

# WEST VIRGINIA: Key 2 a Healthy Start Intervention



This brief provides a summary of the CHOICES Learning Collaborative Partnership simulation model of integrating *Key 2 a Healthy Start*, West Virginia's implementation of Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC), into the state's Tiered Reimbursement system, which provides subsidy incentives to child care centers meeting quality standards.

## The Issue

Over the past four decades, childhood obesity has tripled.<sup>1</sup> In WV, obesity rates in 2-4 year old WIC participants increased from 14% up to 16.4% in 2014.<sup>2</sup> WV was one of four states that experienced increasing rates in this young population. Now labeled as an epidemic, health care costs for treating obesity-related health conditions such as heart disease and diabetes range from \$147 billion to \$210 billion per year.<sup>3</sup> While multiple strategies are needed to reverse the epidemic, emerging prevention strategies directed at children show great promise for addressing the epidemic.<sup>4</sup> A large body of evidence shows that healthy eating, physical activity, and limiting sugary drinks and screen time helps kids grow up at a healthy weight.

In West Virginia, 41% of 2-5 year olds attend a licensed child care center. Licensed centers can offer healthy, nurturing environments for children. Tiered Reimbursement can encourage and empower centers to voluntarily improve nutrition, physical activity, and screen time standards while increasing financial incentives.

## About Key 2 A Healthy Start

*Key 2 a Healthy Start* is based on NAP SACC, an evidence-based intervention for helping child care centers attain best practices regarding nutrition, active play, and screen time.<sup>5,6</sup> The program enables child care directors and staff to complete self-assessments of their nutrition, active play, and screen time practices and receive training and technical assistance to implement changes that create healthier environments and policies. Integrating *Key 2 a Healthy Start* into West Virginia's Tiered Reimbursement system would incentivize and support participation in the intervention and broaden its availability.

## Comparing Costs and Outcomes

CHOICES cost-effectiveness analysis compared the costs and outcomes of integrating *Key 2 a Healthy Start* into Tiered Reimbursement over 10 years versus the costs and outcomes of not implementing the intervention. This model assumes that 44% of licensed child care centers will participate in Tiered Reimbursement and thus participate in *Key 2 a Healthy Start*.

**Implementing *Key 2 a Healthy Start* in child care centers throughout West Virginia is an investment in the future:**



**OVER 38,000  
CHILDREN REACHED**

with healthier food and drinks, more active play and less screen time over 10 years.



**593 CASES OF  
CHILDHOOD OBESITY  
PREVENTED**

In 2025.



**\$69.80**

**COST PER CHILD**

# WEST VIRGINIA: *Key 2 a Healthy Start* Intervention

## Conclusions and Implications

Every child deserves a healthy start in life. This includes ensuring that all kids have access to healthy foods and drinks and to be physically active, no matter where they live or which child care they attend. A state-level initiative to bring *Key 2 a Healthy Start* to West Virginia's child care centers through the Tiered Reimbursement system could prevent 593 cases of childhood obesity in the last year of the model. Additionally, healthy child care environments and policies would be implemented for over 38,000 children.

For every \$1.00 spent on implementing *Key 2 a Healthy Start*, a savings of \$0.10 in health care costs is estimated. These results reinforce the importance of *Key 2 a Healthy Start* as primary obesity prevention. Implementing small changes early for young children can help them develop healthy habits for life, thereby avoiding more costly and ineffective treatment options in the future.

Evidence is growing about how to help children achieve a healthy weight. Programs such as *Key 2 a Healthy Start* are laying the foundation for healthier futures by helping child care centers create environments and policies that nurture healthy habits. Leaders at the federal, state, and local level should use the best available evidence to determine which evidence-based interventions hold the most promise for children to develop and maintain a healthy weight.



<sup>1</sup> Fryar CD, Carroll MD, Ogden CL. Prevalence of overweight and obesity among children and adolescents: United States, 1963-1965 through 2011-2012. Atlanta, GA: National Center for Health Statistics, 2014.

<sup>2</sup> Pan L, Freedman DS, Sharma AJ, et al. Trends in Obesity Among Participants Aged 2-4 Years in the Special Supplemental Nutrition Program for Women, Infants, and Children - United States, 2000-2014. *Morbidity and Mortality Weekly Report (MMWR)* 2016;65:1256-1260. DOI.

<sup>3</sup> Gortmaker SL, Wang YC, Long MW, Giles CM, Ward ZJ, Barrett JL, Kenney EL, Sonneville KR, Afzal AS, Resch SC, Cradock AL. Three interventions that reduce childhood obesity are projected to save more than they cost to implement. *Health Aff (Millwood)*. 2015 Nov;34(11):1932-9.

<sup>4</sup> West Virginia Bureau of Children and Families (2015).

<sup>5</sup> Ward DS, Benjamin SE, Ammerman AS, Ball SC, Neelon BH, Bangdiwala SI. Nutrition and physical activity in child care: results from an environmental intervention. *Am J Prev Med*. 2008 Oct;35(4):352-6.

<sup>6</sup> Alkon A, Crowley AA, Neelon SE, Hill S, Pan Y, Nguyen V, Rose R, Savage E, Forestieri N, Shipman L, Kotch JB. Nutrition and physical activity randomized control trial in child care centers improves knowledge, policies, and children's body mass index. *BMC Public Health*. 2014 Mar 1;14:215.

### Suggested Citation:

Jeffrey J; Giles C; Flax C; Cradock A; Gortmaker S; Ward Z; and Kenney E. *West Virginia Key 2 a Healthy Start Intervention* [Issue Brief]. West Virginia Department of Health and Human Resources, Charleston, WV, and the CHOICES Learning Collaborative Partnership at the Harvard T.H. Chan School of Public Health, Boston, MA; April, 2018.

*This issue brief was developed at the Harvard T.H. Chan School of Public Health in collaboration with the West Virginia Department of Health and Human Resources through participation in the Childhood Obesity Intervention Cost-Effectiveness Study (CHOICES) Learning Collaborative Partnership. This brief is intended for educational use only.*

