Reviewer’s report

Title: Performance evaluation of a health insurance program using optimal resource use: Health care providers perspectives

Version: 1 Date: 24 August 2013

Reviewer: Chunhuei Chi

Reviewer’s report:

• Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. p.6 1st paragraph:
The authors described that they used two-stage random sampling methods to select sample. However, it is not clear from the manuscript what was the response rate. Out of 509 staffs selected in the second stage, 466 were interviewed. Were these the 100% sample that met the selection criteria or not? Also out of 68 facilities selected in the first stage sampling, 57 were included in the final sample. Was this difference due to second stage sample selection criteria, or was there 83.8% response rate in the first stage sampling?

The authors could make it more clear about their sampling method and results, so the readers can easily understand the process and response rate.

2. p.6 2nd paragraph: conversion of 5 ordinal categories into a dichotomous variable.

The authors reported that the resulted binary variables were more evenly distributed and reflected a meaningful distinction in practical terms. Among these two rationales, the later one – a meaningful distinction in practical terms – is methodologically a sound reason, but not the former one. In any given context of original data collection, one does not expect the data to be "evenly distributed" among categories; therefore, it is not a sound argument for grouping multiple categories into dichotomous categories.

3. p.6 last paragraph continues to p.7 1st paragraph on statistical model:
Stepwise selection is not a common or standard methods of model selection or specification. Its use is justified only when researchers have no theory or empirical foundation to support model specification. The authors should justify why they used stepwise selection using backward elimination method.

4. p.9 first sentence in “Discussion”:
The authors stated that “ORU domains are important aid to monitor and evaluate the performance of health insurance schemes implementation at various stages of development.” This statement should be qualified with an emphasis that it is from the providers’ perspective, as some of these domains are not necessary “important” if one is taking a societal or consumer perspective to evaluate the
performance of health insurance schemes.

5. p.12 Conclusions.
This study was based on providers' perspective to assess a national health insurance scheme. What is considered "positive" or "optimal" performance from providers' perspective, however, may not necessarily be in line with societal or consumers' perspective. Whether these traits remain "positive" or "optimal" when one is evaluating an NHI system from societal or consumers' perspective is an open question. The authors should add a brief discussion in the Conclusion section to make it clear the limitation of assessing an NHI scheme based only on providers' perspective.

• Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. P.5, 3rd paragraph: spell out “HCPs” the first time it was used.

• Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

1. p. 16. Table 2: On the categories of "Profession", it is not clear what are the "Non-medical" health care providers. The authors can put a footnote at the end of the Table to explain what they are.

Level of interest: An article whose findings are important to those with closely related research interests

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: I declare that I have no competing interests.