ILLINOIS OBESITY PREVENTION STANDARDS

CASE STUDY

Strengthening obesity prevention standards in child care through state partnerships

---

Christy Serrano and Karen Berman, Ounce of Prevention Fund

Tom Browning and Marcia Stoll, Illinois Action for Children

Adam Becker, Consortium to Lower Obesity in Chicago Children

Jennifer Herd, Chicago Department of Public Health

Summary

The purpose of this case study is to share the Illinois experience in preventing obesity in early childhood via strengthening nutrition, physical activity and screen time standards in licensed child-care centers across the state. This report consists of four sections:

1. The Role of Early Childhood in Obesity Prevention
2. Setting the Stage: Developing and Implementing Chicago Child-Care Standards
3. Statewide Expansion Through Licensing Requirements
4. Policy Opportunities and Lessons Learned

Experts have identified the increasingly important role that early childhood care and education providers play in preventing childhood obesity. As role models and caretakers outside of the home, early childhood providers, including teachers and child-care staff, are uniquely positioned to implement best practices in obesity prevention and influence health-promoting behaviors of children in their care. In Illinois, the policy process for codifying obesity prevention practices in child-care standards was stewarded by the Illinois Early Learning Council, a public-public partnership created by Public Act 93-380, and the state Department of Children and Family Services (DCFS). In developing this case study, the authors hope to inform efforts outside of Illinois in integrating obesity prevention best practices into the early childhood system by describing and sharing lessons learned from the policy process in Illinois.

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH
illinois action for children
Consortium to Lower Obesity in Chicago Children
clocc
the Ounce
Governor's Office of Early Childhood Development
Illinois Early Learning Council

Section 1—The Role of Early Childhood in Obesity Prevention

Approximately 20% of US children are overweight or obese before they enter school, and rates are even higher among low-income children and among African-American and Latino children.[1] According to the Pediatric Nutrition Surveillance Survey, approximately 15% of low-income children under 5 in Illinois are obese.[2] The consequences of being overweight or obese in early childhood are severe. Many health issues are associated with early obesity, including diabetes, liver disease, and asthma and sleep disorders from obstructed breathing. Evidence also indicates that excessive weight gain in the first years of life can alter developing neural, metabolic and behavioral systems in ways that increase the risk for obesity and chronic disease later in life.[3] Overweight and obese children are also more likely to experience academic problems related to chronic absenteeism, anxiety and depression. Researchers predict that this generation of children is likely to have a shorter life expectancy than the generation before it because of the consequences of obesity.[4] Opportunities for mediating risk factors associated with early childhood obesity can be found in the early childhood systems, especially since young children are spending an increasing amount of time outside their homes in early childhood programs such as child care.[5]

Early care and education professionals play a significant role in the lives of young children. These professionals can have an early influence on the healthy lifestyle behaviors and habits of young children through role modeling, education and communication with parents and caregivers about the development of young children.[6] Early care and education professionals can have a direct impact on children's behaviors through institutional policies and practices that govern food served and activities undertaken while children are in out-of-home care. In adhering to more robust obesity prevention standards, early care and education professionals are likely to have a substantial impact on reducing early childhood obesity and influencing later health outcomes of the children they serve.

Despite these opportunities to help lower obesity rates in young children and positively influence later health outcomes, few states have moved to adopt standards that implement best practices related to

