaging.

Another interviewee described that everyone across the various community groups had a role in the effort, from The Health Promotion Council to The Food Trust to groups like Farm to City and Fair Food and Common Market. As this interviewee described, everyone worked together, and every group worked on its own niche.

STUDY LIMITATIONS

While the Philadelphia site visit illuminated many policies and strategies that likely impacted obesity declines among school-aged children, some factors associated with the data collection and analysis do create limits to consider with respect to the study's findings. First, this study was exploratory in nature and could not explore causal relationships. That is, through interviews, policy scans, and document reviews many items emerged that likely impacted childhood obesity declines in Philadelphia, but the study methods do not allow for drawing direct causal conclusions about what led to those declines. Further, snowball sampling and a limited timeframe meant that the study team was limited in how many individuals could be engaged to complete the inventory worksheet and to be interviewed during the study period. Our team was only able to speak to a small subset of the hundreds of individuals in the public, private, and nonprofit sector who likely played a role in advancing changes that brought about obesity declines.

Also, the information gleaned from this study is likely only characteristic of the types of policies, strategies, challenges, and facilitators related to combating obesity declines in Philadelphia. Despite the wealth of data acquired before, during, and after the site visit, this information cannot be considered comprehensive. Finally, a great deal of the information collected was retrospective. Interviewees responded to the best of their abilities as to strategies undertaken 5 to 15 years prior, but their memories may not always be complete or precise when it comes to the specifics and timeframe of developing and implementing various strategies. When possible, the study team used documented reports to try to confirm details and timing of policy changes and strategy implementation.

V. CONCLUSION

Over the course of time reviewed for this study, a broad array of initiatives, policies, and programs were implemented in Philadelphia that may have influenced the observed declines in childhood obesity rates. These initiatives occurred at multiple levels with influences from policies being implemented at the national and State levels to complement those being implemented locally across the city and within specific neighborhoods. These local initiatives also were implemented across settings, with activities in schools, communities, hospitals, and in early care and education facilities. Those working to improve nutritional quality and increase access and to ensure greater opportunities for physical activity worked in tandem to reach the target population. Partners often overlapped across initiatives, working together in close accord and with consistent messaging and goals. The collaboration across sectors, the multilevel and multicomponent approaches taken to blanket parents and children with health promoting messages, and the strategic policy and environmental interventions championed to facilitate healthy physical activity and nutritional choices—these, respondents say, were likely factors leading to the decline in obesity rates seen among Philadelphia school children.

Philadelphia's accomplishment is of interest to others in particular because of the declines attained among minority children. Obesity declined from 21.5% to 20.5% between the 2006–2007 and 2009–2010 school years—one percentage point, representing a 4.8% relative decrease (7.7% for severe obesity). Declines in obesity and severe obesity were significant for Hispanic girls and for African-American and non-Hispanic white boys, and in obesity only for Asian boys. In a later study examining rates through the 2012–2013 school year, though the significance dissipated for girls and even started to increase for Hispanic girls, researchers found similar significant declines in rates of obesity and severe obesity for African-American, non-Hispanic White and Asian boys. In considering what may have made the difference in Philadelphia among minority children, those with a broad perspective of the range of work that took place in the city highlighted three initiatives as seeming more likely to have had an impact: the Universal Feeding Program, the ERN Nutrition Education Program, and the comprehensive wellness and nutrition policy in schools. Each of these initiatives reached either all public school students or the public school students who were potentially at the greatest risk of obesity and obesity-related illness. These three initiatives that took place in schools add to the many that occurred across Philadelphia communities to increase awareness of and access to higher quality nutrition for low-income individuals and families.

Motivations for implementing the varied initiatives that improved the nutrition and physical activity environment varied. While some did have reduction in childhood obesity in the front of their minds, others wanted to improve academic performance, create jobs and economic security, or simply address disparities in quality of life. Champions emerged in many places for individual initiatives and for broader policy and systemic changes. In the city of brotherly love, they worked to make underserved children a priority. Those in the city stood up when needed—whether against government or industry—to defeat policies and practices that might cause harm, and to defend those that would protect and promote the health of Philadelphia school children.

