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CHCS Center for Health Care Strategies, Inc.

Catalyzing Medicaid-Public Health Collaboration to Reduce Childhood Obesity

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IN BRIEF

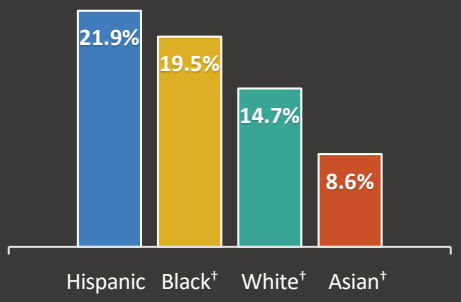
Nearly one in six children in the U.S. is obese,[1] representing a serious public health problem, and contributing to increased risks for many chronic conditions later in life.[2] Further, obesity often affects low-income families facing multiple social challenges, including poverty, early adversity, and trauma. Purposefully bringing together public health and Medicaid leaders to leverage their respective strengths is an innovative way to address this epidemic. This brief describes cross-sector interventions tested by five states participating in the Center for Health Care Strategies' *Innovations in Childhood Obesity* initiative — Arizona, Maryland, Oklahoma, Oregon, and Texas. Cross-sector collaborations emerging from this work include: (1) training of peer health workers; (2) adoption of childhood obesity incentive measures; (3) school partnerships with Medicaid and public health; and (4) embedding dietitians in community settings. *Innovations in Childhood Obesity* and this brief are made possible by Kaiser Permanente Community Benefit.

Childhood obesity is a serious health concern that leads to a greater likelihood of developing many chronic illnesses as well as an increased risk of obesity in adulthood.[3] Rates have leveled off in recent years, but remain at epidemic proportions for at-risk populations, particularly low-income children.[4] Obesity also disproportionately affects children from racial and ethnic minority populations,[5] who represent 65 percent of the nation's child Medicaid beneficiaries.[6] Children covered by Medicaid are nearly six times more likely to be treated for obesity than those who are privately insured.[7]

The negative health and social effects of childhood obesity are numerous. Obese children have lower rates of annual preventive health care visits than non-obese children,[8] and hospitalization rates that are two to three times higher.[9] In addition, childhood obesity is associated with elevated risks for: cardiovascular disease; diabetes; bone and joint problems; sleep apnea; and social and psychological problems that can result from teasing and low self-esteem.[10] Likewise, early adversity and trauma are risk factors for obesity, with research showing negative physical and social effects of adverse childhood experiences (ACES)[11] in children as young as nine,[12] and the prevalence and risk of severe obesity rising with increased numbers of ACEs.[13]

Childhood Obesity by the Numbers*

In 2011-2014, for children and adolescents age 2-19 years, 17 percent (12.7 million) were obese. Prevalence of obesity by race was:



†*Non-Hispanic.*

*CDC (Nov. 2015). "Prevalence of Obesity Among Adults and Youth: United States, 2011–2014." Available at: https://www.cdc.gov/nchs/data/databriefs/db219.pdf.

Made possible through support from Kaiser Permanente Community Benefit.

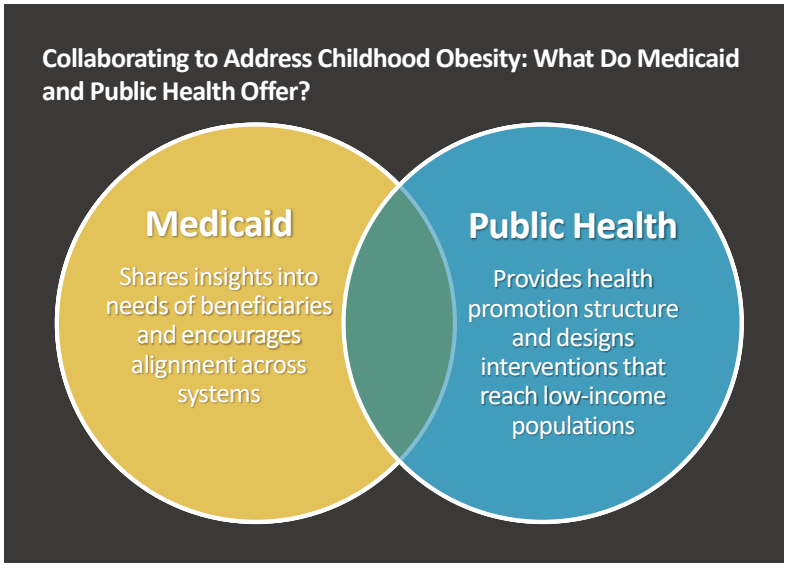
Childhood obesity can be associated with poverty, individual and community trauma, food insecurity, lack of safe spaces for physical activity, and other social determinants of health. Left unaddressed, it can put children on a socially constructed pathway to medical and behavioral health problems that may have serious consequences for them and multiple social service systems in the future.

