Cost-effectiveness of Adolescent Bariatric Surgery

Currently, the prevalence of adolescent morbid obesity is estimated to be at 21%, while the prevalence of severe morbid obesity is estimated around 6.6%. In addition to important health complications, obesity has a strong societal impact. A 2008 study has estimated that about $147 billion or 9% of all medical costs in the United States were obesity-related. Bariatric surgery has been identified as an effective means to ameliorate obesity in adults, but further research needs to be conducted to identify whether the same conclusions can be held for younger people. The aim of this study was therefore to develop a model to evaluate the long-term cost-effectiveness of bariatric surgery.

The study highlighted that bariatric surgery remained more expensive than no surgery in the first seven years, with increasing medical cost savings over time which particularly offset the intervention costs. Additionally, surgery was also associated with gains in life expectancy of around 0.006 years over a year, increasing to 0.158 over seven years. However, based on the $100,000/QALY threshold, bariatric surgery was not cost-effective in the first three years post-surgery, but do become cost-effective beyond that.