Los Angeles County Department of Public Health

Healthy Eating and Physical Activity Opportunities at Child Care Settings in Los Angeles County

Findings from Choose Health LA Child Care Observational Assessments

Submitted to:

Los Angeles County Department of Public Health

Early Childhood Obesity Prevention Project

Choose Health LA Child Care

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SARAH SAMUELS CENTER
FOR PUBLIC HEALTH
RESEARCH & EVALUATION

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Executive Summary

Background

The Los Angeles County Department of Public Health's Choose Health LA Child Care program (CHLACC) is part of a countywide initiative to prevent early childhood obesity. Early childhood is a critical period for developing lifelong health habits and child care settings are a strategic venue for obesity prevention. CHLACC aims to improve nutrition and physical activity (PA) practices in child care settings by providing training and coaching to licensed center and home providers to create and adopt nutrition and PA policies. Our research sought to understand ways in which nutrition and/or physical activity policy, practices, and environments changed as a result of the training and coaching provided as well as examine barriers and facilitators child care providers experienced in promoting nutrition and physical activity.

Methods

Onsite observational assessments identified changes to food and physical activity environments and meal-related practices and behaviors of child care staff and children. Sixty-five three-hour matched pre- and post-observational assessments were conducted November 2014 – August 2016 with providers who received training and coaching. A 20-minute pre- and post- provider interview accompanied each observation to examine changes in policies and practices and explore barriers and facilitators. A $100 incentive was provided for each observation. Cross tabulations, independent and paired-sample *t*, and McNemar's tests were performed to examine associations and assess change over time. A thematic analysis approach was used to process the qualitative data and identify key themes shared by child care providers.

Results

Child care providers reported improvements in physical activity and healthy eating knowledge and behavior both in themselves and among the children in their care. There were noted increases in produce growing areas, staff encouragement for trying new/healthy foods, family-style meal delivery with children self-serving, and in the serving of dark colored vegetables and whole grains. Other improvements included increases in physical activity materials visible to children, increases in structured physical activity among children, and increases in staff modeling and participation in structured physical activity. Barriers were identified, such as perceived cost of substituting healthier foods in place of nutrient-deficient snack options, limited funds for additional physical activity equipment and resources, inclement weather, and working with challenging parents. Key recommendations for building on the CHLACC program

included increasing the capacity of providers to engage child care staff and parents and the need for more and regular coaching and networking opportunities.

Conclusions

The CHLACC program, as delivered by trained coaches, results in improved nutrition and physical activity policies, practices, and environments. Child care providers can improve the healthful eating and physical activity knowledge and behavior of children in their care through strategic policies and practices and development of supportive environments. With continued training and tailored coaching, providers are well-positioned to help effectively establish healthy eating and physical activity habits early in life, which can have a powerful impact in the effort to prevent childhood obesity.

Introduction

Choose Health LA Child Care Program and Goals

Choose Health LA Child Care (CHLACC) is a component of the Early Childhood Obesity Prevention Initiative, a five-year initiative administered by the Los Angeles County Department of Public Health (DPH) and funded by First 5 LA to improve nutrition, increase physical activity, and reduce obesity in Los Angeles County children aged zero to five and their families. The goals of CHLACC is to (1) reduce the prevalence of overweight and obesity among children in child care; (2) improve nutrition and physical activity practices in child care through the creation and adoption of wellness policies; (3) identify barriers that child care providers face in their efforts to promote good nutrition and active play; and (4) promote development of healthy habits early in life.

CHLACC Training and Coaching Curricula

The CHLACC training and coaching curricula were designed to improve physical activity and nutrition policies and practices in child care sites and was informed by a review of standards and best practices for obesity prevention targeting early care and education settings (e.g., Nemours, The National Resource Center for Health and Safety in Child Care and Early Education, The Institute of Medicine, USDA standards, California's Healthy Beverages in Child Care Act*, and others) [1]. The CHLACC evidence-based curricula were utilized to teach child care providers (i.e., licensed child care centers, licensed family child care providers, and license-exempt child care providers) how to develop nutrition and physical activity policies and implement health related activities in their facilities. The two-hour training curriculum included the following topics: breastfeeding, food and drinks, physical activity, screen time, and environment and policy. The coaching component consisted of one-on-one support and technical assistance to child care providers, which served to reinforce concepts taught in the training and foster the creation and adoption of nutrition and physical activity program or policy changes.

* AB 2084, the Healthy Beverages in Child Care Act, took effect in January 1, 2012 and requires all licensed child care centers and family day care homes to comply with healthy beverage standards.

CHLACC – A Los Angeles County-wide Intervention

To implement CHLACC workshops and support the program evaluation, DPH partnered with the Child Care Resource Center (CCRC), one of the 10 agency member organizations comprising the Child Care Alliance of Los Angeles ("the Alliance"), a network of non-profit agencies that provides child care resource and referral services to all areas of Los Angeles County. CCRC collaborated with the other members of the Alliance to collectively conduct the nutrition and physical activity workshops and provide coaching for child care providers countywide.

CHLACC Reach

- N=5,853 child care providers trained
  - 68% Licensed Centers
  - 22% Licensed Homes
  - 10% Licensed-Exempt
- N=2,323 child care providers received at least one coaching session
- N=753 child care providers received at least two coaching sessions
- N= 16,500 parents reached at events
- N=34,500 parents received print material

CHLACC Overarching Evaluation Questions

A multi-method strategy to evaluate the effectiveness of the CHLACC training and coaching involving quantitative (i.e., self-assessment policies and practices surveys and observational assessments) and qualitative (i.e., focus groups with trained providers) techniques was employed to address the following overarching evaluation questions:

1. In what ways did the CHLACC trainings and coaching affect the knowledge, attitude, and readiness to change of the child care providers to improve nutrition and physical activity environments in their child care settings?
2. In what ways have nutrition and/or physical activity policies, practices, and environments changed as a result of CHLACC?
3. What are the barriers and facilitators that child care providers face in efforts to promote healthy nutrition and physical activity?

