I Am Moving, I Am Learning: A Proactive Approach for Addressing Childhood Obesity in Head Start Children

Region III
Administration for Children
and Families
with
CALIBER

Summary Report: The First Two Years



I Am Moving, I Am Learning - Project Overview

The Region III Office of the Administration for Children & Families initiated a pilot project in FY 2005 designed to prevent and reverse the negative consequences of obesity in Head Start children. The original pilot project focused on seventeen Head Start programs in Virginia and West Virginia, where the rate of obesity in elementary school children nearly doubled the national average. The project was expanded in FY 2006 in response to a groundswell of enthusiasm from Head Start programs eager to embrace this approach to children's wellness. This report summarizes the goals, objectives, and accomplishments of *I Am Moving, I Am Learning* over the course of the past two and a half years.

I Am Moving, I Am Learning introduces multidisciplinary teams from local Head Start programs to the science of obesity prevention, and arms them with state-of-the-art resources and best practices for addressing the growing child obesity epidemic in an intentional and purposeful manner. Participating Head Start staff attend a two and a half day intensive training program, with follow-up support provided by the Region III Head Start Technical Assistance System.

I Am Moving, I Am Learning reinforces for grantees the importance of the mind-body connection and the relationship between physical fitness and early learning. The project provides grantees with strategies and resources for infusing quality physical movement and healthy nutrition choices within their familiar curriculum approaches and daily classroom routines. The research-based project is designed to support implementation of the Head Start Performance Standards and Child Outcomes Framework by enhancing existing classroom practices.

The overarching goals of *I Am Moving, I Am Learning* are to:

- Increase the quantity of time spent in moderate to vigorous physical activity (MVPA) during the daily routine to meet national guidelines for physical activity;
- Improve the quality of structured movement experiences intentionally facilitated by teachers and adults;
- Improve healthy nutrition choices for children every day.

Strategies and activities for meeting the goals were developed by Amy Requa, Pediatric Nurse Practitioner and Region III TA System Health Specialist, and Dr. Linda Carson, Director of the West Virginia Motor Development Center, West Virginia University. A key feature of *I Am Moving, I Am Learning* is the flexibility it affords programs to tailor and individualize strategies and activities to meet local program needs.

I Am Moving, I Am Learning is worthy of replication. It provides a developmentally appropriate, focused framework for action to combat childhood obesity. It is an effective and practical response to an alarming health issue.

The Problem: A Childhood Obesity Epidemic in America

According to the Centers for Disease Control and Prevention, childhood obesity has risen dramatically in the United States in the past decade, particularly among young children from low-income and minority groups. Lack of physical activity and poor nutrition are significant contributors to childhood obesity.

Overweight preschool children are now suffering the precursors of chronic diseases and negative health consequences formerly seen only in adults. These include:

- Depression/Social Isolation
- Type II Diabetes
- Cardiovascular Diseases
- High Blood Pressure
- High Cholesterol
- Orthopedic Problems/Destruction of weight-bearing joints

If this trend continues, children of this generation are not likely to live as long as their parents. Research shows that by influencing children early in their lives to adopt active and fit lifestyles and make healthy nutrition choices, childhood obesity can be prevented and even reversed.

Reversing the Trend: A Pilot for Prevention in Region III

In August 2004, with the encouragement and support of the Office of Head Start, Region III launched a special initiative, *I Am Moving, I Am Learning* to intentionally address childhood obesity in two states with significant need – Virginia and West Virginia. Statistics show 58% of Virginia's adults and 64% of West Virginia's adults are overweight or at-risk for overweight, compared to 56% nationally. In West Virginia, 28% of low-income children between 2 and 5 years of age are overweight or at-risk of becoming overweight (CDC PedNSS, 2003). Approximately 28% of Virginia's children and 26% of West Virginia's children are overweight in the fourth and fifth grades, nearly twice the national average.

Targeted programs from these two states were invited to attend an intensive, interactive, two and a half day training event in December 2004. The training demonstrated to grantees how purposeful movement and physical activity influences children early in their development to adopt physically active lifestyles to reduce the risk of heart disease and obesity. In addition to influencing child and family health and fitness, the training promoted multigenerational practice and advocacy for increased physically active lifestyles for all involved: children, parents, staff and community.

