Reviewer's report

Title: Projected growth of the adult congenital heart disease population in the United States to 2050: an integrative systems modeling approach

Version: 1 Date: 9 January 2015

Reviewer: Sayan Mukherjee

Reviewer's report:

Major compulsory revisions:

1) Appropriate population estimates were multiplied to the disease rate estimates to obtain a population number and UI. Do the authors need to consider the uncertainty in the population estimates for either the forecast or UI?
How do the two uncertainties compound in this setting?

2) Reference DisMod-PDE when it is first stated.

3) The modeling section is tough because the model is not stated explicitly so it is not clear what to do. This can be mitigated by referencing another paper or a link to a comprehensive software manual.

4) I can't say I am ok with the statistical methods in the paper because the method is not well enough described.

Minor essential revisions:

1) Define recalled CHD.

Discretionary Revisions:

1) It may be good to state the names associated the ICD codes with the numbers. Also a more detailed explanation of why these codes were used for supplemental materials. Is this choice based on past history, what do other use etc....

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:

No competing interests.