

## Background

The prevalence of obesity is rapidly increasing in the United States and has been described as an epidemic among children and adults alike. Children of racial/ethnic minorities and children living in poverty – served by food nutrition and assistance programs of the USDA – are disproportionately likely to be overweight.

The Surgeon General’s “Call to Action” regarding obesity in 2001 discussed multiple opportunities for treatment and prevention and emphasized the importance of interventions targeting youth. The costs of adult obesity, estimated at over \$50 billion, or about 6% of annual health care expenditures in the US, provide a benchmark for comparison of the expected costs of different intervention options among adults.

However, methods of cost estimation for adult obesity are not applicable to children, because they fail to account for changes in BMI with increasing age during childhood and adolescence. No national estimates of the long-term costs of youth overweight currently exist.

## Methods

The central research question is, **What is the cost of today’s inaction – or ineffective action – regarding youth overweight, when considering the long-term health and economic consequences of overweight and obesity as youth age into adulthood?**

Therefore, we propose to develop novel, innovative methods for estimating the long-term costs of youth overweight. Through secondary analyses of public use datasets (Medical Expenditure Panel Survey; National Health Interview Survey; National Health and Nutrition Examination Survey; National Longitudinal Survey of Youth) that have not previously been linked for the study of the economic impact of overweight among youth, we will characterize the direct (medical) costs and indirect costs (non-medical costs such as lost work and school time, lost wages, and disability) associated with overweight from childhood through early adulthood.

Specifically, we propose the development of mathematical models that will allow us to pursue the following research objectives:

- (1) **To develop methods for estimating the long-term direct medical costs of youth overweight**
- (2) **To develop methods for estimating the long-term indirect costs of youth overweight.**

## Implications for Health Policy

The current absence of a cost benchmark against which to compare potential programmatic or clinical interventions, or further investment in research regarding youth overweight, leaves policymakers and program officials at a distinct disadvantage in making decisions about program initiatives or research funding and emphasizes regarding overweight among children and adolescents.

The goal of this project is to provide decision-makers with short- and long-term cost estimates of youth overweight, in order to more fully inform the development of future interventions at the individual, family, and community levels.

## Contact Information

Principal Investigator: Matthew M. Davis, MD, MAPP  
Child Health Evaluation and Research (CHEAR) Unit  
Division of General Pediatrics, University of Michigan  
300 North Ingalls Building, Room 6C23  
Ann Arbor, MI 48109-0456 Telephone: (734) 615-3508 Fax: (734) 764-2599