Improving the Nutrition and Physical Activity Environment of ABC Quality Child Care Centers in South Carolina

A FIVE YEAR REVIEW 2012–2017
Acknowledgments

The South Carolina Department of Health and Environmental Control’s (DHEC) Division of Nutrition, Physical Activity, and Obesity would like to thank the following individuals who helped to develop and/or provide input on this report. For more information about this report, please contact the Division of Nutrition, Physical Activity, and Obesity.

**ABC Quality Child Care Providers**
To ABC Quality child care center directors and staff across the state: Your commitment to creating higher quality environments and experiences for children is truly appreciated. Thank you for all you do to positively impact the lives of South Carolina children.

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The early childhood years are critically important to children’s growth, development, and learning. During these years, many children spend time outside of the home in some type of child care arrangement. Child care facilities have the unique opportunity, through policy and practice, to create an environment that supports and promotes healthy eating and opportunities for physical activity for young children. While in care, children can receive up to two-thirds of their daily food intake and spend the majority of their waking hours in the child care program — making nutrition and physical activity important aspects of quality early care and education programs.

To support the health and well-being of children, the South Carolina Department of Health and Environmental Control (DHEC) partnered with the South Carolina Department of Social Services (DSS) to incorporate new and enhanced quality nutrition and physical activity-related standards into the existing statewide ABC Quality Rating and Improvement System (ABC Quality). The purpose of the nutrition and physical activity standards, known as ABC Grow Healthy, is to increase children’s consumption of healthy foods and time spent being physically active while in child care.

ABC Quality is a voluntary program that is part of the Division of Early Care and Education at DSS. There are five levels in ABC Quality: Level A+, Level A, Level B+, Level B, and Level C. Child care providers apply to participate in ABC Quality and strive to achieve compliance across comprehensive program standards, which now include nutrition and physical activity. By participating in ABC Quality, providers agree to unannounced on-site reviews by ABC Quality assessors who measure compliance with the program standards. Some comprehensive standards are mandatory and assessed at the child care center level, while others are point-based and scored at an individual classroom level.

The purpose of this report is to highlight changes in ABC Quality Level B+/B child care centers’ compliance with the mandatory nutrition and physical activity standards since becoming effective in 2012. The decision to assess compliance data for only Level B+/B child care centers was based on two factors: Level B+/B centers were reviewed annually compared to a three-year review cycle for Level A+/A centers and significantly more nutrition and physical activity standards were required at Level B+/B than at Level C. This report is based on five years of data that was collected during Federal Fiscal Years (FFY) 2013, 2014, 2015, 2016, and 2017. The results of the data analysis are divided into two sections: Nutrition Standards Compliance Data, including a comparison of compliance among Child and Adult Care Food Program (CACFP) participants and non-participants, and Physical Activity Standards Compliance Data. Each section also includes key findings and recommended actions.
**Nutrition Standards Compliance Data**

There are 11 mandatory nutrition standards (Table 1). One nutrition standard addresses the existence of a written nutrition policy, one standard addresses annual nutrition training, and nine standards address the meal service; specifically foods and beverages that are served, limited, or prohibited. Most of the nutrition standards are assessed for compliance the day of the unannounced review; however some standards, such as training hours, are assessed by calendar year. Compliance with the annual nutrition training standard is based on the random selection and review of five child care center staff training records. Figure 1 highlights ABC Quality Level B+/B child care centers’ compliance with the nutrition policy and the staff training standard during FFY 2013 (n=501), 2014 (n=437), 2015 (n=316), and 2017 (n=403).

**Table 1. ABC Grow Healthy Mandatory Nutrition Standards for Level B+/B Child Care Centers**

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<tbody>
<tr>
<td>Create and consistently implement a written nutrition policy.</td>
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<tr>
<td>All caregiving staff attend nutrition training at least one time per year.</td>
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<tr>
<td>Serve fruit (not juice) at least two times a day.</td>
<td>67.3%</td>
<td>94.9%</td>
<td>98.5%</td>
<td>99.7%</td>
<td>99.0%</td>
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<tr>
<td>Serve vegetables, other than white potatoes, at least once a day.</td>
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<td>Serve whole grain foods at least once a day.</td>
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<tr>
<td>Only skim or 1% milk is served to children 2 years and older.</td>
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<td>Juice is allowed only once per day in a serving size tailored to the age group’s needs.</td>
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<td>Limit sweet food items to no more than two times a week.</td>
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<tr>
<td>Limit fried or pre-fried vegetables (including potatoes) to no more than once a week.</td>
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<td>Limit high-fat meats to no more than two times a week.</td>
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<td>Do not serve sugar-sweetened beverages.</td>
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</table>

