Before age 5, children’s brains are developing rapidly. A balanced diet and adequate physical activity are crucial to achieving and maintaining optimal health. The diet and physical activity habits created in the first 5 years are not a predictor for health behaviors for the future. Because the prevalence of overweight and obesity among US preschool-aged children remains high, childcare settings are an important target for obesity prevention.

A Community Advisory Committee (CAC) was formed which includes key stakeholders in early childhood at the local and state levels. The CAC was involved in identifying and framing the research topic and the design of all study methods. The resultant 2-year intervention will assist early childhood center directors and caregivers in informed, tailored goal setting and revision or creation of policies for improving healthy eating and PA environments.

Baseline data were collected from 10 sites in Fall 2016 to determine the current nutritional and PA environments at childcare centers. The resultant 2-year pilot study in response to a community demand to increase physical activity among children, staff, and families launched the Early Childhood Initiative and 2 year pilot study in 2017.

LiveWell Greenville is a coalition of over 150 organizations working together to ensure access to healthy eating and active living for every Greenville County resident. Through partnerships with local organizations, LiveWell assesses and engages the population at each facility in order to plan and implement interventions to improve health. LiveWell Greenville launched the Early Childhood Initiative and 2 year pilot study in response to a community demand.

2. CDC. Division of Nutrition, Physical Activity, and Obesity. CDC Pediatric Nutrition Surveillance System (PedNSS) 2000–2014:

### Methods: Study Population & Design

A one group pretest-posttest design was used to evaluate the early childhood childcare centers. 10 sites participated in the pilot study. Ages of children in the study range from 3-5 years old. 6 sites are located in faith-based organizations. Sites vary in race, ethnicity, and socioeconomic class.

### Methods: Outcome Measures

- Environmental changes are assessed using the Environmental and Policy Assessment and Observation (EPAO) tool designed to assess childcare environments.
- EPAO consists of 75 items assessing childcare nutrition and PA environments, policies, and practices measured over a full-day.
- EPAO results in 18 food environment and activity environment scores.
- At each site, one 3-5 year old classroom was randomly selected for observation.
- Baseline data have been collected in 10 sites.
- Follow-up data will be collected in August of 2018.
- Due to non-normally distributed data, the median is presented in results.

### Results

| Nutrition Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Fruits & Vegetables |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| % Energy from Fat |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| % Energy from Sugar |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| % Energy from Protein |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

### Interventions

- Since April 2015, stakeholders have convened monthly to develop the Early Childhood intervention.
- A Community Advisory Committee (CAC) was formed which includes key stakeholders in early childhood at the local and state levels.
- The CAC was involved in identifying and framing the research topic and the design of all study methods.
- The resultant 2-year intervention will assist early childhood center directors and caregivers in informed, tailored goal setting and revision or creation of policies for improving healthy eating and PA environments.

### Methods: Intervention

- Baseline data were collected from 10 sites in Fall 2016 to determine the current nutritional and PA environments at childcare centers. The resultant 2-year pilot study in response to a community demand to increase physical activity among children, staff, and families launched the Early Childhood Initiative and 2 year pilot study in 2017.

### Next Steps

Implementation of the 2-year Intervention:
- Tailored goal setting
- Technical assistance and resources
- Quarterly networking sessions to guide center directors in making decisions that support health environments
- Follow-up data collection
- Reassessment in August 2018
- Celebration
- After the 2-year intervention, LiveWell Greenville will celebrate the successful changes the early childhood centers have made and empower them to continue their commitment to laying healthy foundations in Greenville’s youngest children.

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### Summary

The preliminary evaluations of sites indicate the need for improvement with physical activity and nutrition variables in Greenville County early childhood childcare centers. As 12.8% of 2-5 year old’s in South Carolina are overweight or obese, intervening early is necessary. Making the healthy choice the easy choice in the first five years of life is an important step in improving the health of Greenville county.

### LiveWell Greenville

LiveWell Greenville is a coalition of over 150 organizations working together to ensure access to healthy eating and active living or every Greenville County resident. Through partnerships with local organizations, LiveWell assesses and engages the population at each facility in order to plan and implement ways to improve health. LiveWell Greenville launched the Early Childhood Initiative and 2 year pilot study in response to a community demand.

### Evaluation

- Goal Setting
- Implementation
- Reassessment
- Celebration

### Intervention Steps

- Baseline data were collected from 10 sites in Fall 2016 to determine the current nutritional and PA environments at childcare centers. The resultant 2-year pilot study in response to a community demand to increase physical activity among children, staff, and families launched the Early Childhood Initiative and 2 year pilot study in 2017.

### Specific areas for improvement in Nutrition:

- Increase availability of whole grains and low-fat meats
- Create a healthier environment around nutrition
- Increase training & education for children, staff, and families

### Specific areas for improvement in PA:

- Improve access to fixed play equipment to increase physical activity in children
- Increase training & education for children, staff, and families
- Guide centers in writing policies around physical activity

### Results

| Physical Activity (PA) Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Children’s Active Play |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Children’s Sedentary Behavior |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Sedentary Environment |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Portable Play Equipment |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Fixed Play Environment |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Teacher Practices Related to Activity |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Activity Education & Professional Development |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Physical Activity Policy |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |