Reviewer’s report

Title: Health Inequity in Access to Bariatric Surgery: A protocol for a Systematic Review

Version: 3
Date: 18 December 2013

Reviewer: Alexander Tsertsvadze

Reviewer’s report:

I would like to thank the authors for addressing the comments adequately. Please, kindly address the following minor comments:

Comment #1
• Please delete ‘data collection and analysis’ heading
• Change the order and titles of headings as follows: ‘study selection’, ‘data extraction’, ‘quality assessment’, ‘data synthesis and analysis’
• Move ‘comorbidity’ paragraph to data extraction section

Comment #2

The authors are suggested to consider the following (or any similar to this) re-organization of ‘Data analysis and synthesis section’. If they agree, please revise the section accordingly.

Health inequities to access bariatric surgery will be explored through the two following ways:

If data permits, we will run a meta-regression (based on multivariable logistic regression model) using study-level data. In this regression, the utilization of bariatric surgery (yes/no) will be the main outcome (response/dependent variable) and PROGRESS-Plus factors would serve as explanatory (independent) covariates. This analysis will allow us to assess the impact of any individual covariate on utilization rate of surgery as well as potential effect modifiers.

Moreover, we will explore differences in PROGRESS-Plus factors between the surgery vs. no surgery groups within individual studies. The proportion of study participants categorized within each PROGRESS-PLUS category will be summarized as a percentage with a corresponding 95% confidence interval (CI) for dichotomous and categorical variables, and as median and inter-quartile range (IQR) for continuous variables. Differences in PROGRESS-PLUS factors between the groups will be compared using #2 test or Fisher’s exact test for categorical variables and the Wilcoxon-Mann-Whitney test for continuous variables. Statistical tests will be carried out as 2-tailed, tests at α=0.05. if there is no heterogeneity, these differences will be pooled across studies. The random effects model by DerSimonian and Laird will be used to test heterogeneity of
effect sizes between studies. Heterogeneity will be assumed at $P < 0.05$ and $I^2 > 25\%$.

Data will be analyzed with SAS (version 9.1; SAS Institute Inc. Cary, NS).