*Annual training requirements are completed on a calendar year basis. Calendar year 2013 was the first year ABC Quality child care staff were required to complete annual nutrition training. Therefore, data on staff completion of the annual nutrition training was first available during the FFY 2014 review. For complete mandatory nutrition standards language, see Table 1.
**Figure 2** highlights ABC Quality Level B+/B child care centers’ compliance with ABC Grow Healthy nutrition meal service standards during FFY 2013 (n=439), 2014 (n=345), 2015 (n=389), 2016 (n=270), and 2017 (n=366). Sites that did not serve meals and/or snacks were excluded from the analysis. Compliance with the meal service standards was assessed by reviewing the posted menu and/or observing the foods and beverages served during the unannounced on-site review.

**Figure 2. Compliance with ABC Grow Healthy Nutrition Meal Service Standards (Level B+/B Child Care Centers)**

<table>
<thead>
<tr>
<th>Standards</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serves Fruit</td>
<td>74.9%</td>
<td>95.9%</td>
<td>95.9%</td>
<td>95.9%</td>
<td>95.9%</td>
</tr>
<tr>
<td>Serves Vegetables</td>
<td>81.3%</td>
<td>94.8%</td>
<td>94.8%</td>
<td>94.8%</td>
<td>94.8%</td>
</tr>
<tr>
<td>Serves Whole Grain Foods</td>
<td>60.0%</td>
<td>80.0%</td>
<td>96.0%</td>
<td>96.0%</td>
<td>95.6%</td>
</tr>
<tr>
<td>Serves Lowfat/Skim Milk</td>
<td>83.8%</td>
<td>93.8%</td>
<td>97.2%</td>
<td>97.2%</td>
<td>97.2%</td>
</tr>
<tr>
<td>Limits Juice</td>
<td>60.0%</td>
<td>80.0%</td>
<td>95.6%</td>
<td>95.6%</td>
<td>95.6%</td>
</tr>
<tr>
<td>Limits Sweet Foods</td>
<td>60.0%</td>
<td>80.0%</td>
<td>95.6%</td>
<td>95.6%</td>
<td>95.6%</td>
</tr>
<tr>
<td>Limits Fried Vegetables</td>
<td>96.4%</td>
<td>98.9%</td>
<td>98.9%</td>
<td>98.9%</td>
<td>98.9%</td>
</tr>
<tr>
<td>Limits High-Fat Meats</td>
<td>82.0%</td>
<td>94.3%</td>
<td>94.3%</td>
<td>94.3%</td>
<td>94.3%</td>
</tr>
<tr>
<td>Prohibits Sugar-Sweetened Beverages</td>
<td>60.0%</td>
<td>80.0%</td>
<td>95.6%</td>
<td>95.6%</td>
<td>95.6%</td>
</tr>
</tbody>
</table>

*For complete mandatory nutrition standards language, see Table 1.

**Key Findings from the Nutrition Standards Compliance Data:**

- The percentage of child care centers with a written nutrition policy increased from 67 percent in 2013 to 99 percent in 2017.
- From 2013 to 2017, the percentage of child care centers serving fruit at least two times a day increased by 21 percent.
- The percentage of child care centers serving vegetables, other than white potatoes, at least once a day increased by 13 percent from 2013 to 2017.
- The percentage of child care centers serving whole grain foods at least once a day increased by 25 percent.
- The percentage of child care centers limiting high-fat meats to two times a week increased from 83 percent in 2013 to 99 percent in 2017.
- By 2017, child care centers were 90+ percent compliant with all nine mandatory nutrition meal service standards.
Nutrition Standards Compliance Data - Comparison of CACFP Participants and Non-Participants

The United States Department of Agriculture CACFP is a federal program that helps child care providers serve healthier meals and snacks to children in their care. CACFP facilities follow the meal patterns established by the United States Department of Agriculture and receive reimbursement from CACFP for serving nutritious meals and snacks. A comparison of child care centers enrolled in CACFP with centers not enrolled in CACFP showed that CACFP participants fared better on most every nutrition meal service standard across all five years as highlighted in Figure 3.

Figure 3. Compliance with ABC Grow Healthy Nutrition Meal Service Standards between CACFP and Non-CACFP Participants (Level B+/B Child Care Centers)*

*For complete mandatory nutrition standards language, see Table 1

*For complete mandatory nutrition standards language, see Table 1
Key Findings among CACFP and Non-CACFP Participants from the Nutrition Standards Compliance Data:

- In 2013, CACFP participants were assessed as being 13 to 30 percent more compliant than non-CACFP participants with the fruit, vegetable, whole grain, milk, sweet food, and high-fat meat standards.