I Am Moving, I Am Learning recognizes the importance of the mind-body connection, reinforcing the fact that being physically fit fosters healthy early childhood development which translates into successful learning. Because *I Am Moving, I Am Learning* features strategies and resources for integrating and incorporating movement and healthy nutrition choices seamlessly within grantees' curricula, it complements the overall goals and philosophy of Head Start and is grounded in daily classroom routines.

I Am Moving, I Am Learning fits naturally within and supports implementation of the Head Start Performance Standards [1304.21(a)(5)(i); 1304.21(a)(6); 1304.21(b)(3)(i); 1304.23(c)(1-7); 1304.23(d)] and the Head Start Child Outcomes Framework (Domain #8: Physical Health and Development). It enhances what teachers already do in Head Start by providing more guidance to focus on children's gross motor development within their familiar curriculum approaches. I Am Moving, I Am Learning offers tools to grantees to complement the assessment of Domain #8 through observation of children's progress in movement skills within their ongoing monitoring systems.

In FY 2005/2006, *I Am Moving, I Am Learning* was gradually expanded to reach 101 Head Start grantees and delegates from Pennsylvania, Maryland, Delaware, the District of Columbia, as well as Virginia and West Virginia.

Research Based

I Am Moving, I Am Learning was designed as a research-to-practice initiative incorporating best practice guidelines and policies including but not limited to:

- Active Start: A Statement of Physical Activity Guidelines for Children Birth to Five Years (National Association for Sport and Physical Education, NASPE, 2002)
- Bright Futures in Practice; Nutrition and Physical Activity (National Center for Education in Maternal and Child Health, 2001)
- American Academy of Pediatrics Policy Statements & Task Force on Obesity Strategies
- Institute of Medicine Report (2004): "Preventing Childhood Obesity: Health in the Balance"
- Centers for Disease Control and Prevention's BMI-for-Age/Gender Screening Guidelines

Amy Requa, MSN, CRNP, Pediatric Nurse Practitioner and Region III TA System Health Content Specialist, created the pilot project design and led the initiative. The Region was also fortunate to have access to the expertise and support of Dr. Linda Carson, Ed.D., Ware Distinguished Professor and Director of the West Virginia Motor Development Center, West Virginia University. Dr. Carson partnered with ACF Region III and ICF/Caliber, the Region III Technical Assistance contractor, in launching and conceptualizing the initiative, training grantee teams, and providing guidance throughout the two and a half year period. As the Medical Advisor to OHS, Rachel Tellez, M.D., MS, FAAP, also provided valuable support on program content and helped to facilitate a formal evaluation of the project after the pilot phase was completed. The project was championed and carried out under the leadership of Nancy Elmore, Regional Program Manager, Region III Office of Head Start, Administration for Children and Families. In FY 2006, this project team received the Assistant Secretary's "Partnering for HHS Excellence" award in acknowledgement of their accomplishments.

Goals and Objectives

- A. Educate staff and parents about the importance of moderate to vigorous physical activity (MVPA) as an effective obesity prevention strategy for young children.
- B. Enhance and augment the existing curriculum approach with a renewed focus on gross motor skills and physical activity in the *Head Start Child Outcomes Framework Domain #8*.
- C. Educate staff and parents that preschool fitness happens as a by-product of children's movement instruction and play, or what they do during structured movement and unstructured play.
- D. Encourage children to move with more intensity in short bursts or increments of time during both indoor and outdoor routines.
- E. Observe and evaluate individual children for progress in their ability to engage in moderate to vigorous physical activity (MVPA).
- F. Observe and monitor the increase in MVPA within the daily routines of Head Start.

MEASURABLE OUTCOMES: Children accumulate at least 60 minutes of daily, structured physical activity, as well as 60 minutes of daily, unstructured physical activity; children are not sedentary or sitting still for more than 60 minutes at a time; children show individual progress in their ability to move with more intensity for longer periods of time.