Purpose of On-site Observational Assessments

During November 2014 – August 2016, on-site observational assessments were conducted with licensed center- and licensed home providers* to understand their experience with the CHLACC

* Licensed exempt child care providers were excluded from observations due to the limited number of license-exempt providers participating in the CHLACC program.

training and coaching model to improve nutrition and physical activity policies or practices in child care settings. The purpose of the observational assessments was to objectively measure changes in the nutrition and physical activity policies, practices, and/or environments and explore the challenges and facilitators faced by child care providers in promoting healthy nutrition and physical activity.

Methods

Sample

This study employed a non-random, convenience sample to identify eligible child care providers in Los Angeles County. A targeted quota of eligible child care providers by provider type (Licensed Center or Licensed Home) was established for each Child Care Resource and Referral Agency* serving Los Angeles County (i.e., Child Care Resource Center, Connections for Children, Crystal Stairs, Inc., Mexican American Opportunity Foundation, Options for Learning, Pathways, and Pomona Unified School District) to ensure equitable representation based on population served/density and geographic distribution across County.

To be eligible for the observational assessments, center- and home-based child care providers were licensed by the state and not contracted as a Head Start or State Preschool program, had not participated previously in any CHLACC programming and had to agree to participate in both workshop and coaching services. All licensed providers were also required to be English or Spanish speaking, provide lunch, and serve children ages three to five years. A total of 75 eligible providers agreed to participate in the on-site observational assessments. Two providers (i.e., centers) closed permanently during the evaluation period and 8 providers elected to discontinue participation following the initial baseline assessments. This evaluation presents results from 65 matched pre- and post-observational assessments (i.e., 31 licensed center- and 34 family child care providers). Each provider received a $100 gift card per observation (at baseline and follow-up).

Evaluation Design

This observational assessment study used a one-group pretest-posttest design with a quantitative and qualitative component to evaluate CHLACC's health policy, practice, and/or environmental implications [2,3]. The quantitative component (i.e., on-site observational

* The Child Care Resource and Referral Agencies (R&R) serving Los Angeles County help parents who are seeking child care and development services. The R&Rs are able to provide parents with information on child care and development centers, licensed family child care homes, and after school enrichment programs.

assessment) was designed to assess changes in nutrition and/or physical activity policies, practices, and environments. The qualitative component (i.e., interview with director/administrator) was designed to evaluate the barriers and facilitators that child care providers face in efforts to promote healthy nutrition and physical activity.

Evaluation Measures

The observational assessment was adapted from the Environment and Policy Assessment and Observation (EPAO) instrument, a validated tool for assessing the nutrition and physical activity environment in child care settings [4]. Provider visits were scheduled in advance and two 3-hour observations (i.e., one baseline and one follow-up) of the nutrition and physical activity environment were conducted by trained staff. The observation period included the lunch period and a physical activity time. Where multiple classrooms were present, the observer selected one classroom with children aged three to five years for the observations.

Aligned with the study's research interests and training curriculum concerning physical activity, the adapted observation form was used to record the (1) episodes and context of physical activity; (2) staff behavior related to physical activity (e.g., participation in structured and/or unstructured physical activity, prompts to increase physical activity); (3) whether any posters, pictures or displayed books about physical activity were visible or accessible to children; and (4) whether screens were present and used during physical activity.

With respect to nutrition, the observational assessment helped to record (1) the food and beverage components of lunch time meals observed; (2) meal service style and preparation; (3) nutrition-related staff behavior, such as providing second servings without the child asking, encouraging the child to try new foods, and drinking or eating less healthful foods in front of the children; and (4) environmental indicators such as children's access to drinking water, whether there were area(s) where produce was being grown, and presence of any nutrition-related posters, pictures, or displayed books visible or accessible to children.

The interview protocol consisted of a 20-minute on-site post-observation interview with the CHLACC-trained child care staff person. The interview questions were designed to capture the assets and challenges faced by providers in promoting nutrition and physical activity. They also explored what was most helpful about the CHLACC training and coaching including ways providers would change or improve the CHLACC training and coaching to make it more helpful or effective.

Data Analysis

Observation data were converted to frequencies and grouped into various subgroups such as lunch time staff and children behaviors, different food and beverage meal components, and

physical activity staff and child behavior observed. With respect to health promoting indicators, higher frequencies on the observational assessment represented healthier physical activity or nutrition behavior or environments at baseline and follow-up. Means and standard deviations were calculated to describe the sample and group differences. Where appropriate, baseline and follow-up observation data were compared using paired *t* and McNemar's tests. All analyses were performed using SPSS v. 21 (IBM Corp, Armonk, NY, USA). *P* values equal to or less than .05 were considered significant.

Child care provider interview notes were imported into NVivo version 10 qualitative analysis software. Research staff identified and coded themes through content analyses. Related codes were then linked to capture broad views of the participants. A second reviewer independently identified themes to control potential bias. There was high concordance among the reviewers.

This evaluation received expedited review and was approved by the Los Angeles Department of Public Health Institutional Review Board.

Results

Observed Provider Characteristics

From November 2014 through August 2016, a total of 65 child care settings (*N*=31 licensed centers; *N*=34 licensed homes) were observed. The average number of children enrolled in observed licensed centers was 77.8 (*N*=29, *SD*=97.7, range=6-392) while that of licensed homes was 9.4 (*N*=32, *SD*=4.2, range=0-18). Average enrollment in observed licensed homes was evenly distributed across children ages 0-6+ years while licensed centers primarily served children three to five years old (Appendix, Table 1).

Regarding job function, most providers (84.6%) were either an owner/operator or administrator of a program that has direct care/education of young children (Appendix, Table 2). The greatest proportion of providers (64.7%) reported English as their primary spoken language followed by Spanish (32.4%) (Appendix, Table 3). A greater proportion of licensed home providers reported Spanish as their primary spoken language compared to licensed center providers.

Over half of all observed providers reported participating in the USDA's Child and Adult Care Food Program (CACFP). Licensed home providers were more likely to participate in CACFP than licensed center providers (Table 4).

