Reviewer’s report

**Title:** Hospital accreditation, reimbursement and case mix: links and insights for contractual systems

**Version:** 2  **Date:** 25 September 2013

**Reviewer:** Che-Ming Yang

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1. Searching for better severity measures within each healthcare system’s unique context is always important and has widespread implications for health services. As such, the authors’ attempt should be encouraged.

2. The authors tried to come up with CMIs based on ICD-10 to be their gold standards in examining the correlations between severity and their accreditation or reimbursement schemes. This a valid approach based on previous experiences. However, there are a few points that I would like to bring to the authors’ attention and for their further consideration.

3. The authors aimed at shedding lights for the contractual system and the most important conclusion is that the current link between accreditation and reimbursement is not appropriate. The evidence is significant difference is only noted between category A hospitals and the others in terms of CMI. But no difference can be found among other categories. The authors only described in the text that category A is paid more and D is paid least. I would like to see more description with respect to the reimbursement schemes to have a better picture of how strong accreditation results can affect hospitals’ financial incentives.

4. Three proxies considered by the MoPH are brought up in the article. But I cannot get a clear picture as to for what they are going to be proxies. What are the intended uses of these proxies proposed by the government? The ends justify the means. The bad correlations between these so called proxies and CMIs do not necessarily denote that they are bad proxies. Chances are they could have better performance than CMIs in the uses propsed by the government.

5. In Table 1, the lowest CMI for category A hospital is 0.92, and yet the highest CMI for category C hospital is 2.06. The authors kind of indicated that this points to the inappropriateness of the reimbursement system. However, I will have to pose two questions with respect to this finding. First of all, how confident are the authors about coding accuracy? In the limitation section, the authors said that there is no direct link between reimbursement and coding, therefore there is no financial incentive for the hospitals to upcode. This reality also gives rise to the suspicion that there is no need to code correctly either. Especially in the lower accreditation level hospitals, their staff might be ill quipped to code correctly. If, for argument’s sake, there is no coding problem, the second question is that the phenomenon some C hospitals treated seriously ill patients might not be evidence of the inappropriate reimbursement schemes. This might be caused by
the problems of health care delivery system. For instance, really sick people are stuck in the health care delivery system, i.e. category C hospitals. Even though they should be transferred to a higher level hospital, they could not due to the barriers in access. Therefore, more discussions could be developed in these two aspects.

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.