- A. Educate staff and parents about movement vocabulary and the impact of structured movement experiences on early childhood brain development.
- B. Educate staff and parents to structure opportunities for children to engage in quality movement experiences on a daily basis.
- C. Intentionally facilitate structured physical activities that are thoughtfully preplanned within the Head Start daily routines.
- D. Promote structured movement experiences to build on each child's progress with movement skills throughout the day.
- E. Provide frequent practice for children to develop competence in movement skills while at Head Start and at home.
- F. Observe and evaluate individual children for progress with their gross motor skills.
- G. Observe and monitor the classroom and teacher interactions to evaluate the quality of movement experiences within daily routines.
- H. Monitor curriculum implementation plans for daily structured movement experiences.

MEASURABLE OUTCOMES: Increased staff and parental knowledge of gross motor skills and development in young children; increased frequency of structured movement activities at home and in the classroom; teacher curriculum plans integrate structured movement activities more frequently; children show progress in their own abilities and proficiency in a variety of gross motor skills under the *Head Start Child Outcomes Framework - Domain #8;* children show increased awareness and understanding of body position and movement vocabulary.

- A. Educate staff and parents that nutrition improves when they make healthy choices for children.
- B. Educate staff and parents to model healthy choices for children.
- C. Offer a variety of healthy foods to children in a structured family-style meal setting during daily routines and at home.
- D. Educate children to recognize healthy foods.
- E. Use fun and engaging activities in the classroom and at home to encourage preschool children to develop personal preferences for healthy foods.
- F. Provide positive recognition and support when children make healthy choices.
- G. Observe and evaluate individual children for progress in their ability to try healthy foods and beverages.
- H. Observe and monitor teacher interactions and discussion with children about healthy food during family-style meals.
- Screen children at least once annually for underweight, overweight and at-risk for overweight using the Body Mass Index (BMI) for age and gender charts provided by the Centers for Disease Control and Prevention.
- J. Refer children who are underweight, overweight or at-risk for overweight according to Body Mass Index for age and gender.

MEASURABLE OUTCOMES: Children are able to identify healthy foods; children show progress in using vocabulary words for nutritious foods such as a variety of fruits and vegetables; children show progress recognizing colors and shapes of nutritious foods; children choose healthy foods to eat more frequently; children screened as overweight or at risk for overweight using the CDC's Body Mass Index for age and gender charts are referred to their health care provider for further evaluation and testing.

Pilot Project Implementation

LAUNCH MEETING

In August 2004, the Regional Office identified 10 Head Start and Early Head Start grantees from Virginia and 7 from West Virginia to participate in *I Am Moving, I Am Learning*. The seventeen grantees were invited to a launch meeting in Philadelphia to hear the state of the science in obesity prevention and receive best practices guidelines and quality resources. A resource binder was given to all attendees containing research briefs, position statements, sample lesson plans, online resources, books, publications and CDs. The cost of pedometers for all attendees was subsidized by "Walk4Life".

The *I Am Moving, I Am Learning* launch meeting introduced attendees to best practices and developmentally appropriate physical activity guidelines for infants, toddlers and

preschoolers. Key elements for infusing quality movement, physical activities and nutrition concepts within the *Head Start Child Outcomes Framework* were addressed. Head Start management teams focused on developing targeted strategies and action steps to achieve successful outcomes in their local programs.

DEVELOPING PARAMETERS AND TOOLS

Following the launch meeting, conference calls were convened with the participating grantees to refine goals and parameters for the initiative and develop classroom observation tools. This participatory approach generated extraordinary grantee ownership and buy-in. Consensus was reached on the definition of structured physical activity as: "an activity that is thoughtfully planned and intentionally facilitated by an adult."

PRE-INTERVENTION ASSESSMENT

Pilot grantees conducted their own pre-intervention observation and assessment to document activity levels (MVPA) and teacher interactions during movement and nutrition experiences. They assessed their existing music resources and revisited the use of these resources by analyzing the quality of movement and intensity of children's physical activity. This process assisted pilot grantees to hone their observation skills and analyze their own classroom routines and family-style meals with a fresh perspective.