---

[1] Institute of Medicine (IOM). (2011). *Early Childhood Obesity Prevention Policies*. Washington, DC: The National Academies Press.
[2] Dalenius K, Borland E, Smith B, Polhamus B, Grummer-Strawn L. (2012). *Pediatric Nutrition Surveillance 2010 Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
[3] Institute of Medicine (IOM). (2011). *Early Childhood Obesity Prevention Policies*. Washington, DC: The National Academies Press.
[4] Olshansky SJ, Passaro DJ, Hershow RC, Layden J, Carnes BA, Brody J, Hayflick L, Butler RN, Allison DB, Ludwig, DS. (2005) *A potential decline in life expectancy in the United States in the 21st century*. New England Journal of Medicine. Vol. 352:1138-1145.
[5] Kaphingst K and Story M. (2009) *Child care as an untapped setting for obesity prevention: state child care licensing regulations related to nutrition, physical activity, and media use for preschool-aged children in the United States*. Preventing Chronic Disease, Vol. 6(1):A11.
[6] Kathleen Sellers, Theresa J. Russo, Ida Baker and Barbara A. Dennison. (2005). *The role of childcare providers in the prevention of childhood overweight.* Journal of Early Childhood Research. Vol 3(3). 227–242.

nutrition, physical activity and screen time in early child-care settings. According to an analysis by the Administration of Children & Families' Office of Child Care looking at licensing trends nationwide, few state standards for child-care centers currently reflect the most recent American Academy of Pediatrics' nutrition guidelines; only seven states specified a duration of time for physical activity for children in center-based care; and fewer than half of states have any rules on children's use of television, computers, and/or other electronic media.[7] However, this analysis does not differentiate across the different age groups for which certain standards apply, and it is likely that robust obesity prevention policies may overlook very young children in care, specifically in the area of physical activity. In Illinois, licensed child-care centers serve approximately 197,000 children birth to age five in 2013.[8] Of these children, approximately 46,300 participated in full- or part-time subsidized child care.[9] By raising child-care quality standards related to obesity prevention, we have an incredible opportunity to positively influence the healthy development and long-term outcomes of thousands of Illinois' most vulnerable young children.

Best-practice standards in early childhood care and education settings have been promoted through national initiatives such as Let's Move! Child Care; programs like I Am Moving, I Am Learning, and the Nutrition and Physical Activity Self-Assessment for Child Care; and national guidance from the book *Caring for our Children: National Health and Safety Performance Standards: Guidelines for Early Care and Early Education Programs* (3rd ed.). More and more, the early childhood years have been identified as an ideal starting point for shaping positive behaviors and laying the foundation for future learning and development. In following best practices outlined in the sources mentioned above, advocates in Chicago partnered with policy staff at the City of Chicago to develop new voluntary child-care standards aimed at combating childhood obesity. The following section provides background on introducing obesity prevention standards in Chicago that ultimately led to the expansion of those standards to licensed child-care centers statewide.

[7] ACF Office of Child Care, Trends in Child Care Licensing, 2011
[8] IECAM data 2013
[9] June 2013 DHS Child Care by Age and Type of Care March 2013 Unduplicated Statewide Totals

Section 2—Setting the Stage: Developing and Implementing the Chicago Child-Care Standards

The City of Chicago established childhood obesity prevention as a priority in 2006 when four city departments and agencies came together to create the Inter-Departmental Task Force on Childhood Obesity (IDTF). Led by the Chicago Department of Public Health (CDPH) and staffed by the Consortium to Lower Obesity in Chicago Children (CLOCC), the task force, which grew to an 11-member body, identified early childhood strategies as an important element of its efforts. In 2009, CDPH and the Chicago Department of Family and Support Services led the effort to align the city's child-care standards with national best practices for nutrition, physical activity and screen time. The Chicago Board of Health and CDPH passed a joint resolution recommending new obesity prevention standards for licensed child-care centers in the city (see Table 1). In order to assess the impact of the new standards, CLOCC, with the support of IDTF members, sought and received funding from the Robert Wood Johnson Foundation, through its Active Living Research and Healthy Eating Research programs, to study the potential impact on child-care policies and practices of a one-hour session to introduce the new standards and disseminate a resource binder to support implementation of the standards. The study identified factors related to physical activity among children in care but indicated that the brief session and binder did not result in actual policy and practice changes in centers. In 2011, the standards were revised to include new guidelines for low-fat dairy, and again an evaluation was conducted, this time to study the impact of more interactive training and ongoing support around implementation.

