Reviewer's report

Title: How does the New Cooperative Medical Scheme influence health service utilization? A study in two provinces in rural China

Version: 1 Date: 22 December 2009

Reviewer: Owen O'Donnell

Reviewer's report:

Major compulsory revisions

Minor compulsory revisions

1. The study rests on comparison of health care utilization rates of those covered and those not covered by NCMS. Adverse selection is acknowledged as a potential problem and there is some attempt to check for this by comparing health indicators and income of the two groups. No significant differences are found (although p-values of the tests should be reported in Table 2). But this strategy is limited since only two rather crude indicators of health are compared and comparison can only be made of observables. Unobserved differences between the groups may be influencing the difference in utilization rates. These are common problems in this type of study and they prevent the researcher from identifying causal effects. For this reason, the authors should avoid claims to identify the 'impact' or the 'effect' of NCMS throughout the paper. But there is an additional problem in this specific study. 92% of the sample participants (95% in one of the provinces) were covered by NCMS at the time of the study. There are few uncovered households left to compare with those under NCMS. Given this, the authors must be modest (more than is the case at present) regarding what they can hope to learn about the effect of NCMS. I recommend that claims to have identified, estimated or found the impact/effect of NCMS on utilization from this study be replaced by less ambitious language.


3. Page 6 – Claimed contribution two (policy relevance) is not a distinct contribution of the paper. I suggest that it is dropped.

4. Page 7 – Secondary data analysis does not complement the findings of the household survey.

5. Page 9 – It is not clear why adverse selection, in general, should lead to those with low income enrolling. Is there something particular about NCMS that encourages this? If so, make clear.

Discretionary revisions

6. Qualitative findings – The insights gained from the qualitative study with respect to NCMS enrollees facing higher prices of medicines, limited quality of
care and benefit coverage, low reimbursement rates, payment and reimbursement acting as a significant barrier to use, etc are interesting. They provide plausible explanations of why NCMS may be having a limited impact on utilization and payments. Given the criticism made above regarding the limited opportunity to identify effects of NCMS from the quantitative study, rather more emphasis could be placed on the qualitative dimension of the research.

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

**Declaration of competing interests:**

I am a participant of a collaborative research project in which one of the authors (Q. Meng) is also a participating. I do not believe that this association has influenced my review of the paper.