CLASSROOM OBSERVATIONS

Also, pilot grantees developed an observation tool and monitored their classrooms to determine the amount of time spent in structured moderate to vigorous physical activity (MVPA) that was intentionally facilitated by teachers. They monitored teacher participation in MVPA and nutrition conversation with children during meals. Grantees were asked to use this tool to observe interactions in at least 2 classrooms.

TRAINING FOR THE TRAINERS

In December 2004, Region III convened a "training for trainers" event in Charleston, West Virginia. Grantees were encouraged to send their management teams to further develop their capacity to implement *I Am Moving, I Am Learning* in their local programs. Trainers met in plenary sessions, breakout groups, a series of workshops, and local team strategy meetings to review the movement vocabulary framework, discuss nutrition topics and exchange ideas about effective use of music and movement in their curricula. Teams reviewed their classroom monitoring practices for observing teacher interactions with children around nutrition experiences and methods for tracking the frequency, duration, and nature of MVPA taking place during classroom routines.

SELECTED GRANTEE ACTIVITIES: AN INDIVIDUALIZED APPROACH

By spring of 2005, eighty-eight classrooms were participating in *I Am Moving, I Am Learning*. Throughout the implementation of *I Am Moving, I Am Learning*, grantees were receptive to tailoring their interventions to the needs and resources of their own communities, just as they do with the Head Start Performance Standards. Grantees eagerly explored ways to determine the training needs of their staff and the technical assistance they required, what curriculum planning they might conduct, methods for infusing best practices into their daily routines, and effective ways to measure and evaluate outcomes.

Participating programs voluntarily submitted summaries of strategies they had implemented. These strategies reflected their creativity in customizing this initiative to impact children, families, staff and communities. These included:

Strategies Targeted to Children:

- Structuring MVPA for children with rhythm stick dancing, hoop maze, dancing scarves, balance board, and scooter weaving.
- Tracking height and weight changes in children identified as overweight, or at risk for overweight, as defined by their Body Mass Index for age and gender.
- Reinforcing healthy choices using colors, sequencing, grouping and classifying, literacy, language development, as well as MVPA awareness.
- Awarding certificates of participation and photos of each child engaged in MVPA to their parents.

Strategies Targeted to Parents and Families:

- Encouraging male involvement in MVPA in conjunction with Fatherhood Initiative efforts.
- Scheduling parent volunteers to assist with MVPA in classrooms and contribute to discussions about nutrition and healthy food choices during meals.
- Partnering with a university for its physical therapy students to complete parent body composition assessments and transport parents to a local indoor track for fitness activities.
- Partnering with the State Cooperative Extension agent to provide monthly food tasting experiences and educational activities focused on healthy food choices and cooking opportunities.
- Distributing pedometers and other health-oriented incentives to parents.

Strategies Targeted to Staff:

- Beginning monthly program staff meetings with an integrated 10-minute MVPA led by a different staff member team each month.
- Establishing a partnership with the local recreation department to train teachers in a physical fitness curriculum and conduct twice weekly fitness sessions.
- Holding a "Walk 4 Fitness" Challenge a program-wide tracking of steps throughout the year for staff and parents using pedometers.

Strategies Targeted To Communities:

- Integrating I Am Moving, I Am Learning into a Positive Youth Initiative to involve high school youth trained to lead children and parents in MVPA during family events.
- Creating a walking trail with fitness stations for children, parents, staff, and community members.
- Working with the Head Start Health Advisory Committee to urge county school boards to adopt policies regarding cafeteria meals, and food and drinks in snack machines, to promote healthy choices.

Grantee enthusiasm has been high throughout the initiative. For example, grantees have created their own *I Am Moving, I Am Learning* logos, T-shirts, materials, props and other incentives. Pilot grantees have shared successful strategies with their peers at Head Start Association Conferences and other venues. This has created excitement around *I Am Moving, I Am Learning* and resulted in cross-pollination of its key concepts to other

grantees. During the pilot period, Dr. Linda Carson developed two theme songs for *I Am Moving, I Am Learning* – one focused on movement and the other on nutrition.

