

## Project abstract

The proposed ***Mass in Motion: Community-Clinical Partnerships to Reduce Childhood Obesity*** will use the Obesity Chronic Care Model to implement and evaluate a comprehensive, systematic intervention to reduce childhood obesity among underserved children. The Massachusetts Department of Public Health (MDPH), in partnership with the Department of Population Medicine at Harvard Medical School, the Harvard School of Public Health, and the National Initiative for Children's Healthcare Quality, seeks to build on promising community-level experience and related clinical obesity prevention work in communities through the statewide Mass in Motion wellness initiative to develop an intervention in two cities, Fitchburg and New Bedford, that could be replicated throughout the state.

The study proposes an integrated multi-sector and multi-level approach. It incorporates evidence-based interventions in primary health care (High Five for Kids), child care (I Am Moving, I am Learning; NAP SACC) and schools/after-school programs (Food & Fun, Eat Well and Keep Moving, and Planet Health), as well as policy change and a community-wide social marketing campaign to prevent or reduce obesity among predominantly low-income 2-12-year-old children. Using a combination of pre- post time series and quasi-experimental designs, we will examine the effectiveness of our intervention on individual-level lifestyle behaviors, change in body mass index (BMI), satisfaction with health care services, and quality of life.

The **Specific Aims** are: (1) In intervention v. comparison communities, examine the extent to which a multi-level, multi-sector intervention for children, based in pediatric primary care, early education and child care programs, elementary and middle schools, after school programs, and a community-wide social marketing campaign results in improvements in obesogenic behaviors. (2) In intervention v. comparison communities, achieve smaller age associated increases in BMI. (3) In health centers in the intervention communities, demonstrate increases in: BMI screening and counseling on the 5 targeted obesity-related behaviors for all children ages 2-12 years; Coordinated care by a multi-disciplinary clinical team and community health workers for children with an age- and sex-specific BMI  $\geq$  85<sup>th</sup> percentile; Parental satisfaction with services and child obesity-related quality of life. (4) Collect data on the costs of the intervention activities in preparation for cost-effectiveness analyses. (5) Develop a detailed implementation and dissemination guide for MDPH to use to support adoption in other communities across the state.