While clearly a population health concern, childhood obesity is an issue that often gets lost in the gaps between various public programs. It is at once a public health problem, a maternal and child nutrition problem, an education problem, a community safety and environmental problem, and ultimately a heath care problem. It can affect children from all socio-economic backgrounds and lead to social isolation and depression, and at its most extreme, can lead to severe and disabling morbid obesity. By bringing together Medicaid and public health efforts, states can pursue a comprehensive, multi-sector approach to reducing childhood obesity for low-income children. This brief outlines lessons from five states across the country where Medicaid and public health agencies collaborated to test innovative strategies for reducing childhood obesity in vulnerable populations.

Fostering Medicaid-Public Health Collaboration to Combat Childhood Obesity

Public health initiatives such as HealthyPeople 2020[14] and former First Lady Michelle Obama's Let's Move[15] campaign put a national spotlight on childhood obesity in recent years. Medicaid agencies are also addressing the issue by making changes in health care delivery and payment, such as reimbursing community providers for obesity-related services and informing providers about obesity prevention codes.[16,17] Despite this increased focus, few efforts had, until recently, involved meaningful collaboration between the Medicaid and public health sectors. While there are emerging examples of this type of cross-sector collaboration, there is little being done specific to obesity.

State agency leaders increasingly recognize that comprehensive, cross-sector strategies and policies are needed to address this issue. Bringing together Medicaid leaders and their public health counterparts provides an opportunity to build on each other's respective strengths to advance interventions aimed at this epidemic. In collaborating, Medicaid agencies can leverage the strong health-promotion infrastructure of public health agencies to reach low-income populations. In turn, public health leaders receive insights into the needs of Medicaid beneficiaries and can encourage alignment across Medicaid payment systems and public health objectives.



The Center for Health Care Strategies (CHCS), with support from Kaiser Permanente Community Benefit, launched the *Innovations in Childhood Obesity (ICO)* initiative in 2015 to: (1) fuel the development of obesity-reduction efforts by states, health plans, and community partners; and (2) expand cross-sector collaboration within selected states. *ICO* engaged Medicaid and public health leaders in five states — **Arizona**, **Maryland**, **Oklahoma**, **Oregon**, and **Texas** — to develop, implement, and evaluate cross-sector approaches to reduce obesity in high-risk, high-need children.

A number of the *ICO* teams were motivated to bring Medicaid and public health entities together by prior successful collaborations addressing other chronic health conditions, e.g., diabetes or tobacco use. All of the teams built upon existing partnerships to recruit team members and identify common measures for the whole team to pursue.

There were a variety of collaborative models within the *ICO* initiative, and all teams formed with a focus on Medicaid-public health collaboration. While some teams, like Oklahoma and Arizona, were led by the state Medicaid and public health agencies, others were led by local entities, e.g., the City of Laredo Health Department in Laredo, Texas, with broad state and local Medicaid and public health representation and support. Some also partnered with area school districts, clinics, provider organizations, and trade groups, e.g., state community health worker associations. The teams identified a number of strategies that were key to engaging a diverse set of partners to implement their interventions, including:

1. **Shared Commitment**: Team members stayed engaged due to the enthusiasm, commitment, and flexibility of participants.
2. **Common Measures and Goals**: Teams identified common measures among their members; prioritized the measures based on areas of needed improvement; and worked toward goals in those prioritized areas, which helped to increase accountability as each partner had a role in determining the team's objectives.
3. **Open and Continuous Communication**: There was a continuous feedback loop between agencies and team leadership, resulting in increased efficiency and alignment with the goals of the agencies.
4. **Leadership Involvement***:* Sustained buy-in from agency and team leadership reflected their commitment, which in turn increased engagement among team members.

***Innovations in Childhood Obesity* Interventions**

State Medicaid and public health agencies participating in *ICO* collaborated to test the following approaches:

- Increasing utilization of nutrition counseling services billed to Medicaid;
- Training community health workers to screen, refer, and/or evidence-based obesity prevention interventions;
- Supporting the adoption of childhood obesity incentive measures around quality of care, costs, and disparities;
- Embedding dietitians in community settings;
- Clarifying Medicaid-billable obesity prevention, diagnosis, and treatment services with providers, and advising them on billing; and
- Administering a school-based curriculum to high-risk, high-need students and families.

