



**Texas Pediatric Society**  
The Texas Chapter of the American Academy of Pediatrics



**Texas Academy  
of Family Physicians**

## **Senate Education Committee Testimony on Senate Bill 282 *April 7, 2009***

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**Presented by the Texas Medical Association, Texas Pediatric Society, and  
Texas Academy of Family Physicians**

- Madame Chair and members of the committee, my name is Kimberly Avila Edwards, and I am an Austin-based pediatrician. It is a privilege for me to speak with you today on behalf of the Texas Medical Association, the Texas Pediatric Society, and the Texas Academy of Family Physicians, collectively representing more than 48,000 physicians in the state of Texas.
- I am here today in SUPPORT of Senate Bill 282 by Sen. Jane Nelson, relating to grant programs to provide nutrition education to children.
- As a pediatrician, I am a witness to the devastating reality and magnitude of the childhood obesity crisis in our state. I know the face of the 10-year-old boy admitted to the hospital with type II diabetes, and the face of the 9-year-old girl with high cholesterol and high triglycerides who needs referral to the pediatric cardiologist in town. As a pediatrician, I am all too familiar with the numerous children with high blood pressure in my practice who have this and other “adult” diseases that my medical education and training at Harvard Medical School and Baylor College of Medicine did not prepare me to see in children. As a general pediatrician, I can attest to the tremendous costs — both health care and societal — that the disease of obesity and the myriad of diseases associated with obesity, like hyperlipidemia, hypertension, steatohepatitis, and heart failure, place upon us.
- As chair of the advisory committee for the Texas Department of Agriculture on all aspects of the nutrition policy for Texas and public schools, I want to commend both the commissioner of agriculture and the legislature for their efforts over the past few years — thanks in part to this bill’s author, Senator Nelson — to enhance the nutrition and wellness education of our children as well as to increase their exposure to physical activity and physical education. The impact of these efforts in helping our children lead healthy lives is great and will be evident in the years to come, as scientific evidence has clearly related health and physical

activity to academic performance. Schools play a significant role in the lives of children and inevitably play a role in fostering our children's health, so I support rewarding districts that are teaching nutrition education in innovative ways as sought by SB 282.

- As the co-director of a clinician-led, multidisciplinary after-school program for the disease of obesity in East Austin, I can attest that while nutrition education and physical activity in the schools are vitally needed and important, more needs to be done outside of the school setting. My treatment program for the disease of obesity targets 6 to 11 year olds, includes both child and parent participation, and involves clinician-led nutrition, physical activity, and mental health components, all of which are needed to curb and address this epidemic. Through my experience with this program, I am a witness to the hunger for nutrition education that exists in the community. Additionally, I see firsthand here, as I have for years in my private practice, that quite often the onset of the disease of obesity is well before children are of school age. We have parents asking if they can please bring their children younger than 6 to our treatment program, desperately advocating and telling me what I already know, that obesity exists in children younger than school age and that children younger than 5 need these programs as well.
- As a mother, I know you can never begin too early to educate your children about nutrition. SB 282 seeks to grant funding for programs in nutrition education for children 3 to 5 years of age. I support this, as it will help lay a foundation to lead healthy lives and help prevent the disease of obesity at an earlier stage. As a primary care physician, whose role it is to extol the importance of prevention, I highly value opportunities to educate families about healthy lifestyles and obesity prevention. Too often, children come to my office well past the point of prevention, instead needing treatment for obesity and obesity-related health issues.
- As a physician, I can tell you that we have an obesity crisis on our hands. Far too many of our children are overweight and obese, and current projections suggest that this will only get worse. I ask that you provide the opportunity to enhance nutrition education both within the schools and to children 3 to 5 years of age. This bill will provide support, as we as a state continue to strive toward the betterment of the health of our children through the prevention and treatment of childhood obesity.
- In closing, I thank you for this opportunity to support SB 282 and look forward to taking this step in ensuring healthier Texas children. I would be more than happy to answer any questions of the committee at this time. Thank you.

## Tracking Current and Future Costs of Childhood Obesity Economic Research Brief

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Rising rates of overweight and obesity continue across the board in Texas for all ethnic groups and all ages, including children. Two-thirds of Texas' adult population is overweight or obese based on 2007 Center for Disease Control statistics. The National Center for Health Statistics (2003-2004) indicates that the percentages of overweight children are increasing in all age groups: 9.5% of infants ages birth -24 months; 13.9% of children ages 2-5; 18.8% of children ages 6-11; 17.4 % of adolescents ages 12-19.(1) The U.S. Surgeon General's Office reports that overweight children have a 70 percent chance of being overweight or obese adults.(2) Texas data on children by age group and overweight prevalence rate is shown in Table 1.