CDPH partnered with Illinois Action for Children, the statewide advocacy organization serving as the Chicago-area child-care resource and referral agency; Erikson Institute, a graduate school specializing in child development; and CLOCC to create and evaluate the training program. The partners hoped that more in-depth training and support would not only enhance Chicago's implementation and lead to positive change but would also serve as a base of evidence to use in advocating for statewide licensing changes.

In total, 1,408 Chicago-area home-based providers and child-care center directors, teachers and other staff participated in a three-hour in-person training on the new standards. This training used adult learning and motivational interview techniques to engage providers through discussions and activities. The training emphasized the important role providers play in instilling healthy habits in children and allowed participants the opportunity to strategize ways to overcome barriers to implementing the new standards. Following the training period, the Illinois Action for Children Research Department evaluated the implementation of the

standards through a phone interview with 43 center-based and 116 home-based providers randomly selected from the group of attendees.

Table 1. City of Chicago Child-Care Standards for Nutrition, Physical Activity, and Screen Time			
ITEM		**STANDARD**	**AGE GROUP**
Beverage			
	Dairy	1% or non-fat	2 years+
	Sugar-sweetened	Prohibited	All
	Juice	100% fruit juice limited to 4 ounces daily.	1 year+
Physical Activity			
	Total	Minimum 60 minutes	1 year+ attending 6 hours+
	Structured and guided	Minimum 30 minutes	3 years+
	Outdoor	Adequate amounts daily, except in inclement weather	All
Physical Inactivity			
	Sedentary time	Maximum 60 minutes continuously (except nap time)	All
	Screen-based activity	Maximum 60 minutes per day, 30 minutes per session, only educational or movement-focused	2 years+

The evaluation produced several important findings relevant to child-care nutrition and physical activity policy. First, the majority of child-care providers agreed with the standards, and, with the exception of serving low-fat or skim milk, over half of providers (53–64%) were already meeting the new standards prior to the training (see Tables 2 and 3). The evaluators believe that providers' previous exposure to information on obesity prevention through participation in the Child and Adult Care Food Program, Head Start and exposure to other obesity prevention messages could account for their early adoption of the standards. For these providers, the trainings likely reinforced rather than introduced obesity prevention practices.

Second, the evaluation showed that the trainings were successful in motivating providers to implement the standards. By the time of the post-training interview, the percentage of providers meeting standards related to juice consumption and physical activity rose to over 90%, while over 84% were meeting standards related to milk consumption and screen time.

Third, the evaluation identified potential challenges to implementing statewide obesity prevention policies in child-care settings. Providers initially disagreed most with the standard related to milk consumption (16% disagreed; see Table 2) and also found it the most difficult to implement (28% found it difficult; see Table 3). Providers reported that they and many parents feel there are health benefits to drinking whole or 2% milk (over skim or low-fat milk) and that some children resist drinking low-fat milk. Interestingly, the training on the standards appears to have had the greatest impact in this area, since there was a 150% increase in the number of providers who were meeting the new milk consumption standard after the training (see Table 4).

Table 2. Provider Agreement With Standard

Standard	Strongly Agree	Agree	Disagree	Strongly Disagree	No opinion
Juice	48%	43%	8%	1%	0%
Milk	33%	47%	16%	1%	3%
Physical Activity	59%	38%	3%	0%	0%
Screen Viewing	55%	38%	5%	2%	0%

Table 3. Providers Reporting Difficulties in Meeting Standard	
Standard	Percentage Facing Difficulties
Juice	12%
Milk	28%
Physical Activity	9%
Screen Viewing	18%

Table 4. Provider Implementation of Standard at Time of Interview					
Standard	Fully implemented the standard before training	Made changes after training and now meet the standard	Made some but not all recommended changes	Made no changes yet	**Percentage increase in number of providers meeting standard after training**
Juice	53%	39%	7%	2%	**75%**
Milk	32%	47%	11%	9%	**150%**
Physical Activity	56%	37%	6%	1%	**66%**
Screen Viewing	64%	22%	11%	3%	**34%**

