Reviewer’s report

Title: Factors related to treatment intensity in Swiss primary care

Version: 1 Date: 30 June 2008

Reviewer: Barbara Starfield

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This paper is too sketchy to be well understood by readers. Also, some of the terms are used in unconventional ways, causing confusion for readers. The following need attention.

1. ‘Patient lists’. The term is generally used to describe a system wherein patients are on a list that denotes their relationship with a practice or practitioner over time. In this paper, you use it as a synonym for those who have made one or more visits to the practice—but they could also have gone elsewhere during the time period, and this might vary with physician supply. There is an average of .8 primary care physicians for each person in the country, i.e. the true average list size would be 1250. But the 'patient lists' in the practices you describe seem to be about 775. So only about 60% of people are seeing a doctor in a year, which seems low. Is it right, or are some patients going elsewhere?

2. Is column 1 in Table 2 just primary care physicians? The total is 6034. The Abstract (Methods) says that 5469 physicians were in the analysis. Please explain the difference.

3. What are possible explanations for the difference between specialists and primary care physicians in the correlation between density and treatment intensity?

4. Since there is a large difference between the German speaking areas and the others, the regressions should be run separately for the different language groups. Since they are ALL pad fee-for-service, running parallel regressions will shed some light on possible differences in influences on use.

5. Explaining over 90% of variance is rather remarkable. Please indicate the relative contribution of each influence to the is variation explained.

6. Your argument (Structural attributes of physicians and practices) does not seem coherent. That is, please explain why the data are 'consistent' with the hypotheses that non-medical factors are related to competition.

7. The short paragraph just two before the Strength and Limitations section is unclear. Do you mean to say that a 3% inappropriateness rates is not believable? What would you expect and why?

8. In the first paragraph of Strengths and Limitations: Why does only 57% of people receive services outside their area? Can you say for sure that they are not also using services in their area?

9. Some of the figures in Table 2 differ from figures in the Abstract, with no
apparent explanation.

10. Table 3 needs the number of specialists per population. Also, the much higher treatment intensity on the part of specialists needs comment. Recent other studies have shown lower mortality rates where primary care physician/population ratios are high, but much less consistent results for specialists. Is it possible for you to get mortality rates (total, by major cause, infant (Neonatal; postneonatal) for the areas differing in physician supply?

11. You need to do a better job of explaining differences between primary care physicians and specialists. Presumably they are both paid fee-for-service.

**Level of interest:** An article of importance 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 I have no competing interests.