Observations, Trainings, and Coaching

Most observed providers (92.3%) received at least one follow-up coaching session (Appendix, Table 5). The number of coaching sessions received did not vary by child care category. The

number of days between the initial training session and first coaching session varied among providers from 0 to 405 days (*N*=60, *M*=72.1, *SD*=93.4, range=0-405). The number of days between the training session and second coaching session also varied widely from as little as 33 days to as much as 393 days (*N*=33, *M*=112.4, *SD*=74.5, range=34-393). Overall, the mean time between baseline and follow-up observations was over 6 months with licensed centers experiencing a greater average gap in months compared to licensed homes (Appendix, Table 6).

Key Findings

Findings from the on-site observational assessments and interviews with providers were analyzed and synthesized to answer the following evaluation questions:

1. In what ways have nutrition and/or physical activity policies, practices, and/or environments changed as a result of the CHLACC training and/or coaching provided?
2. What are the barriers and facilitators that child care providers face in efforts to promote healthy nutrition and physical activity?

In response to these evaluation questions, key findings are organized and presented separately in accordance to the following focus areas:

- ✓ Food Environment
- ✓ Staff Behavior During Lunch
- ✓ Children's Behavior During Lunch
- ✓ Foods Offered
- ✓ Food Policies and Practices
- ✓ Physical Activity Environment
- ✓ Staff Behavior During Physical Activity
- ✓ Children's Behavior During Physical Activity
- ✓ Physical Activity Policies and Practices
- ✓ Challenges to Improving Nutrition
- ✓ Challenges to Improving Physical Activity
- ✓ Recommendations for CHLACC Program Improvement

Where meaningful and/or significant, each focus area presents group differences by child care category (i.e., licensed center or licensed home). No group differences by number of coaching sessions received were observed in any focus area and thus are not presented.

Food Environment

Pertinent findings of the food environment were observed:

- Among sites with screens present (e.g., TV, computer, Smart Board, Ipad/tablet, etc.), 8.1% (3 out of 37) at baseline and 14.3% (4 out of 28) at follow-up used screens during mealtime.

    - Among sites using screens during mealtime, majority of the screen content was educational (e.g., songs about fruits and vegetables, shapes and colors, alphabet, and numbers).

- Slight increase in the number of sites displaying nutrition-related posters, pictures, or books, not sponsored by a food or beverage company, visible or accessible to children from baseline to follow-up.

    - 33.8% (22 out of 65) of sites at baseline and 38.1% (24 out of 63) of sites at follow-up displayed posters, pictures, or books about nutrition visible or accessible to children.

- All (65 out of 65) sites provided free access to drinking water throughout the day at baseline and follow-up.

- A statistically significant increase in number of sites with areas where they grow produce was observed.

    - A significantly greater proportion of sites had areas where they grow produce at follow-up (47.7%) than at baseline (30.8%) (N=65, McNemar p<.05) (Appendix, Table 7).

    - The significant increase in sites with areas where produce was grown was primarily attributed to an increase in the presence of outdoor gardens (Appendix, Table 8).

Staff Behavior During Lunch

- Most children and child care providers 75% (48 out of 64) sat together to eat lunch at most sites at baseline and follow-up 73% (46 out of 63).

- A statistically significant increase in the number of times staff encouraged children to try new/healthy foods when children were reluctant.

- The average number of times staff encouraged children to try new/healthy foods when children were reluctant was statistically significantly higher at follow-up (*M*=6.9, *SD*=3.6) than at baseline (*M*=5.6, *SD*=3.8), *t*(53)=-2.0, *p*=.04.

- 90.8% (59 out of 65) of sites at baseline and 92.3% (60 out of 65) at follow-up encouraged children to try new/healthy foods.

Example of CHLACC provider comments encouraging children to try new/healthy foods, Los Angeles County, California, 2014-2016

Baseline	*Follow-up*
"…always try something once before you say no—I'm glad you guys are trying your broccoli"	*"…try your carrots. It's healthy for you. Carrots are good for your eyes"*
"Eat your apple—the skin of the apple is good for you"	*"If you put the strawberry w/ your spinach it tastes delicious"*
"Peas are good for you. Remember we grew beans in our garden—they were good"	*"If you want to be big and strong you need to eat your beans—if you want strong bones you have to eat cheese and milk"*

- Staff modeled eating the same food and/or beverage as the children under their care at 35.4% (23 out of 65) of sites at baseline and 36.9% (24 out of 65) of sites at follow-up.

  - Staff modeled eating the same fruits, vegetables, and grains at over half the sites observed at baseline and follow-up (Appendix, Tables 9-11).

  - Staff ate or drank unhealthy items in the presence of children at 3.1% (2 out of 65) of observed sites at baseline and zero sites (0 out of 65) at follow-up.

Children's Behavior During Lunch

- A statistically significantly greater proportion of sites served the same meal to all children using "family style," allowing children to serve themselves with minimal assistance at follow-up (24.6%) than at baseline (16.9%) (*N*=65, McNemar *p*<.01) (Appendix, Table 12).

- Staff encouraged children to eat more than they intended (e.g., "clean your plate, you don't get dessert until you finish lunch") at 20.3% (13 out of 64) of sites at baseline and 17.2% (11 out of 64) at follow-up.

Example of CHLACC provider comments encouraging children to "clean their plates", Los Angeles County, California, 2014-2016	
Baseline	*Follow-up*
"…finish your plate before you play"	*"Finish your food"*
"…you have to finish, some more bites and I'll give you cantaloupe"	*"You're going to be hungry, eat or I'm going to tell your mom"*
"…you can have a cup of juice but finish all the food on your plate"	*"You need to finish your plate or your mom will be sad"*

- Children were given an average of 24 minutes to eat at baseline and follow-up, with a range of 12-44 minutes at baseline and 10-49 minutes at follow-up.

Foods Offered

Low fat milk and water were the primary beverages offered to children. Only one site did not offer the recommended nonfat or low-fat milk to all children over two years of age. Other important observations noted:

- Most sites served fresh, dried, unsweetened frozen, or fruit canned in 100% juice at baseline and follow-up (Appendix, Table 13).
    - There was no change in the mean number of unsweetened fruit served from baseline (*N*=59, *M*=1.3, *SD*=.7, range=1-4) to follow-up (*N*=58, *M*=1.3, *SD*=.7, range=1-4).
- No meaningful change over time in most sites serving non-fried vegetables (Appendix, Table 14).
    - There was no change in the mean number of non-fried vegetables served from baseline (*N*=59, *M*=2.1, *SD*=1.4, range=1-6) to follow-up (*N*=59, *M*=2.2, *SD*=1.6, range=1-8).
    - A statistically significant greater proportion of sites served dark colored vegetables at follow-up (86.4%) compared to baseline (67.7%) (*N*=58, McNemar $p<.05$) (Appendix, Table 14).
- Majority of sites served grains at baseline 92.2% (59 out of 64) and follow-up 86.2% (56 out of 65).