APPENDIX A: CHILDHOOD OBESITY DECLINES PROJECT EXPERT PANEL MEMBERS

Childhood Obesity Declines Expert Panel Members	
Name	**Organization**
1. Rachel Ballard-Barbash	National Cancer Institute, National Institutes of Health
2. Nisha Botchwey	School of City and Regional Planning, Georgia Institute of Technology
3. Bridget Catlin	Population Health Institute, University of Wisconsin
4. Allen Cheadle	Center for Community Health & Evaluation, Group Health Research Institute
5. Jamie Chriqui	Institute for Health Research and Policy, University of Illinois at Chicago
6. Patricia Crawford	School of Public Health, University of California, Berkeley
7. Christina Economos	Friedman School of Nutrition Science and Policy, Tufts University
8. Karen Glanz	Perelman School of Medicine, University of Pennsylvania
9. Shiriki Kumanyika	Perelman School of Medicine, University of Pennsylvania
10. Cathy Nonas	New York City Department of Health and Mental Hygiene
11. Punam Ohri-Vachaspati	Arizona State University
12. Debra Rog	Westat
13. Brian Saelens	Seattle Children's Hospital
14. Jay Variyam	Economic Research Service, U.S. Department of Agriculture
15. Sallie Yoshida	The Sarah Samuels Center for Public Health Research & Evaluation

APPENDIX B. CONTEXTUAL DATA

DEMOGRAPHIC CONTEXT

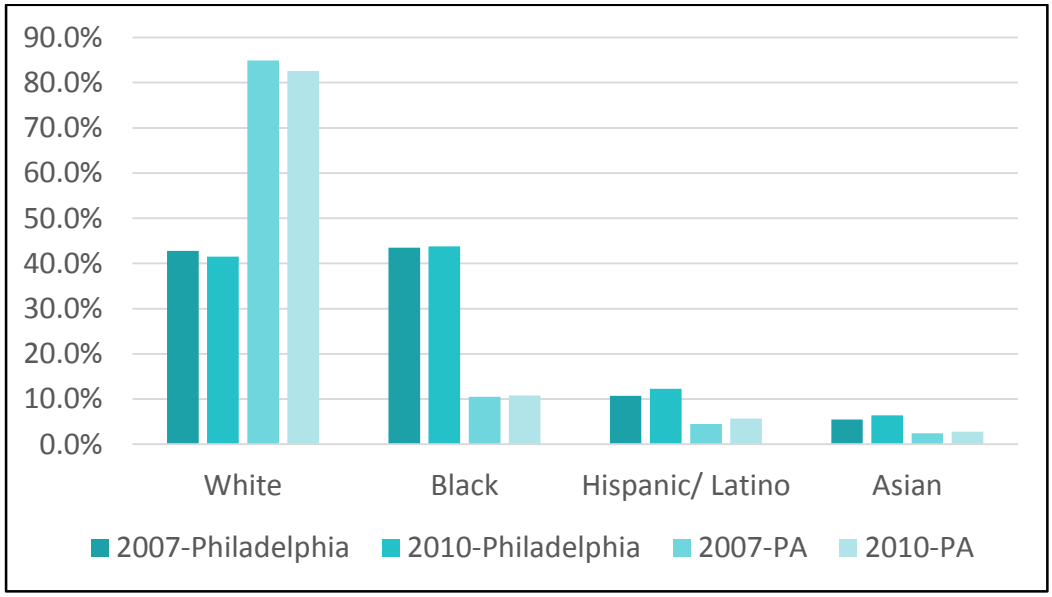
The ICF Macro team collected county-level sociodemographic data for the baseline and follow-up years of Philadelphia's timeline—2007 and 2010, respectively. The data gathered prior to the site visit was helpful to better understand contextual factors in the community that may affect the population and any changes in health outcomes. Variables collected include basic demographics such as total population, race/ethnicity, educational attainment, unemployment rate (adults 20–64), percentage living below the FPL (aged 18–64) and percentage of adults without health insurance (aged 18–64). To establish a baseline and follow-up, 2007 and 2010 demographic data were taken at the county level from the U.S. Census American Community Survey.