Project Outcomes

Participating programs and the TA staff working with them have reported a variety of positive outcomes for children, staff, families and communities over this two and a half year period.

CHILD OUTCOMES:

- Accumulated MVPA in minutes has doubled and tripled in selected classrooms.
- Children who were previously sedentary are now active.
- Individual children experienced moderate improvements on the BMI-for-age and gender growth curves.
- Teachers found that children who needed the most redirection prior to I Am Moving, I Am Learning required less as music and movement increased in the daily routines.
- Gross motor centers were established in classrooms, with activities changing weekly.
- Use of music to facilitate movement increased and children and teachers were observed to be happier and have more energy.
- MVPA was observed in block/floor play during one hour of work time whereas all activities during that period had been sedentary prior to *I Am Moving, I Am Learning*.

PARENT AND FAMILY OUTCOMES:

- There has been extraordinary parent participation in I Am Moving, I Am Learning events.
- Programs have linked their Fatherhood Initiatives and I Am Moving, I Am Learning, getting Dads involved in facilitating movement with children.
- Parents have been increasingly receptive to physical fitness and nutrition topics being highlighted at parent meetings throughout the year.
- Nutrition, activity and wellness themes are the subject of daily conversations with parents.
- Goals to promote healthy choices are included in Family Partnership Agreements, and families are encouraged to participate in physical activities together and try nutritious recipes.
- Parents do not bring cupcakes or candy to the classroom anymore. They substitute healthy treats for birthdays.
- One grantee reported nutrition awareness had been a theme during one month of the school year in the past but currently nutrition is a part of everyday awareness for everyone.

STAFF OUTCOMES:

- Structured outdoor play is now included in lesson plans on a daily basis.
- MVPA is frequently used as a transition activity, and movement activities occur before sitting activities.

- Family Service staff are establishing health partnerships with families.
- Increased physical activities and healthy nutrition have been infused into all programming.
- Program policies and procedures have been revised to promote healthy choices, practices and messages across service areas.
- Teacher interactions improved from simply demonstrating movements to intentionally facilitating MVPA and engaging in MVPA themselves.
- Teachers and staff reported personal weight loss and attributed it to increased MVPA conducted with the children.
- Training conducted by their own training teams made all staff, including teachers, cooks, and drivers, more aware of the importance of increased activity and healthy food choices in their lives.
- Many grantees reported positive outcomes in teacher's nutrition conversations
 with children about the importance of fruits and vegetables and making healthy
 food choices during family meals in the classrooms.
- Programs are videotaping and taking pictures of staff and parents implementing I
 Am Moving, I Am Learning activities with children, and sharing these experiences
 to motivate other staff.

COMMUNITY OUTCOMES:

- Policy Councils, School Boards, Parent Committees, Health Advisory Committees and staff were involved in planning and implementation throughout the year.
- I Am Moving, I Am Learning paved the way for introducing changes to healthier food choices and encouraging more physical activity for staff and students throughout county school systems.
- School Districts supported ongoing training of teachers and physical education staff using the I Am Moving, I Am Learning approach.
- School Districts changed policies and procedures for meal preparation, such as the elimination of fried foods from all menus.
- Pre-k partners in multiple counties were trained by Head Start using the I Am Moving, I Am Learning approach.
- Local community partners funded strategies for increased MVPA.
- Wellness groups were formed among community partners.

Project Expansion

As word of *I Am Moving, I Am Learning* spread from program to program and among State Head Start Associations within Region III, overwhelming interest in obesity prevention was generated across the region, and requests for additional training opportunities poured in. As a result, the region sponsored four additional training events in the spring and summer of FY 2006. A fifth training event was sponsored by Baltimore City for its 15 delegate agencies during the summer of 2006.

To date, 650 Head Start staff representing 101 grantee and delegate agencies in Region III received the full two and a half day training. Trainees returned to their programs to train their co-workers, sharing the strategies and approaches they learned and facilitating planning across service areas. Through this method the training has reached over 3,000 Head Start staff in the region. Several other programs have been exposed to a condensed version of *I Am Moving, I Am Learning* through workshops at State Association Conferences, the Region III 2006 Child Care Conference, and the Region III Fatherhood Initiative Teleconference in June 2006.

