Reviewer's report

Title: Hospital admissions in Alicante (Spain): A comparative analysis of foreign citizens from high-income countries, immigrants from low-income countries, and Spanish citizens

Version: 2 Date: 7 September 2013

Reviewer: Luis Andrés Gimeno-Feliu

Reviewer's report:

• Major Compulsory Revisions

1. The use of data issued by the National Statistics Institute as the denominator for the calculation of rates for immigrants is an important limitation since the variable “nationality” is not disaggregated by age and sex which impedes an adequate fit for the different variables. In other studies carried out in Spain this data was obtained from the medical databases of the public healthcare system. This article would be more valuable if these calculations were properly performed. Should it not be possible, this issue should be better clarified in the Methods.

2. The Crude utilization rates (cR) do not seem to have been adjusted for age, sex and foreign status. It would be important to do so.

3. When calculating average length of hospitalization and mortality, it would have been very interesting to adjust for complexity by means of a risk-adjustment system such as DRGs. Alternatively, the average length of hospitalization could be described separately for the most frequent reasons for discharge. The authors should explain the reason why they used medians instead of means when describing length of hospitalization.

4. References 39 and 40 are not correct in this case because they are articles on global mortality of the population, not hospital mortality.

• Minor Essential Revisions

1. The sentence “Admission from the emergency department was lower in FCHICs (58.9%) versus ACs (63.9%) (AOR: 0.84; 95% CI: 0.74-0.94) and higher in FCLICs (67.2%) (AOR: 1.22; 95% CI: 1.18-1.33)” refers to results in Table 5, but was written before results in Table 3.

2. The sentence “The length of hospitalization was lower in FCLICs (median: 3; IQR: 2-6) than ACs (median: 4; IQR: 2-8) and FCHICs (median: 4; IQR: 2-8) (p<0.001)” does not refer to any table. Therefore, it should be written in a separate paragraph from the comments on Table 5.

3. In line 5 of the third paragraph on page 9, the meaning of the word “Notwithstanding” is unclear.

• Discretionary Revisions

1. The Results section contains too much text. It would be desirable to shorten
the number of words to the most relevant aspects.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests