Reviewer's report

Title: Medical expenses of urban Chinese patients with stomach cancer during 2002-2011: a hospital-based multicenter retrospective study

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Reviewer: Rei Goto

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This paper analyses the cost of the initial phase of treatment of gastric cancer in China on the basis of the data from multiple institutions across the nation. In addition, this study provides high-quality evidence about this field, wherein research to date was restricted to regional analysis alone. Some of the recommended revisions are as follows:

1. (p. 2 l. 6) Although gastric cancer is one of the rare cancers in western countries, it is common in eastern Asian countries. In Japan, Hori et al. (2015) reported that age-standardised incidence rate of gastric cancer in 2012 was 36.3. Perhaps, this commonality could be added to the rationale of this study.

2. (p.3 l.26) Please elucidate the relationship between CanSPUC and study population in this research. Does the study population in this study comprise patients with cancer detected by the cancer screening programme? If this is the case and if gastric cancer is often diagnosed incidentally or further examined after symptomatic outpatient visits, the study population loses some fractions of detected cancers.

3. (p.4 l.10) How were admissions for non-cancer conditions excluded from the analysis? Please define cancer-related conditions.

4. (p4. l.12) This study uses CPI of medical care. Please define 'medical care'. In some countries, this definition includes health-related goods as well as healthcare services. It is better to focus on the latter if you can describe it. Is this number country-based or provincial? If you use country-wide data, provincial price changes could not be provided in this analysis. In such case, it is challenging to separate the trend changes from price changes on regional levels.
5. (p.4, l.22) It is better to illustrate the data of inclusions and exclusions of the samples according to criteria (1) through (6) in a flow chart.

6. (p. 5, l. 16) It is true that along with Poisson and Gamma distribution, GLM is a famous method to estimate health expenditure at microlevel. Please refer some related literature.(e.g., Manning et al., 2005).

7. (p. 5, l. 18) The definition of 'number of episodes of care' is unclear. Please clarify.

8. (p. 7, l. 1) Please provide the estimation results of GLM with Gamma distribution.

9. (p. 9, l. 1) Is GDP here a real term? Real per capita GDP is better for comparing the growth rate of expenses per patient.

10. (p. 9, l. 19) The estimation of the annual cost of initial treatment of gastric cancer is unclear. Did you mean that 'It is safe to use 6851 USD both for urban and rural patients as the yearly expense of the first course of treatments? In this case, it can be estimated that it costs China around $3 billion"? If so, it is better to insert the first sentence.

11. (p. 9, l. 20) Are factors enumerated here confirmed as a risk factor for gastric cancer? If not, it may be misleading to rationalise that you do not expect a rapid decline in cancer cases.

12. (p.10, l. 4) You mentioned that cancer care is an enormous financial burden on Chinese patients. However, the description is rather anecdotal. Could you refer some studies (could be Chinese as well)?

13. (Table 4) Please explain some measures of the goodness-of-fit (e.g. R-squared and the root mean squared prediction error).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?

If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English

Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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