- The proportion of sites serving whole grain items increased from 13.6% (8 out of 59) at baseline to 40.0% (22 out of 55) at follow-up.

- Among sites where grains were served, the average number of whole grain items served was statistically significantly higher at follow-up (*M*=.4, *SD*=.5) that at baseline (*M*=.1, *SD*=.3), *t*(50)=-.2, *p*=.01.

    - The average number of whole grain items served was statistically significantly higher for licensed centers (*M*=.6, *SD*=.5) than for licensed homes (*M*=.2, *SD*=.4), *t*(49.8)=2.6, *p*=.01.

- All sites (except one at follow-up) did not serve pre-packaged or pre-proportioned foods or offered sweets on the days observed.

Foods Policies and Practices

There was slight decrease in the proportion of providers reporting having a written nutrition policy in place from 75.4% (49 out of 65) at baseline to 69.2% (45 out of 65) at follow-up. Among providers with written nutrition policies, several described having guidelines that banned certain foods (e.g., fast food) or accommodated children with food allergies (such as peanut products). Depending on the severity and frequency, sites accommodated children with allergies by preparing special lunches or alternative beverages. Other providers said they had policies that stipulated the serving size of juice (limited to a total of four to six ounces or less per day for children over one year of age) and banned outside food. Of those that did not ban outside foods, many had policies that banned outside sweets and/or provided a list of suggested healthy snacks for incorporating into birthdays and other celebrations. Several providers described developing nutrition policy statements and communicating these to parents via orientation materials, handbooks, on-site bullet boards, monthly newsletters, and/or during interactions with parents during child pick-up.

Physical Activity Environments

Pertinent findings of the physical activity environment were observed:

- All sites had fixed and/or portable play equipment that was in good condition.

- Most sites had available outdoor space for the children to run and play at baseline 96.9% (62 out of 64) and follow-up 95.4% (62 out of 65).

- Most physical activity, structured and unstructured free play, took place outdoors at baseline 88.9% (56 out of 63) and follow-up 84.6% (55 out of 65).

- A statistically significantly greater proportion of sites had posters, pictures, or displayed books about physical activity visible or accessible to children at follow-up (27.0%) than at baseline (6.3%) (*N*=62, McNemar *p*<.01) (Appendix, Table 15).

- No sites (except for one at follow-up) used screens (e.g., TV, computer, video game console, smart board, Ipad/tablet) during physical activity time.

    - The screen content for the one site at follow-up which used a screen during physical activity time was educational in nature, guiding children in physical activity.

Staff Behavior During Physical Activity

Key observations of staff behavior during physical activity included:

- A statistically significantly greater proportion of sites included staff participating in structured physical activity at follow-up (95.7%) than at baseline (78.6%) (*N*=23, McNemar *p*<.01) (Appendix, Table 16).

- A statistically significant decrease in the proportion of sites where staff participated in unstructured physical activity was observed from baseline (58.3%) to follow-up (25.5%) (*N*=52, McNemar *p*<.01) (Appendix, Table 17).

- A statistically significant increase in the proportion of sites where staff provided prompts to increase physical activity from baseline (88.7%) to follow-up (92.3%) (*N*=52, McNemar *p*<.01) (Appendix, Table 18).

Example of CHLACC provider prompts to increase physical activity among children, Los Angeles County, California, 2014-2016

Baseline	*Follow-up*
"…Jump higher, good. Now me [my turn]. Now you can jump higher"	*"…[pour] a little more soil. Use your shovel to scoop the soil. Pour the water"*
"…now move back and throw it. Now let's see if you can throw it from far away"	*"…go very quick around the cones. Hurry, go faster!"*
"Jump and hop with your left foot. Now hop with your right foot. Now skip!"	*"Ok, 1, 2, 3, everybody run under the parachute"*

Children's Behavior During Physical Activity

Important observations of children's behavior during physical activity included:

- The average length in minutes of total physical activity time (includes structured and unstructured play) was statistically significantly less at follow-up (*M*=40.7, *SD*=18.8) than at baseline (*M*=45.7, *SD*=19.4), *t*(58)=2.3, *p*=.03.

- A statistically significantly greater proportion of sites included children participating in structured physical activity at follow-up (75.4%) than at baseline (43.8%) (*N*=64, McNemar *p*<.01) (Appendix, Table 19).

Examples of CHLACC provider structured physical activity, Los Angeles County, California, 2014-2016

Baseline	*Follow-up*
• Playing catch with providers	• Duck Duck Goose
• Hop scotch	• Obstacle course with cones
• Simon Says	• Yoga poses

- A statistically significant decrease in the proportion of sites where structured physical activity was provided as optional (e.g., children could do an alternative non-physical activity or sit down) from baseline (85.7%) to follow-up (37.0%) (*N*=23, McNemar *p*<.01) (Appendix, Table 20).

- The average length in minutes of unstructured physical activity was statistically significantly less at follow-up (*M*=25.6, *SD*=11.5) than at baseline (*M*=36.4, *SD*=20.7), *t*(44)=3.0, *p*=.00.

Physical Activity Policies and Practices

There was no change in the number of providers who reported having a physical activity policy in place. All providers at baseline and follow-up described instituting time for planned daily structured and unstructured physical activity. Weather permitting, providers said they encouraged daily outdoor play to support physical development and health. There was an increase in the proportion of providers who reported offering at least 60 minutes of structured play from baseline 37.1% (23 out of 62) to follow-up 51.0% (32 out of 63). By comparison, there was a decrease in the proportion of providers reporting offering at least 60 minutes of unstructured play from baseline 84.6% (55 out of 65) to follow-up 67.2% (43 out of 64). A few providers noted instituting a dress code policy that would help children participate in physical activity (e.g., sneakers versus dress shoes or sandals with heels). Many providers described sharing information with parents on the duration, location, and types of physical activity

provided in child care via handbooks, orientation materials, and fliers. A couple of providers organized physical activity family events (e.g., Yoga, Fitness classes) to help parents understand why and how their child care provider is promoting physical activity behaviors.