Providers encountered some parent or child resistance to the juice consumption and screen time standards as well. Providers reported that some children would request more juice or more screen time, especially if that was their practice at home. Providers also reported facing logistical challenges, such as finding time to fit structured and unstructured physical activities into their schedules or lesson plans, developing indoor activity ideas when poor weather prevented children from going outdoors, and finding ways to meet the standards related to physical activity and screen time when caring for children of mixed age groups. The

availably of low-fat milk and cost of juice were also issues for providers. Some reported not being able to find 1% milk at discount stores, and some found that 100% juice cost more than sweetened juice. These providers were also reluctant to buy milk they thought children disliked and would not drink.

Despite these challenges, the majority of providers were able to shift their program policies and practices to reflect the new standards. Training elements that are believed to have been the most effective in the successful implementation of the new standards were (1) educating providers on childhood obesity and its impacts on children, (2) motivating providers to see themselves as important change agents in children's lives and (3) drawing on providers' own ideas and strategies for implementing the standards. Effective trainings also acknowledged and addressed barriers to implementing change, particularly (1) children's (but also parents') attitudes toward the new standards, (2) considerations related to establishing outdoor physical activity routines such as weather conditions or crime, (3) financial constraints and (4) the negative influence of advertisements for unhealthy foods that target children.

The Chicago-based partners held a series of dissemination meetings with statewide early childhood advocacy organizations to introduce the obesity prevention standards, to share the findings of the two studies, and to explore opportunities for strengthening implementation by including the standards in statewide licensing requirements. The Chicago partners invited staff from the Ounce of Prevention Fund[10] in the hopes that an influential organization would lend its expertise and authority as the staffing organization for the Illinois Early Learning Council to the statewide expansion effort.

[10] The Ounce of Prevention Fund's mission is to give children in poverty the best chance for success in school and in life.

Section 3—Statewide Expansion Through Licensing Requirements

In 2012, staff from CLOCC, Illinois Action for Children, CDPH and the Ounce began to develop a strategy for statewide expansion of the obesity prevention standards. A clear strategy emerged when two concurrent events occurred. First, the Illinois Early Learning Council (ELC) leadership decided to create a health subcommittee to explore opportunities for the integration of health into the ELC's primarily education-focused agenda. Second, DCFS decided to revise the administrative rule regarding licensing standards for day-care centers, otherwise known as Rule 407. These two events are described in more detail below.

In 2011 and 2012, the ELC went through a strategic planning process and committee restructuring. The strategic plan included a set of guiding principles to direct the work of the committees and reflect the priorities and commitments of the ELC as a whole (ELC Strategic Plan 2012). The principles highlight the ELC's commitment to a holistic approach to supporting the needs of children with the goal that all children enter school healthy and ready to learn. The restructuring process led to the creation of the Systems Integration and Alignment Committee (SIAC) and included a work stream for health under the committee charge. SIAC formed the health subcommittee in order to move the ELC's health objectives forward. After learning about the successful implementation of obesity prevention standards in Chicago child-care centers, the health subcommittee proposed developing recommendations to expand the obesity prevention standards across the rest of the state by way of including them in licensing standards for all child-care centers. As Illinois' child-care licensing administrator, DCFS has the authority to expand nutrition, physical activity and screen time standards to licensed child-care centers across the state.