The data presented below in Table B1 and Figure B1 provide a snapshot of the demographic shifts that took place in Philadelphia between 2007 and 2010 as compared with the state of Pennsylvania overall.

Table B1: Philadelphia and Pennsylvania Demographic Data, 2007 and 2010

Demographic Variable	Philadelphia		Pennsylvania	
	2007	2010	2007	2010
Population	1.44 million	1.53 million	12.4 million	12.7 million
Unemployment	10.7%	15.8%	5.2%	8.9%
Living below poverty	23.8%	26.7%	10.6%	12.7%
No health insurance	Not available	20.9%	Not available	14.3%
High school diploma or less	57.3%	53.5%	47.0%	44.8%

Figure B1: Philadelphia and Pennsylvania Population Percentage by Race/Ethnicity, 2007 and 2010



American Indian/Alaska Native:
0.2% (2007-Philadelphia), 0.3% (2011-Philadelphia)
0.1% (2007-PA), 0.2% (2011-PA)

NUTRITION AND PHYSICAL ACTIVITY CONTEXT

ICF Macro also collected food and physical environment data for 2007 and 2010 to provide a more comprehensive snapshot of Philadelphia at the project baseline and follow-up years. Environmental data related to the food environment and physical activity environment were largely compiled from County Business Patterns (CBP),[1] an annual series producing economic data by industry with business categorized according to the North American Industry Classification System. To establish a measure of the food and physical activity environment, we extracted data for the following categories: grocery store,[2] convenience store (including gas stations with convenience stores),[3] fruit and vegetable markets,[4] full service restaurants,[5] limited service restaurants,[6] and fitness/recreation centers.[7] The number of establishments by type was documented for 2007 and 2010 and divided by the total population county to arrive at the number of establishments per 1,000 residents. In addition to data from the Census CBP, we also assessed the number of farmers markets in the area and the payment method accepted using data of the United States Department of Agriculture's Farmers Market Directory.[8] Data were not available retrospectively, so numbers reflect the number of farmers markets in the area as of 2014. Lastly, we used data from the County Health rankings to capture the percentage of county residents with access[9] to recreation opportunities. These data were only available for 2014.

The food environment data suggests an overall increase in the availability of food-related establishments from 2007 to 2010, as indicated in Table B2 below.

Table B2: Philadelphia Food Environment, 2007 and 2010

Store Type	Establishments 2007	Establishments 2010
Grocery store	627 0.43 per 1,000 residents	705 0.46 per 1,000 residents
Convenience stores (with and without gas stations)	339 0.23 per 1,000 residents	347 0.22 per 1,000 residents
Fruit and vegetable markets	24 0.02 per 1,000 residents	22 0.01 per 1,000 residents
Full service restaurants	992 *0.86 per 1,000 residents*	988 *0.65 per 1,000 residents*
Limited service restaurants	1144 *0.79 per 1,000 residents*	1281 *0.84 per 1,000 residents*

[1] U.S. Census Bureau. (n.d.). *County business patterns.* Retrieved September 17, 2015, from http://www.census.gov/econ/cbp/.
[2] Establishments generally known as supermarkets and grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food.
[3] Establishments known as convenience stores or food marts primarily engaged in retailing a limited line of goods that generally includes milk, bread, soda, and snacks.
[4] Establishments primarily engaged in retailing fresh fruits and vegetables.
[5] Establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating.
[6] Establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to customers' location.
[7] Establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.
[8] U.S. Department of Agriculture, Agriculture Marketing Services. (n.d.). *National Farmers Market Directory—2014*. Retrieved September 14, 2015, from http://www.ams.usda.gov/local-food-directories/farmersmarkets.
[9] Access is defined as living in a census block that is within 0.5 miles of a park, within 1 mile of a recreation facility in urban areas, or within 3 miles of a recreation facility in rural areas.

Farmers Markets	
51 as of 2014	75% accepting SNAP, 76% accepting WIC, and 67% accepting both SNAP and WIC

Physical activity environment access data, presented in Table B3 below, suggest an overall maintenance in the availability of fitness centers from 2004 to 2011, 0.06 per 1,000 residents in 2007 and 0.06 per 1,000 residents in 2010. In 2013, 100% of Philadelphia residents had access to at least one recreation opportunity.