Challenges to Improving the Nutrition Environment

Providers were asked what challenges they face in making changes to their site to improve the nutrition environment. The three common themes described by providers were (1) perceived challenges related to parents; (2) perceived challenges related to food; and (3) challenges associated with perceived children's preferences. Most provider-asserted challenges centered on working with unsupportive parents. The most common challenge was that parents continue to give their children unhealthy food to bring to the child care site, for example, soda, donuts, sugary cereal, and hot Cheetos. Some parents were also described as resistant to healthy food changes, including abiding by healthy celebration guidelines. Many providers said that nutrition at home hasn't improved and there is a need for parents to be educated about healthy food.

Regarding challenges related to food, some providers (including both CACFP and non-CACFP participants) felt that healthy foods, in place of less expensive and less nutritious alternatives for snacks and meals, was too expensive for a limited budget. Some expressed worries about fresh produce being perishable while others described the difficulty in maintaining a garden on-site. A few providers said that encouraging water consumption was also a challenge. Some children did not want to drink water in place of juice.

Challenges related to children included their resistance in trying new vegetables and/or unfamiliar foods. Providers noted that many of their children are not used to healthy eating and are generally "picky" eaters. Providers also felt that family style eating was difficult to implement, saying that children will over pour food/beverages and will steal from others' plates or focus entirely on one offering rather than consuming a balanced meal.

Challenges to Improving the Physical Activity Environment

Providers were asked what challenges they faced in making changes to their site to improve the physical activity environment. Five key themes arose including (1) lack of equipment and space; (2) challenges related to knowledge and training; (3) challenges related to children; (4) challenges related to parents; (5) and challenges associated with outdoor conditions. Regarding lack of equipment and space, providers described the need for more funds for items such as play structures and other equipment.

Regarding knowledge and training challenges, providers talked about the need for more physical activity ideas and more ideas for indoor play. Providers also found it difficult to establish intentional physical activity time, keeping children actively engaged for long periods of time.

Some providers felt having children of different ages made it difficult to institute structured physical activity. Several providers wanted more education and training opportunities for their staff.

Regarding challenges associated with unsupportive parents, providers said it is hard to get parents on board with physical activity and it is difficult to communicate information to parents. Information and fliers sent home were often never read and there was limited time to discuss their child's day during pick-up time.

Finally, providers talked about challenges related to the weather and other barriers to playing outside. Providers talked about temperatures of extreme heat or cold, not having enough shade structures, and fear of wild animals such as coyotes and bears, as well poor air quality, and occasional gas leaks.

Recommendations for CHLACC Program Improvement

Providers shared a number of suggestions for improving or changing the CHLACC program. Two broad themes arose including suggestions related to the implementation of the program and suggestions for more topics and materials. Regarding implementation of CHLACC, providers recommended having more training and coaching sessions, as well as opening up the program for more providers. Other suggestions include having webinars for staff, having a certificate program that was available to be completed at their own pace, and more ideas and strategies for making improvements provided consistently throughout the year. For program delivery, more interaction and less lecture-based training and coaching was suggested, as well as including parents in the training to help ensure the health messages were consistent in child care and home settings.

Regarding suggestions for more topics and materials, the most common response was the need for more ideas for engaging young kids in physical activity and more materials to support active play. Other recommendations included offering templates for monthly newsletters, a Web site that provides evidence-based guidelines and a portal that allows for the sharing of ideas and resources, free or low-cost informational materials, and peer-to-peer exchange opportunities. Providers also asked for more sample menus or recipes, more ideas and hands-on training for successfully incorporating family style eating, as well as additional tips, health information material, and training for engaging parents.

Discussion

The goal of this evaluation was to understand ways in which nutrition and/or physical activity policies, practices, and environments changed as a result of the training and/or one-on-one coaching provided. Participating child care sites significantly improved in a range of areas: the food environment, staff behavior during lunch, children's behavior during lunch, foods offered, and food policies and practices. We also found significant improvements to the physical activity environment, staff behavior during physical activity, and children's behavior during physical activity. Overall, with the exception of more whole grain items served at licensed centers versus licensed homes, there were no significant differences by child care category from baseline to follow-up.

The greater number of infants and toddlers enrolled in licensed homes versus center care observed in this evaluation is consistent with national estimates showing parents with children less than one year often choose home-based care [5]. Family child care providers care for children across a variety of age groups and are important settings for supporting breastfeeding and other infant feeding and mealtime habits. Recommendations suggest that early care and education facilities have a breastfeeding policy, provide a welcoming, private place for on-site breastfeeding, and ensure procedures for storing and handling breast milk are in place [1,6]. Family child care homes might also be targeted with health messages and policies that emphasize not serving fruit juice to children under one year of age and not bottle feeding an infant formula mixed with any cereal, juice, or other foods without documentation from a medical provider [6,7].

Our observation that licensed home providers were more likely to participate in CACFP than licensed center providers was also congruent with national estimates [8]. CACFP participation is important for all child care providers as programs taking part in CACFP serve meals that are more nutritious compared to child care programs not participating in CACFP [9,10]. CACFP food and beverage standards have been recently updated to be more closely aligned with nutrition standards for the school lunch and breakfast programs. Given that lower income families tend to choose family child care homes relative to their higher-income counterparts, increasing the number of family child care homes participating in CACFP could be especially beneficial for children in need [11].

Consistent with national (e.g., Healthy, Hunger-Free Kids Act) and California (e.g., AB 2084, the Healthy Beverages in Child Care Act) recommendations that support healthful dietary choices in child care settings, all CHLACC site providers offered drinking water for children to serve themselves throughout the day, served either nonfat or low-fat milk to all children over two years of age, sat with children at the table, and ate the same meals and snacks [7,12,13]. A

significant increase in the provision of areas for growing produce was observed among CHLACC sites. In alignment with obesity prevention recommendations, we found significant increases in providers serving meals family style so children can serve themselves and modeling and encouraging, but not forcing, children to try new/healthy foods [13,12,6]. Child care sites also showed significant improvements in the provision of dark colored vegetables and whole grains. Dietary guidelines suggest child care providers offer a mix of different colored vegetables each day, especially dark green, red, and orange vegetables as well as ensuring all breads, cereals, and pastas served are whole grain [6,7,12,13].