DCFS began revising Rule 407 and its accompanying procedures around the same time that the health subcommittee proposed developing recommendations to expand the obesity prevention licensing standards for all child-care centers. DCFS expressed interest in considering the subcommittee's obesity prevention recommendations in its revision of Rule 407. Members of the subcommittee and staff from the governor's office, the City of Chicago and DCFS met in November 2012 to determine a process for developing and presenting its recommendations to DCFS. The health subcommittee convened an Obesity Prevention ad hoc work group in December 2012, and over the course of several months, it drafted obesity prevention recommendations for consideration by DCFS. As the main resources in developing its recommendations, the work group used the following reports: *Nutrition, Physical Activity and Screen Time*

Standards for Child Care Centers in the City of Chicago and *Caring for Our Children: National Health and Safety Performance Standards: Standards: Guidelines for Early Care and Early Education Programs*.[11]

Over approximately two months, the recommendations were developed following an iterative process of sharing and revising based on feedback given at two in-depth meetings and multiple email exchanges between ELC participants and other stakeholders. Guidelines for supporting breast-feeding of children in licensed care were added, along with refinements to the Chicago obesity prevention standards. The recommendations were then reviewed and approved by the health subcommittee and SIAC before being approved at the ELC Executive Committee meeting. The recommendations received final approval at the ELC meeting in February 2013.

DCFS drafted amendments to Rule 407 that included the majority of the recommended obesity prevention standards approved by the ELC. These amendments, along with other changes made by DCFS, were published in the Illinois Register for first notice and a public comment period through October 7, 2013. The health subcommittee encouraged participating members to submit comments to DCFS in support of the new obesity prevention standards in Rule 407. The final version of Rule 407 was made effective on August 1, 2014, and it included all of the proposed amendments that were published during first notice in 2013. The major changes to Rule 407 related to obesity prevention are:

In the area of physical activity

- Infants will have supervised tummy time every day when they are awake.
- Staff will interact with an awake infant on his or her tummy for short periods of time.
- Children of all ages will participate at least twice daily in age-appropriate outdoor time.
- In inclement weather, active play will be encouraged and supported in indoor play areas.
- Children who are mobile will not be allowed to sit passively for more than 30 continuous minutes, except during scheduled rest or nap times.
- Imposing physical activity or withholding active play will not be used on children as a form of discipline.

[11] Other resources used to help develop the recommended standards include US Department of Labor, USDA's Child and Adult Care Food Program Guidelines, NAEYC and the Fred Rogers Center, Academy of Breastfeeding Medicine, CDC, NAP SACC, Institute of Medicine and the Let's Move! White House Initiative

In the area of screen time

- Children younger than 2 years will not be allowed passive screen viewing (i.e., the passive, sedentary use of age-appropriate and educational media through screen-based technologies, such as television, video, DVDs, visual recordings and other noninteractive technologies).
- Children 2 years and older will not have more than 60 minutes per day of passive screen viewing in a six-hour program; children attending a program for less than six hours a day shall be limited to a proportionate amount of passive screen viewing (e.g., children in a three-hour program shall not have more than 30 minutes per day of screen viewing).
- TV, video or DVD viewing will not be allowed during meal or snack time.

In the area of nutrition

- No juice is permitted for children younger than 1 year.
- For children 1 year and older, juices will be 100% fruit juice and limited to a four-ounce daily serving.
- Fruit juice will be given only as part of a meal or snack.
- Beverages with added sweeteners, whether natural or artificial, will not be provided to children.
- Human milk or infant formula will be served to children younger than 1 year.
- Children 1 to 2 years old who are not on human milk or infant formula will be served whole milk, unless low-fat milk is recommended in writing by a child's medical provider.
- Children 2 years and older will not be served milk with a fat content higher than 1%, unless recommended in writing by a child's medical provider.
- The center will provide reasonable, private accommodations for mothers who may want to breast-feed during hours of operation, including a private area with an electrical outlet for mothers to pump their breast milk, and shall notify parents of these accommodations.

- The facility will make drinking water freely available to all children by providing drinking fountains and/or disposable cups for individual use.
- Water will be offered to children at frequent intervals and during meals and snacks.
- Meals will be prepared so as to moderate fat and sodium content—choose monounsaturated and polyunsaturated fats (e.g., olive and safflower oils) and soft margarines; avoid trans fats, saturated fats and fried foods.
- Limit salty snack foods, such as pretzels or chips.
- Cake, pastries, cookies or other foods with high sugar and/or fat content will not be served to children.

