Reviewer's report

Title: Regional variations in and correlates of disability-free life expectancy among older adults in China

Version: 1 Date: 28 January 2010

Reviewer: Zachary Zimmer

Reviewer's report:

Major compulsory revisions:

1. Not enough is said in the background section to situate the paper. While the authors themselves may not realize it, the paper builds on past literature that has explored rural / urban variations in health and literature that has examined DFLE or similar types of measures in China.

2. Clarification is required with respect to how mortality was estimated. Reference to an individual's previous research is insufficient.

3. Nothing is said about the Sullivan Method method or how the estimates are calculated. There is not even an appropriate citation. More needs to be done here to clarify a Sullivan Method, what other methods exist for calculating DFLE and why Sullivan is preferred.

4. The paper implies in the discussion section that there are variations in how quantity of life is being translated into quality of life. This feeds into other debates regarding issues such as compression of morbidity. Some of this discussion would broaden the implications of the findings.

5. Sullivan estimates should be accompanied by standard error calculations and tests of significance, which are now commonly done. Table 1 should show these estimates.

6. There’s no indication of where the measures used as correlates for tables 2 through 4 come from. Better discussion of data and variable measurement is necessary so one may reasonably assess the validity of the findings.

Minor essential revisions:

7. A bottom row for Table 1 should be included to show total estimates.

8. Figure 1 presents very odd divisions for categories. It is unclear why for instance a female DFLE category runs from 12.91 to 15.12 instead of 13 to 15, which would be more intuitive, and why categories differ for the two figures (M vs F). These should be made consistent and the categories themselves should be easier to read or these unusual divisions need to be justified.

Discretionary revisions:
9. One decimal place is sufficient for Table 1.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.