Contrary to early care and education best practice recommendations to turn screens off for children under two and minimize television/screen time to no more than 30 minutes per week for children age 2 and older, we found an increase in screen use during mealtime [7]. While the media content was educational nature, it is unclear as to why television use during meal time increased over time for a few providers. Providing screen time policy examples to providers and encouraging parents to set a good example by limiting their own television viewing and smart phone use may help to address this issue. Fewer provider sites were observed with screens present at follow up, which may suggest a positive effect of coaches' recommendations to eliminate screens in the child care setting.

Improvements in physical activity were observed. We found a significant increase in physical activity materials visible and accessible to children from baseline to follow-up. A significant increase was also observed in child care providers leading structured games or activities and providing prompts to encourage children to increase physical activity. In keeping with best practice guidelines in the US, the majority of sites provided opportunities for outdoor active play and limited media viewing during physical activity [6,7,1].

Concomitant with the observed increase in the proportion of providers offering structured, teacher-led physical activity, we observed a significant decrease over time in the proportion of providers offering unstructured activity (free play). This was coupled with a significant decrease in total physical activity time observed from baseline to follow-up. While an overall reduction in activity time may partially explain the decrease in proportion of providers observed offering unstructured activity, it is more likely that the sampled CHLACC providers reprioritized physical activity time to incorporate more structure in place of unstructured activity. This notion is supported by the inverse relationship observed in the proportion of providers offering the recommended amount of structured and unstructured activity. Specifically, a decrease in the proportion of providers offering at least 60 minutes of unstructured activity coincided with an increase in the proportion of providers offering at least 60 minutes of structured activity. Increasing structured physical activity was a common goal among participating providers.

However, unstructured activity should not be entirely replaced with structured activity. Unstructured activity has many benefits beyond increasing physical activity and helping children to move at their own pace, including helping children learn how to work in groups, to share, to negotiate, to resolve conflicts, and to learn self-advocacy skills [14].

We found most child care providers maintained written policies on promoting nutrition and physical activity and shared these policies with parents. Improving policies, practices, and environments supportive of nutrition and physical activity is challenging for many noted reasons, including child and staff interest, limited resources (e.g., limited awareness of free or low-cost health education handouts, perceived high cost of healthier foods) and a need for additional training to engage parents as partners in change. Engaging in conversations about physical activity and healthy eating with parents and sharing related policies are congruent with recommendations by the Institute of Medicine [8]. Incorporating parent engagement components adds to the effectiveness of early care and education interventions, given the critical role that the primary caregivers play in shaping a young child's behavior. [15].

These findings also present areas for continued improvement in the child care settings, such as the continued work on serving family style meals so children can serve themselves, allowing them to eat to their fullness without pressure to overeat, encouraging daily physical activity among children, and positive modeling by staff on healthy eating and active play. Key recommendations made by providers to improve the CHLACC program included increasing the capacity of child care providers to engage all staff and parents in the work, providing on-going and consistent coaching, offering peer-to-peer learning networks, and providing an on-line repository for free and low-cost resources.

This evaluation is not without limitations. The evaluation sample was relatively small, non-random, and lacked a comparison group. Generalizability is limited to similar licensed child care sites in the Los Angeles County area. It is possible that non-licensed child care providers who experience more challenges and may be less ready or compliant with following nutrition and physical activity policies and recommendations were less likely to participate and/or equally benefit from the CHLACC intervention.

Positive findings may be due to other events or similar interventions occurring between the program and the roughly six-month follow-up. For example, program participants may have gained nutrition and physical activity knowledge and additional resources from complementary sources like California's Champions for Change, a statewide movement to improve nutrition education and prevent obesity [16]. The variation in time between initial training and follow-up coaching session/s received by child care providers call into question the feasibility and fidelity of the program. Having too short or too long of a gap between training and subsequent one-on-

one coaching may have provided insufficient opportunity for child care providers to implement and deliver the intervention as intended or provided too much time without tailored reinforcement (e.g., coaching) potentially diluting any real effect.

While field observers were trained to be un-obtrusive and not engage anyone during the observation, social desirability may have limited the data garnered from direct observation. Though high agreement in field observations was noted among trained observers, it is possible that the changes documented over time may reflect not only program impact but also differences in data collection among the various field data collectors between baseline and follow-up. Furthermore, the CHLACC training and coaching timeline dictated that some observations be conducted during the Summer and Winter months, seasons when more children are absent and outdoor play is more likely to be limited due to inclement weather. This may have resulted in a dampening of programmatic impact in some focus areas such as outdoor physical activity.

These limitations notwithstanding, the evaluation findings demonstrate that CHLACC providers experienced significant and meaningful nutrition and physical activity improvements from baseline to follow-up. While child care quality improvement research suggest ten coaching sessions are effective in enhancing provider practice [17], the CHLACC program (with one to two coaching sessions) demonstrates the potential population-wide impact that a broad-scale intervention, led by a partnership between public health and a child care resource and referral network, can have on a large jurisdiction. Providing two coaching sessions proved practical on a countywide level from the perspective of reaching as many providers as possible with limited resources. However, as noted by a review of coaching visits conducted by CCRC, a lead agency in CHLACC, sustainable changes to the child care environment are typically not evident until the sixth coaching session in a program that offered monthly site visits. Other studies have incorporated eight to twelve coaching sessions in realizing significant improvements in child care nutrition and physical activity [17,18]. The comparably fewer coaching sessions offered by CHLACC may partially explain why improvements in policies, practices, and environments were not observed across all programmatic focus areas of healthy eating and physical activity. Although more coaching sessions is recommended, care should be taken in determining what can be feasibly implemented with good fidelity on a countywide basis, particularly in light of the compensation, role, and training required of successful nutrition and physical activity child care coaches as well as the time and effort required in scheduling in-person one-on-one support. Child care directors and owners often report having little time for intervention activities, even those including one-on-one support [19].