Table 1 Number of Overweight Texas Children by Age Group

Age Group	Population Estimates (2007)	Overweight Prevalence Rates	No. of Overweight Children
Birth to 23 months	781,595	9.5%	74,251
Ages 2 to 5	1,485,818	13.9%	206,529
Ages 6 to 11	2,011,360	18.8%	378,136
Ages 12 to 19	2,894,292	17.4%	503,607
Total	7,173,065		1,162,523

### Economic Cost of Overweight and Obesity in Adults and Children

*Texas Department of State Health Services (DSHS), "A Battle We Can't Afford to Lose", 2004:* This report estimated that of the 15.3 million Texas adults aged 18 and older in 2001, 24% were obese (3.6 million). The overweight incidence rate

Note: For children under age 20, the term overweight is used for those at or above the 95<sup>th</sup> percentile of weight for recumbent length; in adults, overweight is 25-29.9 BMI (Body Mass Index) and obesity is 30-99.8 BMI as used by the Center for Disease Control.

was estimated at 36%. The total costs (direct and indirect) associated with overweight and obesity in Texas in 2001 was estimated at \$10.5 billion. The number of obese people in the state is projected to reach 9.6 million by 2040, with a total cost of \$26.3 billion (2001 dollars). For obesity, the average cost per case was \$2,249 in 2001, or \$2,894 when adjusted to 2008 dollars. It is worth noting that some projection scenarios estimated the cost of adult overweight and obesity reaching as high as \$39 billion.(3) More recent 2009 estimates by the Texas State demographer indicate the current number of obese adults at 4.7 million.(4)

*D. Janicke, et al, Journal of Pediatric Psychology, 2009:* This hallmark study used Medicaid claims data from 2001-2005 in Florida to examine the use of nonpsychiatric health care services in children, ages 5-18 years, with and without a comorbid psychiatric diagnosis, when the children had one of 4 obesity –related conditions: type 2 diabetes, metabolic syndrome, dyslipidemia or obesity. The sample of 13,688 children and adolescents was racially diverse. Average annual expenditures for children with a psychiatric diagnosis were \$4,431 compared to average expenditures for children without a psychiatric diagnosis of \$2,598. This study is important because it highlighted not only specific costs associated with four specific obesity related conditions but pointed out the linkage between obesity, mental distress and the potential negative impact on lifestyle behavior improvement in affected populations.(5) Because only four diagnoses were used in the study, the annual Medicaid expenditures may underrepresent actual costs associated with child obesity. It has been widely noted that obesity is not diagnosed in most children and that there are many comorbid conditions. (6)

*Using the child overweight cost estimates from the Journal of Pediatric Psychology article above, the estimated annual healthcare costs associated with the 1.16 million overweight children in Texas range from \$3.02 to \$5.15 billion in 2007.*

### Evidence-Based Interventions in School Age Children Predict Cost Savings

Attention to school age children in Texas has resulted in policy and program changes designed to improve lifestyles including nutrition and physical fitness and ultimately affect health outcomes. Several recent studies have provided an economic analysis of school-based obesity prevention programs such as *Planet Health* and *Coordinated Approach to Child Health (CATCH)* which have been shown to be effective in reducing the prevalence of overweight or the rate of weight gain in participants when compared to control school populations. Based on

predicted prevention of adult obesity in 1.9 percent of female student participants, Wang, et. al.(2003) calculated quality-adjusted life years (QALYs) by estimating medical care savings, loss of productivity and in the case of *Planet Health*, the net savings to society of \$7,313 per case of prevented obesity.(7) More recently, Brown, et. al. (2007) estimated the net benefit of CATCH as \$68,125 when the medical and labor productivity savings during adulthood for both male and female participants were compared to the cost of the intervention.(8) These studies both bring evidence that effective environmental interventions in elementary schools are cost effective and net beneficial because overweight carried into adulthood may require costly medical treatment.

### Child Care Settings-an Opportunity for Early Intervention

Child care settings represent an opportunity to develop healthy lifestyle behaviors from an early age when habits are formed. Because over 60% of mothers with preschool-aged children are employed full or part-time, more children today are in child care programs than ever before. In Texas, 1,264,986 children under age 6 have working parents and may need child care. (9)

The economic burden of childhood overweight in Texas demonstrates the critical need to prevent health problems at an early age. Research studies have indicated that obesity consequences develop as chronic conditions much earlier than school age.(10) A recent Harvard Medical School study found that the rate of weight gain in the first 6 months of life was correlated significantly to overweight by age 3.(11)

Although Texas has made a good start by specifying daily nutrient content in meals, the number of meals and snacks, requiring some types of physical activity and time outdoors in child care and family/group child care homes, additional environmental and educational strategies are needed.(12) Environmental strategies need to target both children in care and the adults caring for them. Educational strategies that effectively improve dietary practices and physical activity habits in staff, the youngest children and their families can prevent overweight in children before it gets out of hand.

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