Dear Editor,

We enclose the third revision of our paper, Relationship between efficiency and clinical effectiveness indicators in an adjusted model of resource consumption, submitted for publication as an Original Research Article for the consideration of the Editorial Board of BMC Health Services Research.

We have again carefully reviewed the questions posed by the reviewers. In response to comments made by Dr. Lee, we have added two appendices: the components of the general synthetic index (SI), the definition of each indicator, and the construction (appendix 1) and the calculation of the SI (appendix 2). We corrected the “ICD-9-MC” typo (ICD-9-CM), with apologies, and further simplified the results in Table 5.

In our opinion, the SI, based on a set of clinical indicators, reflects the effectiveness of the primary health care centre based on clinical performance. However, we did not perform sensitivity and specificity analysis. We have added this point of interest to the study limitations.
Dr. Glazier poses a series of questions about the indicators. In response to his question about the definition of the risk index, we have attempted to provide a clear definition in Methods and eliminated other restatements to avoid confusion. We took his question about the synthetic index into account in constructing the two appendices introduced. Finally, we have incorporated the total population into Table 3 (196,593 patients) and the total episodes, costs and visits into Table 1.

We are confident that this article contributes a new focus, the incorporation of a measure of effectiveness into the internationally used ACG system, that has merit. We do not yet know whether the relationship is weak to moderate only at the statistical level or also at the clinical level, but will continue to monitor clinical outcomes over time. We also have no multiple correlation coefficients for reference or comparison. On the other hand, due to the homogeneity of the centres from which data were obtained for this study, we are able to establish that these centres face similar complexity (or morbidity burden), reflected in the Risk Index – and have similar results in the Efficiency Index that is based on costs, episodes, and visits.

The fact that centres with such homogeneity yield differences in the Synthetic Index devised from our standard indicators in Catalonia indicates that despite their similarities they achieve different results in terms of clinical indicators. Therefore, it appears that some centres are more effective than others with equal resources.

We therefore hope this paper will be of interest to readers of BMC Health Services Research.

Yours Sincerely

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On behalf of the co-authors

P.S.: All authors warrant that neither the entire manuscript nor any part of its content has been published previously or is being submitted to another journal. All authors have contributed to the study according to international consensus on authorship and have approved the final draft, agreeing with the analyses of the data and the conclusions reached in the manuscript. There is no conflict of interest.