This evaluation illustrates the benefits of collecting observational data and provider-level data from those tasked with implementing CHLACC-inspired policy, practice, and environmental improvements. There is a need to incorporate data from additional quantitative and qualitative methods from larger, more representative samples, to replicate and expand upon the observed associations in child care settings. Future research should employ additional methods to examine causality, dose-response, and disparities. A further understanding of the impact of the CHLACC program is critical to supporting other jurisdictions interested in continuing to support these efforts in child care, settings pivotal in influencing the development of lifelong dietary and physical activity habits.

Recommendations

The evaluation resulted in eight key recommendations for CHLACC and other public health partnerships to consider in helping providers to successfully create healthy nutrition and

8 Key Recommendations for Creating Healthy Nutrition and Physical Activity Environments in Child Care Settings

1. Promote participation in the Child and Adult Care Food Program among both licensed family child care homes and centers
2. Strengthen efforts to support staff modeling of healthy eating and physical activity behaviors at the child care site
3. Build the capacity of child care providers to engage parents as partners in change
4. Ensure providers implement a balance of both developmentally appropriate daily structured (led by the adult caregiver) and unstructured (child-driven) physical activity experiences
5. Offer providers policy templates to limit screen time, including television, cell phone, or digital media
6. Target family child care homes to support breastfeeding and establish policies that support on-site lactation
7. Provide on-going support to help providers implement and address challenges and sustain efforts in promoting healthy eating and physical activity opportunities
8. Provide opportunities for peer-to-peer child care provider information sharing and dissemination of low and no-cost lesson plans and resource sharing

physical activity environments to prevent obesity in young children in early education and care settings.

References

1. Early Care and Education (ECE) | Overweight & Obesity | CDC. Available at: https://www.cdc.gov/obesity/strategies/childcareece.html. (Accessed: 23rd November 2016)
2. Campbell, D. T. & Stanley, J. *Experimental and Quasi-Experimental Designs for Research*. (Cengage Learning, 1963).
3. Grembowski, D. E. *The Practice of Health Program Evaluation*. (SAGE Publications, Inc, 2015).
4. Ward, D. *et al.* An instrument to assess the obesogenic environment of child care centers. *Am. J. Health Behav.* **32,** 380–386 (2008).
5. Bureau, U. C. Who's Minding the Kids? Child Care Arrangements: Spring 2011. Available at: http://www.census.gov/library/publications/2013/demo/p70-135.html. (Accessed: 12th January 2017)
6. McGuire, S. Institute of Medicine (IOM) Early Childhood Obesity Prevention Policies. Washington, DC: The National Academies Press; 2011. *Adv. Nutr. Bethesda Md* **3,** 56–57 (2012).
7. Boston, 677 Huntington Avenue & +1495‐1000, M. 02115. Early Child Care Obesity Prevention Recommendations: Complete List. *Obesity Prevention Source* (2012). Available at: https://www.hsph.harvard.edu/obesity-prevention-source/obesity-prevention/early-child-care/early-child-care-obesity-prevention-recommendation-complete-list/. (Accessed: 29th November 2016)
8. Requirements, I. of M. (US) C. to R. C. and A. C. F. P. M., Murphy, S. P., Yaktine, A. L., Suitor, C. W. & Moats, S. *The Child and Adult Care Food Program*. (National Academies Press (US), 2011).
9. Ritchie, L. D. *et al.* Participation in the child and adult care food program is associated with more nutritious foods and beverages in child care. *Child. Obes. Print* **8,** 224–229 (2012).
10. Ritchie, L. D. *et al.* Policy improves what beverages are served to young children in child care. *J. Acad. Nutr. Diet.* **115,** 724–730 (2015).
11. NCCP | Demographics of Family, Friend, and Neighbor Child Care in the United States. Available at: http://www.nccp.org/publications/pub_835.html. (Accessed: 12th January 2017)
12. Dev, D. A., McBride, B. A. & STRONG Kids Research Team. Academy of Nutrition and Dietetics benchmarks for nutrition in child care 2011: are child-care providers across contexts meeting recommendations? *J. Acad. Nutr. Diet.* **113,** 1346–1353 (2013).
13. Institute of Medicine (US) Committee on Prevention of Obesity in Children and Youth. *Preventing Childhood Obesity: Health in the Balance*. (National Academies Press (US), 2005).
14. Ginsburg, K. R. The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds. *Pediatrics* **119,** 182–191 (2007).

15. Ward, D. S. *et al.* Strength of obesity prevention interventions in early care and education settings: A systematic review. *Prev. Med.* (2016). doi:10.1016/j.ypmed.2016.09.033
16. Nutrition Education and Obesity Prevention (NEOPB) NEW. Available at: https://www.cdph.ca.gov/programs/NEOPB/Pages/Default.aspx. (Accessed: 28th November 2016)
17. Benjamin Neelon, S. E., Østbye, T., Hales, D., Vaughn, A. & Ward, D. S. Preventing childhood obesity in early care and education settings: lessons from two intervention studies. *Child Care Health Dev.* **42,** 351–358 (2016).
18. Trost, S. G., Messner, L., Fitzgerald, K. & Roths, B. A nutrition and physical activity intervention for family child care homes. *Am. J. Prev. Med.* **41,** 392–398 (2011).
19. The State of Obesity: Obesity data trends and policy analysis. Available at: http://stateofobesity.org/. (Accessed: 12th January 2017)

Appendix

Table 1. Children enrolled at CHLACC sites, Los Angeles County, California, 2014-2016

	Less than 3 years old		*3-5 years old*		*6 years or older*	
Child Care Category	*M*	*SD*	*M*	*SD*	*M*	*SD*
Licensed Center	19.6	21.9	55.5	79.6	2.79	9.1
Licensed Home	3.2	2.0	3.7	2.3	2.5	2.6
All Sites (N=61)*	11.0	17.1	28.3	60.3	2.7	6.5

**N*=4 Providers had missing data for children enrolled

Table 2. CHLACC provider type of involvement, Los Angeles County, California, 2014-2016