Innovations in Childhood Obesity: Overview of Cross-Sector Approaches

As part of the *ICO* initiative, CHCS released a series of profiles detailing how state Medicaid and public health agencies partnered to develop, test, and disseminate innovative approaches to reduce the prevalence of childhood obesity in their high-risk communities. Following are summaries of each profile, outlining the collaborative model, intervention, and findings from each state's project.

Arizona

As part of former Arizona Governor Janet Napolitano's efforts to ensure that children enter school safe, healthy and ready to succeed, the state identified obesity as a major cause of poor health in children and a potential barrier to school readiness. To address the issue, the state prioritized initiatives relating to childhood obesity prevention, including assessing strategies for improving service delivery models for the Medicaid population. The Arizona Health Care Cost Containment System (AHCCCS), Arizona's Medicaid agency, partnered with Medicaid managed care organizations (MCOs) and a federally qualified health center (FQHC) to conduct a needs assessment of services to address childhood obesity in the state's Maricopa County. The needs assessment provided a strong evidence base to support initiatives to improve clinical care practices addressing childhood obesity in Arizona. The low reported use of clinical services to address childhood obesity suggested that documentation practices and/or quality of care for these patients needs to be improved. The team plans to review member identification and referral strategies within FQHCs to explore ways to increase utilization of services within the Medicaid population. It has also reached out to the Arizona chapter of the American Academy of Pediatrics (AZAAP) and the Arizona Academy of Family Practice Physicians to promote the implementation of a widespread intervention, e.g., updating current AZAAP tools to reflect new coding procedures to facilitate treatment or referrals to nutrition counseling services. AHCCCS is also considering a value-based payment strategy for adult and childhood obesity, and will add two new pediatric weight performance measures to the quarterly data collection tool in which the MCOs are required to report.

Maryland

Childhood obesity is a significant problem in both Baltimore City, an area with high rates of poverty and chronic disease, and Maryland's more-affluent Howard County, which has concentrated pockets of income disparities and poor health. With leadership from the Horizon Foundation[18], a diverse set of partners is addressing childhood obesity in these two areas by: (a) creating new data systems to measure obesity prevalence; (b) conducting an American Academy of Pediatrics learning collaborative to improve service delivery in high-volume Medicaid pediatric practices; (c) assessing how to better treat severe obesity through specialty centers; and (d) delivering nutritional counseling in community settings. Findings indicate substantial need for interventions to address childhood obesity in Baltimore, and that

> *"Participating in this collaborative gave us the incentive, platform, technical assistance, and accountability we needed to work on this problem together. We have much work to do, but we have come a long way because of this partnership."*
>
> – Glenn E. Schneider, Horizon Foundation and Maryland Team Lead

learning collaboratives are an effective strategy to improve the way in which pediatricians address this critical health issue in a clinical setting. Additionally, after learning of billing, regulatory, and sustainability challenges within specialty treatment centers, the team identified a need to increase access to other prevention services, e.g., nutritional counseling, within the community. The team is exploring funding mechanisms and implementation needs for embedding a dietitian within local Head Start agencies to deliver nutritional counseling services and empower and educate low-income families. The Maryland Department of Health is also evaluating the quality improvement learning collaborative to determine if the knowledge and training delivered to providers is being implemented after the nine months.

Oklahoma

Oklahoma has the 11th highest rate of overweight or obese children ages 10 to 17 in the country. The state's Comanche County, with the third highest percentage of obese SoonerCare (Oklahoma Medicaid) members,[19] has collaborated with state health entities to implement obesity prevention efforts in recent years. To further these efforts, the Oklahoma Health Care Authority, the state's Medicaid agency, partnered with the Oklahoma State Department of Health and other public health stakeholders to address childhood obesity in Comanche County by increasing the utilization of nutritional counseling services among SoonerCare members. Determining that providers were not aware of when and how to bill and refer to nutritional counseling services, the team delivered technical assistance to them in this area. Through funding from the Comanche County Health Department, the team also hired a registered dietitian to provide nutritional counseling services and engage with providers to encourage referrals. These findings are promising for future efforts to reduce childhood obesity in the community through use of a registered dietician. Results from the analysis of the nutrition counseling data suggest a positive program effect – a substantial finding given the relatively small sample size – but data over a longer period of time are needed to support this claim.