Table B3: Philadelphia Physical Activity Environment, 2007 and 2010

Type of Physical Activity Environment Available	Establishments 2007	Establishments 2010
Availability of Fitness Centers	0.06 per 1,000 residents	0.06 per 1,000 residents
Recreational opportunities		
100% of Philadelphia residents lived within 1 mile of at least one recreation opportunity.		

APPENDIX C. INTERVIEWEES AND TITLES

Site visitors conducted a total of 22 interviews with 23 people. On average, the interviews lasted approximately 1 hour. Below is a list of the interviewees for Philadelphia and their titles at the time of the interviews.

Interviewee	Title
1. Dr. Donald Schwarz	Former Philadelphia Health Commissioner and Deputy Mayor for Health and Opportunity
2. Vanessa Briggs	Health Promotion Council, Director
3. Dr. Shirley Huang	Healthy Weight Program, the Children's Hospital of Philadelphia, Nutrition Pediatrician
4. Amy Virus	Division of Food Services, School District of Philadelphia, Manager, Administrative and Support Services
5. Bette Begleiter	Maternity Care Coalition, Deputy Executive Director
6. Sara Vernon Sterman	The Reinvestment Fund, Chief Lending Officer
7. Particia Smith	The Reinvestment Fund, Senior Policy Advisor
8. Dr. Giridhar Mallya	Philadelphia Department of Health, Director of Policy and Planning
9. Kathy Fischer	Coalition Against Hunger, Policy Manager
10. Vicki Lassiter	African American Collaborative Obesity Research Network, Executive Director
11. Libyy Ungvary	Pennsylvania chapter of American Academy of Pediatrics, Director of Early Childhood Linkage Education System (ECELS)
12. Dr. Gail Herrine	Temple University Hospital, Assistant Director of OB/GYN and Medical Director of Postpartum Unit
13. Dottie Schel	Philadelphia chapter of American Academy of Pediatrics, Director of Breastfeeding Education, Support and Training (BEST)
14. Mary Graham	Children's Village, Executive Director
15. Sandy Sherman	The Food Trust, Director of Nutrition Education
16. John Weidman	The Food Trust, Deputy Director
17. Jackie Metzler	Federation Early Learning Services, Vice President, Programs
18. Robin Rifkin	Health Promotion Council, Program Manager
19. Natalie Renew	Southeast Regional Key, Public Health Management Corporation, Director
20. Beth Alarcon	School District of Philadelphia Office of Early Childhood, Nutrition Coordinator
21. Susan Aichele	School District of Philadelphia Office of Early Childhood, Health Coordinator
22. Bettyann Creighton	School District of Philadelphia, Director of Health and Wellness
23. Dr. Gary Foster	Weight Watchers, Chief Scientific Officer

