The Cost-Effectiveness of Individual Cognitive Behaviour Therapy for Overweight / Obese Adolescents

Abstract:
While relatively expensive in the short-term, Cognitive Behaviour Therapy (CBT) for overweight / obesity in adolescents has the potential for long-term improvement in health status, and a reduction in healthcare spending associated with this improvement. The Choose Health Program is a 12-session program using CBT to promote improved eating habits, healthy food choices, reduced sedentary behaviour, and increased physical activity. Within the program, CBT is also used to address the physical, social, cognitive and emotional barriers to long-term behaviour change. It is relatively labour intensive; it consists of 12 treatment sessions, 2 three monthly maintenance clinic sessions and 8 maintenance phone call sessions. Initial trials of the program with 63 overweight or obese adolescents revealed improvements in self-reported eating, physical activity and sedentary behaviours and laboratory measured fitness and body composition. The question addressed in this paper is whether CBT in this population group is a cost-effective use of scarce societal resources.

We have built a cost-effectiveness analysis (CEA) alongside the Choose Health trial but, as follow-up of adolescents does not extend to maturity and increasing prevalence of co-morbidities, the measure of outcome from the trial may significantly underestimate the true benefit of the intervention (and ignore substantial cost savings). We will present the results of the CEA using intermediate outcomes and show how, in addition to identifying the costs of the intervention, we have attempted to extrapolate long-term outcomes. However, due to the uncertainty in this extrapolation, the measure of outcome is subject to considerable doubt. This issue is of relevance to many interventions (such as vaccinations and many public health issues) in which much of the benefit is likely to occur after any follow-up period has concluded.