Category	*N*	*Percent*
Employed in a classroom and works with young children	8	12.3%
Administrator of a program that had direct care/education of young children	22	33.8%
Employed in a family child care and works with young children	2	3.1%
Owner/operator of a Licensed Family Child Care	33	50.8
Total	65	100%

Table 3. Primary language of CHLACC providers by child care category, Los Angeles County, California, 2014-2016

	Licensed Centers		*Licensed Homes*		*Total*	
Category	*N*	*Percent*	*N*	*Percent*	*N*	*Percent*
English	28	90.3%	22	64.7%	50	76.9%
Spanish	2	6.5%	11	32.4%	13	20.0%
Korean	1	3.2%	0	0.0%	1	1.5%
Other	0	0.0%	1	2.9%	1	1.5%
Total	31	100.0%	34	100.0%	65	100.0%

Table 4. CHLACC providers participating in USDA's Child and Adult Care Food Program by child care category, Los Angeles County, California, 2014-2016

	Licensed Centers		*Licensed Homes*		*Total*	
Category	*N*	*Percent*	*N*	*Percent*	*N*	*Percent*
Does participate	9	31.0%	28	84.8%	37	59.7%
Does not participate	20	69.0%	5	15.2%	25	40.3%
Total	29	100.0%	34	100.0%	62*	100.0%

**N*=3 Providers had missing data for CACFP participation

Note: The relationship between CACFP participation and provider type was significant, X^2 (1, N=62) = 18.6, p = .00.

Table 5. CHLACC number of coaching sessions received by child care category, Los Angeles County, California, 2014-2016

	Licensed Centers		*Licensed Homes*		*Total*	
Category	*N*	*Percent*	*N*	*Percent*	*N*	*Percent*
Had no coaching sessions	3	9.7%	2	5.9%	5	7.7%
Had one follow-up coaching sessions	12	38.7%	14	41.2%	26	40.0%
Had two follow-up coaching sessions	16	51.6%	18	52.9%	34	52.3%
Total	31	100.0%	34	100.0%	65	100.0%

Table 6. CHLACC time between baseline and follow-up observations by child care category, Los Angeles County, California, 2014-2016

	Months	
Child Care Category	*M*	*SD*
Licensed Center	8.1	3.1
Licensed Home	5.5	3.6
Total (N=64)*	6.8	3.6

**N*=1 Provider had missing data for the elapsed time, in months, between baseline and follow-up observation.

Table 7. Presence of area where produce grown at CHLACC providers, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	20	30.8%	31	47.7%
No	45	69.2%	34	52.3%
Total	65	100.0%	65	100.0%

Note: An exact McNemar's test determined that there was a statistically significant difference in the proportion of sites with produce growing areas pre- and post-CHLACC intervention, p = .02.

Table 8. Outdoor gardens at CHLACC providers, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	16	80.0%	28	90.3%
No	4	20.0%	3	9.7%
Total	20	100.0%	31	100.0%

Table 9. CHLACC sites where providers modeled eating same vegetables as children, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		15	68.2%	15	62.5%
No		7	31.8%	9	37.5%
	Total	22*	100.0%	24	100.0%

Table 10. CHLACC sites where providers modeled eating same fruit as children, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		12	45.5%	13	54.2%
No		10	54.5%	11	45.8%
	Total	22	100.0%	24	100.0%

Table 11. CHLACC sites where providers modeled eating same grains as children, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		10	45.5%	14	58.3%
No		12	54.5%	10	41.7%
	Total	22	100.0%	24	100.0%

Table 12. CHLACC sites where meals served family style with children self-serving, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		11	16.9%	16	24.6%
No		54	83.1%	49	75.4%
	Total	65	100.0%	65	100.0%

Note: McNemar Exact Test determined that there was a statistically significant difference in the proportion of sites using family-style + children self-serving pre- and post-CHLACC intervention, $p = .00$.

Table 13. CHLACC sites serving unsweetened fruit, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		59	90.8%	59	90.8%
No		6	9.2%	6	9.2%
	Total	65	100.0%	24	100.0%

Table 14. CHLACC sites serving non-fried vegetables, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		62	95.4%	59	90.8%
No		3	4.6%	6	9.2%
	Total	65	100.0%	65	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites with non-fried vegetables served pre- and post-CHLACC intervention, $p = .01$.

Table 15. CHLACC sites with displayed physical activity-related material, Los Angeles County, California, 2014-2016

		Baseline		*Follow-up*	
Category		*N*	*Percent*	*N*	*Percent*
Yes		4	6.3%	17	27.0%
No		60	93.8%	46	73.0%
	Total	64	100.0%	63	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites with displayed physical activity-related material pre- and post-CHLACC intervention, $p = .00$.

Table 16. CHLACC sites with staff participating in structured physical activity, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	22	78.6%	45	95.7%
No	6	21.4%	2	4.3%
Total	28	100.0%	47	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites where staff participated in structured physical activity with children pre- and post-CHLACC intervention, $p = .01$.

Table 17. CHLACC sites with staff participating in structured physical activity, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	35	58.3%	14	25.5%
No	25	41.7%	41	74.5%
Total	60	100.0%	55	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites where staff participated in unstructured physical activity with children pre-and post-CHLACC intervention, $p = .00$.

Table 18. CHLACC sites with staff providing prompts to increase physical activity, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	55	88.7%	60	92.3%
No	7	11.3%	5	7.7%
Total	62	100.0%	65	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites where staff provided prompts to increase physical activity pre-and post-CHLACC intervention, $p = .01$.

Table 19. CHLACC sites with children participating in structured physical activity, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	28	43.8%	49	75.4%
No	36	56.3%	16	24.6%
Total	64	100.0%	65	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites where children participated in structured physical activity pre-and post-CHLACC intervention, $p = .00$.

Table 20. CHLACC sites where structured physical activity provided as optional, Los Angeles County, California, 2014-2016

	Baseline		*Follow-up*	
Category	*N*	*Percent*	*N*	*Percent*
Yes	24	85.7%	17	37.0%
No	4	14.3%	29	63.0%
Total	28	100.0%	46	100.0%

Note: McNemar's test determined that there was a statistically significant difference in the proportion of sites where structured physical activity was provided as optional pre-and post-CHLACC intervention, $p = .02$.