In January 2007, *I Am Moving, I Am Learning* will be rolled out to Head Start grantees in Region IX (San Francisco). This represents the first major delivery outside of Region III. Additional training events have occurred or are in the planning stages as a result of the intentional formation of federal, state and local partnerships for moving forward strategically to address the growing epidemic of childhood obesity.

- The West Virginia Collaboration Office supported statewide training in March 2006 for all Head Start programs and their partners, and the West Virginia Public Broadcasting Service developed a 10 minute television spot which showcased I Am Moving, I Am Learning as an effective approach to children's wellness.
- The Pennsylvania "Keystone Color Me Healthy" multi-agency nutrition initiative is partnering with I Am Moving, I Am Learning to provide a consolidated approach to training of trainers. In addition, Region III has been invited to join the core group of the Philadelphia Obesity Consortium.
- The Virginia Department of Health will convene 12 training events using the *I Am Moving, I Am Learning* model for all WIC and Cooperative Extension employees as well as Head Start staff during the spring and summer of 2007. These events will be conducted as part of Virginia's CHAMPION program (Commonwealth's Healthy Approach & Mobilization Plan for Inactivity, Obesity, and Nutrition).
- In an October 2006 press release, Virginia Governor Tim Kaine identified I Am Moving, I Am Learning as an example of an effective strategy for addressing childhood obesity.
- Planning is underway with the Delaware Head Start Collaboration Office, Region III ACF, and Nemours Health & Prevention Services one of the nation's largest children's health systems for statewide training targeting 50 early childhood programs, including Head Start, ECAP (the state funded pre-k program), and center based as well as family child care providers. The training, anticipated in the summer of 2007, will combine the best of Nemours' "5-2-1, Almost None" prescription for child wellness with the strategies and resources of *I Am Moving, I Am Learning*.

In addition to the Region III activities described above, information on *I Am Moving, I Am Learning* has been shared at national and regional conferences across the country, including but not limited to the following:

- Birth to Three Institute, May 2006
- National Obesity Action Forum, June 2006
- California Head Start Health Institute. June 2006

- ACF State Child Care Administrator's Conference, August 2006
- HHS National Prevention Summit, October 2006
- American Public Health Association Annual Conference, November 2006
- National Association for the Education of Young Children Annual Conference, November 2006

Finally, Region III developed a video presentation on *I Am Moving, I Am Learning* in December 2006 which summarizes the project's goals, objectives, and implementation strategies. The video highlights children, families and staff engaging in *I Am Moving I Am Learning* activities. We hope this will be a useful resource for sharing the *I Am Moving, I Am Learning* story throughout the Head Start community and beyond.

Evaluation

In FY 2006, the ACF Office of Planning, Research, and Evaluation contracted with Mathematica Policy Research, Inc. to design and conduct a two year implementation evaluation of *I Am Moving, I Am Learning*. The purpose of the evaluation is to monitor implementation, assess program outcomes and measurement options, and assist in the dissemination of research products to Head Start practitioners, the research community, and policy makers.

Opportunities for Replication

I Am Moving, I Am Learning offers several key benefits that make it worthy of replication:

- Provides a logical, focused framework for action.
- Provides a practical response to a health issue that has implications for local, regional, and national planning and policymaking.
- Offers a consistent, sustainable health-and nutrition-based methodology for meeting established Head Start Performance Standards.
- Compiles a record of initiative milestones to inform programming and funding decisions for expanded project activities in subsequent years.

Moreover, *I Am Moving, I Am Learning* is easily integrated with other community initiatives designed to address childhood obesity and family wellness. *I Am Moving, I Am Learning* is not an "either/or" solution to the problem of childhood obesity; it is a strategic approach that is complementary to and supportive of the work other agencies and organizations are doing in this area.

For additional discussion and information, contact Amy Requa at (215) 592-1684 Ext. 225 or Nancy Elmore at (215) 861-4048.