

Publication

Adaptation of cost-effectiveness analyses to a single country: the case of bariatric surgery for obesity and overweight

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 4487593**Author(s)** Ademi, Zanfina; Tomonaga, Yuki; van Stiphout, Joris; Glinz, Dominik; Gloy, Viktoria; Raatz, Heike; Bucher, Heiner C.; Schwenkglenks, Matthias**Author(s) at UniBasel** [Schwenkglenks, Matthias](#) ;**Year** 2018**Title** Adaptation of cost-effectiveness analyses to a single country: the case of bariatric surgery for obesity and overweight**Journal** Swiss medical weekly**Volume** 148**Pages / Article-Number** w14626**Mesh terms** Bariatric Surgery, economics; Body Mass Index; Cost-Benefit Analysis; Humans; Obesity, surgery; Quality-Adjusted Life Years; Switzerland

The aims of this study were to (a) identify and assess the quality of reporting of published cost-effectiveness studies of bariatric surgery, (b) assess their transferability to Switzerland, and (c) adapt transferable cost-effectiveness results to Switzerland.; A systematic literature search was performed in Medline, Embase and other databases. Two reviewers independently undertook screening, extraction, assessment of reporting quality utilising the Consolidated Health Economic Evaluation Reporting Standards, transferability, adaptation of cost data and recalculation of cost-effectiveness results. Cost data were adapted in three steps: correction for different levels of resource utilisation, for different prices of healthcare services and for change in costs over time.; Fifteen studies fulfilled criteria for adaptation of cost data to Switzerland. Four out of fifteen adapted studies with a long time-horizon for patients with a body mass index (BMI) >35kg/m² indicated bariatric surgery to be a cost-saving (dominant) approach compared with conventional treatment. Other studies for patients with BMI >35kg/m² showed cost-effective results, with incremental cost-effectiveness ratios (ICERs) below CHF 50,000 per quality adjusted life-year (QALY) gained. Two studies assessed cost-effectiveness for patients with BMI <35kg/m², and revealed ICERs below 50,000 per QALY gained for bariatric surgery versus conventional treatment. Between-study differences were related to approaches for the modelling effectiveness and costs, time horizon, population, type of intervention and possibly other unidentified reasons. Gastric bypass appeared to be superior to gastric banding, but was more expensive.; Nearly all studies found bariatric surgery to be a cost saving or cost-effective compared with conventional treatment. The adaptation of existing cost-effectiveness analyses cannot be considered to give accurate ICERs for Switzerland, but may have achieved an approximation of cost-effectiveness levels to be expected for Switzerland. It has made the results of international cost-effectiveness studies reported for different countries and in different currencies more comparable, and may be useful for individual countries in which financing or capacity for economic analyses is scarce.

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