Reviewer’s report

Title: Economic consequences of Japanese schools’ recovery certificate policy for seasonal influenza

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Reviewer: Pieter De Boer

Reviewer’s report:

This manuscript titled "Economic burden of "Recovery Certificate" from season influenza in Japan" estimates the costs of a "recovery certificate" policy for schoolchildren in Japan. The paper is interesting and helpful to understand the Japanese school policy on sick leave of children. The calculations are straightforward and clearly described. Nevertheless, I have some additional comments/questions which may improve the paper.

1) On first sight, the title did not ring a bell on what I could expect from the content. It may be a difference of taste, but there are three aspects I do not like so much. 1: Burden. I am not sure whether a recovery certificate causes an economic burden, because a burden has a negative load and that reflect too much the opinion of the authors. I would prefer the word "consequences". 2: "recovery certificate": I think the certificate does not cause the burden, but it is the "recovery certificate policy". 3) It is not clear whether the study deals with sickness leave on schools, because it could also deal with working adults. So I would modify the title to "Economic consequences of the recovery certificate policy from seasonal influenza in Japanese schools ". If the authors agree, these terms should be changed throughout the whole manuscript.

2) It is not clear to me what the criteria of Japanese schools are in order to ask for a certificate. Do they use something similar to the usual ILI criteria like fever combined with a respiratory symptom? Are children sampled in order to confirm influenza infection?

3) Currently, the recovery certificates issued every year was estimated by the total number of symptomatic influenza patients under 15 years old, with a reference to weekly reports of influenza virus detection. How did the authors use exactly that information in order to estimate the number of cases and subsequently the number of certificates? What are the number of ILI cases and the proportion of detected influenza viruses? In line with comment 2, would the number of certificates not be higher than the number of symptomatic influenza cases, as there may be other pathogens that cause ILI symptoms and schools presumably can not judge whether the infection is influenza or not.

4) The assumption of half day leave for a caregiver is a strong assumption that could be added to a sensitivity analysis.
5) I like the adjustment for grandparents. The authors have been very thorough about this aspect.

6) Page 10, line 155. This should be discussed in the paragraph in which the number of certificates is determined. The source of this percentage seems not that reliable. Please clarify how this poll is conducted and who were the respondents.

7) It is not clear to me whether Table 1, the number of document issued, is methodology or a result. In results page 10 line 167 states the number of patients of 7253100, and table 1 5135738 documents, but how this conversion has been done is not really clear to me. Also the first paragraph of the results seems to have a lot of methodology like proportion of people with fulltime job, and other percentages mentioned in line 169-173.

8) I think the authors should be careful not to exaggerate their personal opinion throughout the paper that they not like this policy, but be a little more neutral. For instance: Page 5, line 71: "To make matters worse", Page 13, line 205-206. "our study offers an opportunity to tell a little bit weird custom in Japanese healthcare system to other countries' people.

9) Figure 2 is not so clear. Smaller cost intervals would provide more information on the distribution, while also the exponential in the legend could be replaced by millions US$.

10) Some minor edits:

- page 16, line 259: societal burden to our society -> 2 times society

- page 2, line 26: IssuRance

- page 2, line 49: THE "recovery certificate"

- page 9, line 137: 12 YEARS

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

Unable to assess

Does the work include the necessary controls?  
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Yes

Are the conclusions drawn adequately supported by the data shown?  
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Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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