Reviewer's report

Title: Using Adjusted Clinical Group System to Quantify Populations' Morbidity Burdens in the Ambulatory Settings of Taiwan

Version: 1 Date: 12 March 2008

Reviewer: Jonathan P Weiner

Reviewer's report:

General Comments:

1) The author’s intent is to demonstrate that the MOH of Taiwan can do work beyond looking at simple disease registries and that a shift toward population and patient centered rather than disease centered analyses is warranted. Additionally, the author demonstrates that the Taiwanese MOH has the data necessary to support such analyses by processing a large, randomly and nationally represented data extract through the Johns Hopkins ACG case-mix software to produce distributions of ADGs and ACGs. Relative weights and correlation coefficients are calculated for two years of data.

2) To the best of our knowledge this is one of the first reports (in the English language) of a wide scale application of a population based (non hospital) risk adjustment / case mix mythology in Asia.

Major Compulsory Revisions: (that the author must make before a decision on publication can be reached)

3) While the reasons for the study are provided in the discussion section, the author should provide his justification for the "why of the study" in the abstract or intro of the paper. Also, the text would be improved if the objectives were stated explicitly in the abstract and introduction.

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

4) In characteristics of morbidities, third finding, the author states “NHI program is potentially threatened by steering ambulatory resources away from populations that are most needy.” While there is a citation for a statistic in the prior sentence, the justification for this conclusion is unclear. Additional explanation and/or justification would help the reader to understand the authors conclusions.

Discretionary Revisions

Ideally, one or the other or both of the following additions to the paper would be desirable.

5) A concurrent analysis looking at the linkage between risk assessment
variables and costs.

6) A comparison of some of the disease markers produced by the risk adjustment system to those recorded by disease registries in Taiwan.

To reiterate, inclusion of one or both of these additional analyses is NOT compulsory.

7) In the discussion section, “This study fount” should be changed to “This study found”. If possible, having the paper reviewed by a native English speaking editor would be useful as there are a handful of such errors that could be corrected. This is NOT a requisite for publication as the authors’ intent is always clear.

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

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

Declaration of competing interests:

The methodology being applied by the author (the ACG case-mix system) is a measurement tool developed at the Johns Hopkins University, where the reviewers are employed. The University makes software based on this tool widely available for free or at nominal costs to academic groups (as was used in the case here). The University does charge royalties when applied to commercial or administrative applications. The reviewers do receive salary from the Johns Hopkins University that is in part funded through these royalties.