These changes substantially strengthen the physical activity and nutrition standards already in Rule 407. While previously there were no specific rules on screen time use in Rule 407, Illinois is now one of a few states that sets limits on the amount of screen time children can have in licensed child-care centers. Additionally, the new standards further align public policy in Illinois with national child obesity prevention efforts, such as first lady Michelle Obama's Let's Move! campaign.[12]

However, the health subcommittee recognizes that changing center practices that adhere to the new obesity prevention standards will require significant implementation support from the state. As the Chicago experience shows, offering training and support to child-care providers on understanding the importance of obesity prevention standards and providing guidance on how to implement those standards are essential to transforming state policy into practice at the local level. The health subcommittee advised the state's child and family professional development support system, called Gateways to Opportunity, and state agencies on the need to develop a comprehensive and accessible training on the new obesity prevention standards. Currently, Gateways to Opportunity, through the Illinois Network of Child Care Resource and Referral Agency (INCCRRA), offers an online training for the entire state. In-person trainings continue to be offered through Illinois Action for Children and other child-care resource and referral agencies throughout the state.

[12] For more details, see http://www.letsmove.gov/

Section 4—Policy Opportunities and Lessons Learned

Multiple pathways exist for implementing obesity prevention strategies in early childhood,[13] and revising state child-care licensing standards is just one path states can take to affect long-term policy change. In Illinois, setting this work in motion was aided by the nearly simultaneous events of convening a new health subcommittee under the Early Learning Council and DCFS' opening up Rule 407 for a major revision. The authors of this report believe that the development of feasible policy recommendations and the identification of implementation considerations for following the obesity prevention standards were largely due to the sustained partnership between the ELC's health subcommittee and DCFS at the onset of the process. Foundational to the collaborative approach between DCFS and the health subcommittee was the prioritization of early childhood health within the ELC through the establishment of the health subcommittee, which in turn developed an actionable plan for researching, drafting and presenting the obesity prevention recommendations to the ELC.

Although the precise steps for developing and embedding obesity prevention practices in early childhood may look different in different states, the following are additional lessons learned from the Illinois experience for motivating successful policy change:

1. Identify and convene a diverse group of stakeholders (health experts, policy experts, public representatives, early childhood experts and program providers, parents, etc.) to engage in developing policy recommendations.

2. Conduct thorough research of current obesity prevention initiatives in the state to ensure that such efforts are aligned across the state or could be leveraged to promote obesity prevention in early childhood.

3. Investigate what other states are doing within their early childhood systems to promote best practices in obesity prevention in order to draw valuable lessons from those experiences.

4. As a partner, be a resource to state agencies and offer strategies for supporting best practices while recognizing feasibility considerations.

In summary, the two overarching elements for successful policy implementation are (1) analyzing the opportunities for embedding obesity prevention within early childhood systems and (2) conducting effective outreach to engage key stakeholders for promoting best practices in obesity prevention. Although recent

[13] For more ideas on strategies, see *Let's Move! Child Care (http://www.healthykidshealthyfuture.org/home/collaborate.html)*

trends show a slight decline in childhood obesity nationwide, states must remain proactive in adopting policies that promote child well-being so that healthy children may develop into healthy adults. With successful implementation, state and local policies have the potential to motivate change and drive impact much more quickly than federal initiatives are able to produce.

To Contact the Authors

Adam Becker: info@clocc.net

Tom Browning: healthyfood@actforchildren.org

Marcia Stoll: stollm@actforchildren.org

Jennifer Herd: Jennifer.Herd@cityofchicago.org

Karen Berman: advocacy@theounce.org

Christy Serrano: CSerrano@mccormickfoundation.org

Kate Ritter: Kate.Ritter@illinois.gov