This paper presents a survey on two selected segments of the multi-faceted economic research on obesity: first, research on the impact of rising pediatric obesity on health care expenditures, and second, research evaluating the cost-effectiveness of preventive interventions into pediatric obesity.

As pediatric obesity can lead to adverse health outcomes already in childhood, it is plausible to assume that obese children concurrently have more health care utilization and costs than their otherwise similar healthy-weight peers. However, the evidence related to this hypothesis is mixed. Looking at studies using data from nationally representative surveys, the most unambiguous evidence is provided by Monheit et al. [1], who used pooled data from the 2001–2003 US Medical Expenditure Panel Surveys on adolescents. They found no differences among males, but female obese and overweight adolescents were found to have expenditures that exceeded those of normal-weight females by nearly USD 800 per year.

Children and adolescents who are obese tend to remain so over time, and therefore are confronted with increased risk of morbidity during adulthood. As there is compelling evidence for obesity-related excess health care costs in adulthood, in a lifetime perspective medical costs of childhood obesity might add up to a substantial amount. Unfortunately, studies trying to calculate the complete lifetime health care costs attributable to childhood obesity are missing. In order to calculate estimates of the long-term cost impact of pediatric obesity, more longitudinal data for better understanding the links between obesity and chronic disease risks as well as longitudinal data about health care consumption and costs are required.
There are many possible ways to prevent childhood obesity. Economists propose that policy makers should choose those interventions that provide the most ‘bang for the buck’. Until now, only a small number of studies assessing the cost-effectiveness of preventive obesity interventions among children have been published, with a major contribution to this research having been made by the ACE-Obesity project [2]. Due to large methodological differences between the twelve relevant studies found, it is difficult to synthesize the findings of this research. The results show that in order to reach acceptable cost-effectiveness values, interventions should include nutrition as an intervention target. In addition, there is some evidence in support of the expectation that childhood obesity prevention may be successful in combining health gains with cost savings. Due to substantial methodological differences between the studies, it is not possible to rank the interventions according to their comparative cost-effectiveness. Nevertheless, the large variation in the incremental cost-effectiveness ratios even among studies based on the same methodological approach impressively underscores the urgent need for analyzing not only the effectiveness, but the efficiency of childhood obesity interventions as well, in order to ensure the most economical use of the limited financial resources available for improving the young population’s health.

The lack of cost-effectiveness analyses of pediatric obesity interventions highlights the need to design intervention trials with translation and dissemination in mind. As there is little doubt that cost-effectiveness increasingly will be a major consideration in reimbursement decisions of policy makers and third payers, evaluation research has to pay more attention to the economic aspects of new health technologies. Without providing good value for money, those technologies probably will not turn from inventions to innovations in health care.

To design efficient public policies to curb the obesity epidemic, a more detailed and more precise knowledge is necessary on their long-term costs and effects. Moreover, the economic evaluation of preventive interventions into childhood obesity faces various methodological and conceptual challenges including the definition and measurement of intervention outcomes, the definition and measurement of health-related quality of life in pediatric populations, the attribution of outcomes to interventions if RCTs are not feasible to test causal relations, how to deal with unrelated health care costs in life years gained, how to value future costs and benefits, and finally, how to integrate considerations of equity and fairness into economic evaluations. These challenges are to be addressed in future research if the full potential of economic evaluation as an aid to decision-making is to be exhausted.
References
