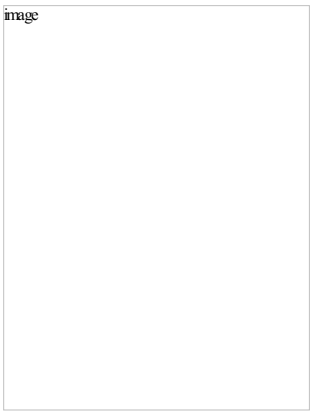

www.elsevier.com/locate/bios

PII: S1550-7289(18)30169-2
DOI: https://doi.org/10.1016/j.soard.2018.03.030
Reference: SOARD3341

To appear in: *Surgery for Obesity and Related Diseases*

Cite this article as: , , *Surgery for Obesity and Related Diseases,* doi:

Comment on: Systematic assessment of decision analytic models for the cost effectiveness of bariatric surgery for morbid obesity

Brett Doble, Ph.D.

Health Economics Research Centre
Nuffield Department of Population Health
University of Oxford
Oxford OX3 7LF, United Kingdom
Email: brett.doble@dph.ox.ac.uk
Tel: +44 0 18652 89418

A number of systematic reviews of economic evaluations of bariatric surgery have been previously published.[1-6] The most recent reviews have specifically contrasted methods for modelling long-term clinical outcomes (e.g., weight-loss and resolution of comorbidities) [5] and identified important knowledge gaps in the economic evidence base after conducting a comprehensive review of diverse types of economic evaluations.[6]

Key findings from these reviews highlight a number of important issues to be considered when conducting future economic evaluations of bariatric surgery. In terms of long-term modelling, three main approaches, each with their own limitations (see Wang et al. for details [5]), have been used (i.e., statistical regression models, Markov models and assumptions). Such approaches are an inevitable part of evaluating the cost-effectiveness of bariatric surgery given the chronic nature of obesity. What is more concerning is that the models identified relied on clinical data from only three to five years of follow-up, despite the average time horizon of the models being 50 years. Furthermore, no clear recommendations have been provided to ensure future evaluations conduct long-term modelling in a consistent manner. In addition, multiple reviews have indicated that out-of-pocket costs to individuals/family members (e.g., travel time and caregiving) and indirect costs due to lost productivity are largely ignored in most analyses [4, 6] as well as long-term costs incurred