APPENDIX D: PENNSYLVANIA CHILDHOOD OBESITY POLICIES, 2003–2013

Year	Policy Name/ Number	Description
2003	House Resolution No. 183, Physical Education and Sports Week	Observes May 1–7th as National Physical Education and Sports Week and the month of May as National Fitness and Sports Month in Pennsylvania. Encourages the residents of Pennsylvania to participate in the Great Pennsylvania Workout by compiling the number of minutes they are physically active the week of April 28 through May 2, 2003, and reporting those minutes to their local district office of the Department of Health. They are then acknowledged at the Great Pennsylvania Workout, May 7, 2003.
	PA HR 13 (enacted)	Directs the Committee on Health and Human Services to investigate and consider problems associated with lack of supermarkets in urban and underserved communities in Pennsylvania and to report to the legislature within 8 months.
2004	House Resolution 821	Memorializes the United States Congress to pass the Farm-To-Cafeteria Projects Act of 2003 and other projects that (1) assist schools in purchasing locally grown food, and (2) expand market opportunities for local farms.
	PA SB 1026 (enacted)	Provides economic development financing that may be used, among other purposes, to encourage the development of supermarkets in underserved areas throughout the State, including urban and rural communities.
	PA HR 770 (enacted)	Urges the United States Department of Agriculture to reconsider its recent policy change relating to Pennsylvania's Nutrition Education Program and to recognize that food provided to low-income households may properly be considered nutrition education when used to reinforce or replicate a nutrition lesson.
2005	24 Pa. Cons. Stat. § 5-504.1, Competitive food or beverage contracts	A board of school directors of a school district or any of the schools under its jurisdiction shall not enter into an exclusive competitive food or beverage contract unless the board of school directors provides reasonable public notice or holds a public hearing about the contract. A board of school directors or any of the schools under its jurisdiction shall not enter into any contract prohibiting a school district employee from disparaging the goods or services of the party contracting with the board of school directors.
	House Resolution 442	Recognizes Penn State Nutrition Links and the help it provides children, youths, adults, and families in attaining healthy eating practices.
	HR 57 (enacted)	Resolution observing May 1–7, 2005 as National Physical Education and Sports Week in Pennsylvania.
2006	PA HB 185 (2006, enacted, Act 114)	Among other provisions related to local wellness policies and nutritional guidelines for food and beverage sales in schools, provides that the Pennsylvania Child Wellness Plan shall include recommendations for "teaching about nutrition and obesity." Directs the secretary of education to establish an interagency coordinating council for child health, nutrition and physical education. Provides for and directs the department of education to establish a clearinghouse of wellness policies and information, and for other duties of the department of education and for physical education. Provides for physiology and hygiene. Provides for competitive food or beverage contracts and for nutritional guidelines for food and beverage sales in schools. Provides for

Year	Policy Name/ Number	Description
		certain health services and for advisory health councils. Provides for local wellness policies and directs the department of education to establish a clearinghouse of wellness policies and information, for an interagency coordinating council for child health and nutrition, for other duties of the department of education and for physical education. Provides for physiology and hygiene.
2007	Healthy Farms and Healthy Schools Act	Provides for the Healthy Farms and Healthy Schools Program. Authorizes the Department of Agriculture in consultation with the Department of Education and the Department of Health, to establish a program to award grants for the purpose of developing the Healthy Farms and Healthy Schools Program in kindergarten classes. Provides for eligibility of any school, district, or charter school.
	24 Pa. Cons. Stat. § 13-1337.1, School lunch and breakfast reimbursement	Requires the establishment of a school nutrition incentive program to provide a supplemental school lunch and breakfast reimbursement to any school that has adopted and implemented the nutritional guidelines for food and beverages available on each school campus.
	House Bill 4141	Appropriates monies to (1) incorporate obesity prevention programs, including nutrition and wellness programs, in school curricula; and (2) the Childhood Obesity School Nutrition Pilot Project.
	PA HR 244 (2007, resolution adopted)	Observes May 1–7, 2007, as National Physical Education and Sports Week and the month of May 2007 as National Physical Fitness and Sports Month in Pennsylvania.
2009	22 Pa. Code § 4.20, Pre-Kindergarten Education	Amends rules concerning pre-kindergarten counts, requirements, standards and procedures. Participation includes time spent in physical education.
	24 Pa. Cons. Stat. § 14-1422.1, Local wellness policy	Amends the Public School Code of 1949. Includes initiatives to promote nutrition and physical activity in children and provisions to publish recommended nutritional guidelines for food and beverages sold in schools.
	Child Day Care Centers 55 Pa. Code § 3270; Group Child Day Care Homes 55 Pa. Code § 3280; Family Child Day Care Homes 55 Pa. Code § 3290	These chapters are promulgated to facilitate the safe and healthful care of a child in a child day care center (or group child day care home, or family child day care home) and to support families by providing care that promotes the emotional, cognitive, communicative, perceptual-motor, physical and social development of the child. The purpose of this chapter is to provide standards to aid in protecting the health, safety, and rights of children and to reduce risks to children in child day care centers. This chapter identifies the minimum level of compliance necessary to obtain the department's certificate of compliance.
2010	PA HB 174 (enacted)	Provides for food safety standards to include school cafeterias. Requires schools and organized camps to cooperate in conducting cafeteria health and safety inspections and to participate in inspection services and training programs.

