Reviewer's report

Title: Labour force participation and the cost of lost productivity due to cancer in Australia

Version: 0 Date: 12 Nov 2017

Reviewer: Tomoyuki Takura

Reviewer's report:

Comments to the Author:

The authors conducted two analyses: one to estimate the indirect cost due to lost productivity, and one to identify any inequality in the distribution of labour force absence in Australia. Although I consider the idea as reaching consensus, the lost productivity due to cancer was already shown by economical parameter and several design issues limit the value of the work presented herein. This manuscript has value in that it addresses an important theme. Such work is interesting to a wider audience across disciplines as site remediation. However, there are several issues that must be addressed before its acceptance.

Major points:

1. P6-L134: The financial impact to the gross domestic product (GDP)

I agree with the authors about the GDP calculation. However, if the authors make an effort to ensure the accuracy of the findings as real world, you should take the unemployment rate (labor absorption or operation buffer) into account in the analysis.

2. P5-L125: Labour force participation of people with cancer

I agree with the authors about the limitation of the dataset (SDAC). However, this manuscript as cross-sectional study has a potential restriction. The authors should consider various biases in order to discuss a correlation between the will to work and the service record if you want to make their discussion convincing.

3. P4-L103: Dataset (correction weights)

The authors should clarify the definition of the correction weights for this implementation. Especially, you should carefully consider from a multipronged perspective the influence of the mechanism of type of cancer on the results in the present study.
Minor points:

1. P6-L134: The financial impact to the gross domestic product (GDP)

If the authors make an effort to ensure the accuracy of the findings as GDP impact of lost productivity due to cancer, you should analyze the data of a labour demand boosting (expanding GDP) according to healthcare employment offer.

2. P5-L115: Statistical analysis

The authors should explain a level of repetition of 'cancer' (those who identified as having cancer) and 'no health condition', 'any other' long-term health condition.

3. P10-L221: Discussion

The authors should expand on the degree and rationale of the robustness of the obtained findings as much as possible.

4. P7-L164: Result (Table 1)

I feel something is wrong with population of No Health Condition: Are morbidity rates more than aged groups in the youth group?

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.

Unable to assess

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

No
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:

Acceptable

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