Reviewer's report

Title: Using Confidence Intervals to Assess Regression to the Mean Effects in Health Care Initiatives

Version: 3 Date: 9 August 2013

Reviewer: David Mosen

Reviewer's report:

This is an excellent methods paper that addresses an important issue in pre-post evaluation designs; specifically how to address regression to the mean (RTM). The paper presents an innovative approach; Monte Carlo simulation on multivariate normal data to verify the accuracy of traditional RTM calculations.

Major Compulsory Revision

The only thing the paper should address is what are the possible limitations to this approach. Statistical adjustments; cannot adjust for differences in populations that cannot be captured by administrative data alone. For example, 2 populations may be different due to differences in health behaviors not often available in claims analysis, etc. So, just a general commenting on this approach would be good.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.