Year	Policy Name/ Number	Description
2011	House Bill 1485 (enacted)	Appropriates $3,327,000 from the State's general fund to the School Nutrition Incentive Program, among other appropriations for the Fiscal Year 2012 State budget. Appropriates funds for various programs, including the National School Lunch program and other school nutrition programs, the emergency food assistance program, the Farmers Market Food Coupons, Senior Farmers Market Nutrition, a number of agricultural programs, food marketing and research, a food program for needy children, a nutrition program for the aging, traffic control and safety, and State parks operations.
2012	PA HB 1901 (enacted)	Among other school finance provisions, continues to provide a 10 cent per school meal reimbursement from the State. Provides an additional incentive reimbursement of 2 cents per meal for schools that serve both school breakfast and lunch if less than 20% of students participate and 4 cents per meal if more than 20% of students enrolled are served by both school breakfast and lunch programs.
2013	House Resolution 243, Commission to Study Childhood Obesity	Recognizes childhood obesity as an epidemic and establishes a joint 25-member government commission, including a licensed dietician-nutritionist, to make policy recommendations to prevent and control childhood obesity to the House of Representatives
	House Resolution 28, National Nutrition Month	Recognizes the month of March 2013 as National Nutrition Month in Pennsylvania, and encourages all citizens to join the campaign for good nutrition and to become concerned with their nutrition and the nutrition of others.
	PA HR 243 (resolution adopted)	Directs the Joint State Government Commission to establish a multidisciplinary advisory committee to conduct a comprehensive study of childhood obesity, to propose strategies for healthier eating and physical activity for children and to report to the House of Representatives with its findings, recommendations and legislation within 12 months. Notes that the Pennsylvania Department of Health reports that 32.6% of children in kindergarten through grade 6 and 34.1% of children in grades 7 through 12 in the State are overweight or obese.

APPENDIX E: PHILADELPHIA MATRIX OF STRATEGIES

Name of Strategy	Focus Area				Setting			Type		
	ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
Universal Feeding pilot (broadly increasing access to free and reduced-price lunch)		X			X			X	X	
EAT.RIGHT.NOW. program using SNAP-Ed funding to provide nutrition education in schools		X			X			X		
Ban on sugary drinks in schools		X			X				X	
Comprehensive, districtwide school wellness policy (including switch from 2% to 1% and skim milk; deep fryer ban)		X			X	X			X	
Out of School Time program			X		X	X		X		
Healthy Corner Store initiative			X		X		X	X		
Philadelphia Urban Food and Fitness Alliance			X		X	X		X		
Pennsylvania farm-to-school initiative		X	X		X		X	X		
Healthy Farms and Healthy Schools grant program		X	X		X		X	X		
Students Run Philly Style			X			X		X		
Healthy You. Positive Energy. (HYPE) campaign and youth leadership initiative			X		X	X		X		X
Pennsylvania Keystone Standards, Training/Professional Development, Assistance, Resources and Support (STARS)	X				X	X	X	X		
Early Childhood Education Linkage System (ECELS)	X				X	X		X		
I am Moving, I am Learning	X				X	X		X		
Children's Village Center nutrition program	X				X			X		
Breastfeeding, Education, Support & Training (BEST) program				X	X			X		
Educating Practices/Physicians in their Communities (EPIC) program				X	X			X		
Breastfeeding Friendly Philadelphia program				X	X			X		
EPIC Pediatric Obesity Program				X	X	X		X		
Fresh Rx: A Prescription for Health conference (Saint Christopher's Hospital for Children)				X	X	X		X		
Healthy Weight Program (Children's Hospital of Philadelphia)				X	X	X		X		

Name of Strategy	Focus Area				Setting			Type		
	ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
Philly Food Bucks			X		X			X		
Fresh Food Financing Initiative			X		X			X		
City Harvest Program			X		X		X	X		
Shaping Our Health by Influencing Food Trends (SHIFT) program			X		X			X		
STEPS to a Healthier US			X		X	X	X	X	X	
Communities Putting Prevention to Work (CPPW) Get Healthy Philly program (of the Philadelphia Department of Health)	X	X	X	X	X	X	X	X	X	X
Ban on trans fats		X	X		X				X	
Restaurant menu labeling			X		X				X	
Attempted soda tax (and accompanying media campaign)			X		X				X	X