Oregon

As part of the state's efforts to make childhood obesity prevention a priority, Oregon Medicaid and public health entities within the Oregon Health Authority (OHA) are partnering to reduce childhood obesity across the state by: (a) expanding the use of community health workers for obesity screening and referrals; and (b) providing supports to coordinated care organizations (CCOs) to implement evidence-based strategies for obesity prevention and treatment. OHA has a history of cultivating Medicaid-public health collaboration through tobacco-cessation initiatives, and has extended that collaboration to other performance improvement efforts, including addressing childhood obesity, which is one of seven priority areas for the state. OHA's strong commitment to collaboration facilitated relationships with politicians, CCOs, and key community-based organizations, including establishing a contract with the Oregon Community Health Worker Association and the Oregon Primary Care Association. The team's robust collaboration also facilitated the spread of evidence-based policy and practices to improve health and reduce costs throughout the state, such as supporting the adoption of a childhood obesity CCO incentive metric. Lessons from this work reinforced the team's efforts to: (a) address childhood obesity within larger systems change

processes; and (b) support opportunities for multi-sector interventions, which can engage CCOs in non-medical services, programs, and initiatives to promote health in the community.

Texas

Laredo, Texas, is a rural, low-income area along the U.S./Mexico border with high rates of poverty and chronic disease. Over 30 percent of children between five and 11 years of age are overweight, and their rates of obesity are on the rise.[20] To combat this epidemic, the City of Laredo Health Department (CLHD) is pursuing collaborative approaches to reduce the risk of chronic disease, particularly obesity, hypertension, and diabetes. CLHD is partnering with two Medicaid MCOs and two Laredo school districts to implement an evidence-based school health program, Bienestar,[21] addressing childhood obesity and diabetes risk factors. The team works with a high-risk, high-need population in a rural, low-income area with overwhelming rates of poverty, childhood obesity, and diabetes. Children and families in the area have little access to affordable healthy food choices, are largely uninsured, and have high rates of sedentary lifestyle. Through the Bienestar curriculum, CLHD reaches a large number of children in the area by targeting schools. The program includes school staff — teachers, nurses, principals, and coaches — and engages parents and families to increase the support for high-risk children. Overall, findings indicate that students' nutrition-related knowledge improved significantly over the study period, but that a statistically significant increase in average body-mass index (BMI) occurred concurrently. The team is assessing factors that may be associated with the increase in BMI to understand these seemingly conflicting effects. The team also aims to continue to partner with the MCOs on other related obesity-prevention initiatives.

Next Steps for the Field

To further cross-sector efforts to reduce childhood obesity, state Medicaid and public health entities can come together to:

1. **Encourage more Medicaid involvement in childhood obesity efforts as a mechanism to test innovative approaches.** For example, in CORD 2.0, the second phase of the CDC's Childhood Obesity Research Demonstration Project (CORD),[22] grantees are working with state and community partners, such as state Medicaid agencies, to better reach low-income families and identify payment models that reduce costs and improve care.

2. **Consider other sectors to involve in collaborative efforts,** e.g., community-based/social service organizations in vulnerable areas that are also addressing poverty, trauma, and other social determinants of health linked to obesity.

3. **Assess the adoption of new comprehensive, collaborative frameworks to address obesity and related social issues**, e.g., trauma-informed and integrated physical and behavioral health models; approaches to drive upstream prevention; and other models for addressing the interlocking problems of adversity and obesity in vulnerable populations.

4. **Target interventions for high-risk, vulnerable children**, particularly those with morbid, severe obesity, where there is greatest need and opportunity for the greatest return on investment in interventions by payers.

5. **Conduct structured evaluations** to build the evidence base for the field and identify best practices for obesity reduction among low-income children. Evaluating future cross-sector obesity prevention efforts would inform those considering multiple cross-sector partners to the table, including Medicaid as a payer, and public health entities to develop targeted prevention efforts.

There is more work to be done to understand the full potential of the *ICO* interventions, as well as their implications for addressing the root causes of, and the intersection with poverty, ACEs, and social determinants of health. The cross-sector obesity prevention approaches for consideration that emerged from this work include: training of peer health workers within communities; adoption of childhood obesity incentive measures; school partnerships with Medicaid and public health entities; and embedding dietitians in community settings. Further Medicaid-public health collaboration along these lines at the state and community levels could reduce the likelihood that low-income children will suffer the long-term consequences of childhood obesity.