- 100% of CACFP and non-CACFP participants reviewed in 2017 were not serving fried vegetables.

- By 2017, non-CACFP participants showed tremendous growth in narrowing the difference in, or in some cases exceeding, compliance for each standard related to the type and frequency of foods and beverages served.

- The whole grain foods standard continued to show the largest difference in compliance and the most improved, narrowing from a 30 percent difference in compliance in 2013 to less than a 3 percent difference during the 2017 review period.

Recommended Actions based on Nutrition Standards Compliance Data:

- Promote participation in CACFP to eligible child care programs.

- Provide targeted education and/or technical assistance to child care providers on the benefits of serving fruit, vegetables, and whole grain foods to continue increasing compliance.

- Collaborate with early care and education partners to assure annual nutrition training opportunities are readily available and accessible for child care providers.
Physical Activity Standards Compliance Data

There are 12 Level B+/B ABC Grow Healthy physical activity standards of which only two are mandatory: staff completing annual physical activity training and the existence of a physical activity policy (Table 2). Compliance with the annual physical activity training standard is based on the random selection and review of five child care center staff training records. Figure 4 highlights ABC Quality Level B+/B child care centers’ compliance with these two mandatory standards for FFY 2013 (n=501), 2014 (n=391), 2015 (n=437), 2016 (n=316), and 2017 (n=403). The remaining 10 physical activity standards are assessed at the classroom level. At this time, only mandatory standard compliance data have been collected and analyzed.

Table 2. ABC Grow Healthy Mandatory Physical Activity Standards for Level B+/B Child Care Centers

<table>
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<tr>
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<tbody>
<tr>
<td>Create and consistently implement a written physical activity policy.</td>
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<tr>
<td>Attend training on promotion of children’s movement and physical activity at least one time per year.</td>
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Figure 4. Compliance with ABC Grow Healthy Physical Activity Policy and Training Standards (Level B+/B Child Care Centers)*

*Annual training requirements are completed on a calendar year basis. Calendar year 2013 was the first year child care staff were required to complete annual physical activity training. Therefore, data on staff completion of the annual physical activity training was first available during the FFY 2014 review. For complete mandatory physical activity standards language, see Table 2.
Key Findings from the Physical Activity Standards Compliance Data:

- The percentage of child care centers with a written physical activity policy increased from 65 percent in 2013 to 99 percent in 2017.

- The percentage of staff that completed physical activity training increased each year; however, when looking across all years of data, the growth in compliance for annual physical activity training increased slower than compliance with annual nutrition training.

Recommended Actions based on Physical Activity Standards Compliance Data:

- Collaborate with ABC Quality to develop a process for extracting and analyzing classroom-level physical activity compliance data.

- Collaborate with early care and education partners to assure annual physical activity training opportunities are readily available and accessible for child care providers.
Overall Summary

ABC Quality Level B+/B child care centers have shown tremendous success in complying with the ABC Grow Healthy nutrition and physical activity standards. Since mandated in 2012, Level B+/B child care centers have increased their compliance rate for every mandatory nutrition and physical activity standard.

The data clearly highlights that providers participating in CACFP achieved relatively high levels of compliance with the nutrition meal service standards when first assessed in FFY 2013. This is not unexpected considering that providers enrolled in CACFP are accustomed to following nutrition requirements and have direct access to nutrition training and resources. However, it is worth noting that even with high initial compliance rates, the percentage of child care centers enrolled in CACFP complying with the nutrition meal service standards increased to 97% or greater over the five year period.

Another significant accomplishment was the considerable increase in the percentage of child care providers complying with the nutrition meal service standards who were not participating in CACFP.

The collection, analysis, and subsequent report on child care centers' compliance with the nutrition and physical activity standards is evidence that early care and education stakeholders in South Carolina recognize that healthy eating and physical activity are indicators of quality child care. To ensure ABC Quality providers continue to comply with these standards, education and accountability efforts must be sustained at the state level.

Early care and education stakeholders should continue to provide training and technical assistance to child care providers on how nutrition and physical activity supports the growth and development of young children. ABC Quality and stakeholders should also continue to collaborate to monitor the implementation of these standards at participating sites and assure reliability among staff when assessing child care providers for compliance. In addition, ABC Quality leadership and partners must continue to advocate for the continued presence of nutrition and physical activity standards, as indicators of quality, in program requirements. The inclusion of these requirements encourages providers to create environments which can establish a foundation of lifelong wellness for young children.