ABOUT THE CENTER FOR HEALTH CARE STRATEGIES

The Center for Health Care Strategies (CHCS) is a nonprofit policy center dedicated to improving the health of low-income Americans. It works with state and federal agencies, health plans, providers, and consumer groups to develop innovative programs that better serve people with complex and high-cost health care needs. For more information, visit **www.chcs.org**.

ABOUT INNOVATIONS IN CHILDHOOD OBESITY

CHCS, with support from Kaiser Permanente Community Benefit, launched the *Innovations in Childhood Obesity (ICO)* initiative to: (1) fuel the development of obesity-reduction efforts by states, health plans, and their community partners; and (2) expand cross-sector collaboration within selected states. *ICO* fostered collaboration between Medicaid and public health organizations in five states — Arizona, Maryland, Oklahoma, Oregon, and Texas — to develop, test, and disseminate innovative approaches to reduce obesity in low-income children. To learn more, visit **www.chcs.org**.

ENDNOTES

[1] Centers for Disease Control and Prevention (April 2017). "Childhood Obesity Facts: Prevalence of Childhood Obesity in the United States, 2011 – 2014." Available at: https://www.cdc.gov/obesity/data/childhood.html.

[2] Centers for Disease Control and Prevention (January 2017). "Childhood Obesity Facts." Available at: http://www.cdc.gov/healthyyouth/obesity/facts.htm.

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[5] Centers for Disease Control and Prevention. "Childhood Obesity Facts," op.cit.

[6] C. Coyer and G.M. Kenney. *The Composition of Children Enrolled in Medicaid and CHIP: Variation over Time and by Race and Ethnicity.* Urban Institute, March 2013.

[7] W.D. Marder and S. Chang (2016). "Childhood Obesity: Costs, Treatment Patterns, Disparities in Care and Prevalent Medical Conditions." Thompson Medstat Research Brief. Available at: http://www.nptinternal.org/productions/chcv2/healthupdates/pdf/Cost_of_childhood_obesity.pdf.

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[9] W.D. Marder and S. Chang (2016), op.cit.

[10] Centers for Disease Control and Prevention, "Childhood Obesity Facts," op.cit.

[11] Adverse childhood experiences (ACEs) are stressful or traumatic events, including abuse and neglect.

[12]J.L., Luby, D. Barch, D. Whalen, R. Tillman, and A. Belden. "Association Between Early Life Adversity and Risk for Poor Emotional and Physical Health in Adolescence: a Putative Mechanistic Neurodevelopmental Pathway." *JAMA Pediatrics*, Oct. 30, 2017. Available at: https://jamanetwork.com/journals/jamapediatrics/article-abstract/2659320.

[13] Centers for Disease Control and Prevention (April 1, 2016). "Adverse Childhood Experiences (ACEs)." Available at: https://www.cdc.gov/violenceprevention/acestudy/index.html.

[14] For more information about *HealthyPeople 2020*, see: https://www.healthypeople.gov/.

[15] For more information about *Let's Move*, see: https://letsmove.obamawhitehouse.archives.gov/.

[16] K. Sebelius (2014). "Report to Congress on Preventive Services and Obesity-related Services Available to Medicaid Enrollees." Available at: https://www.medicaid.gov/medicaid/quality-of-care/downloads/rtc-preventive-obesity-related-services2014.pdf.

[17] Centers for Medicare & Medicaid Services (July 15, 2013). "Medicaid and children's health insurance programs: essential health benefits in alternative benefit plans, eligibility notices, fair hearing and appeal processes, premiums and cost sharing, exchanges: eligibility and enrollment; final rule. 78 Fed Reg 42160. Available at: https://www.gpo.gov/fdsys/pkg/FR-2013-07-15/pdf/2013-16271.pdf.

[18] The Horizon Foundation is a philanthropy located in Howard County, Maryland, dedicated to improving the health and wellness of people living or working in Howard County. For more information: http://www.thehorizonfoundation.org/.

[19] Based on 2014 SoonerCare member data.

[20] City of Laredo, Texas. "City of Laredo, Texas Federal Legislative Agenda 2017." Available at: http://www.ci.laredo.tx.us/cmo/CASS/Pres_Fed/2017/chronic.html.

[21] For more information about the Bienestar program, see: http://www.sahrc.org/health-programs.

[22] For more information, see: https://www.cdc.gov/obesity/strategies/healthcare/cord2.html.