Author's response to reviews

Title: Comparing potentially avoidable hospitalization rates related to ambulatory care sensitive conditions in Switzerland: the need to refine the definition of health conditions and to adjust for population health status

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Version: 3 Date: 23 April 2013

Author's response to reviews: see over
Dear Editor,

We hereby submit the enclosed manuscript: “Comparing potentially avoidable hospitalization rates related to ambulatory care sensitive conditions in Switzerland: the need to refine the definition of health conditions and to adjust for population health status” for publication in BMC Health Services Research.

Regional rates of hospitalization for ambulatory care sensitive conditions are widely used to compare the availability and quality of ambulatory care but often with a rough gender and age risk adjustment. Our study shows how the use of a greater quantity of data pertaining to health status (diagnoses from prior hospitalizations, drug-based morbidities and previous medical visits) modifies comparative reporting.

Our study also makes several points that seem to us innovative and worthy of being reported to your readers:

1. Clinically relevant improvement of inclusion criteria to detect ambulatory care sensitive conditions (amendments to Purdy’s list).
2. Proposal to introduce exclusion criteria to hospitalizations which are justified by comorbidities or surgical interventions that are not consequences of those conditions.
3. Adjustment not restricted to age, gender and chronic diseases, but extended to some recurrent illnesses. Adjustment based on both diagnoses and drug inferred morbidities is a promising approach.
4. Analysis of the relation between the number of previous visits to physicians and potentially avoidable hospitalization rates.
5. Measuring potentially avoidable hospitalization rates in a country with a high income and universal access to health care.

We believe that these methodological refinements make a significant contribution to supporting the implementation of this indicator in developed countries.

All authors certify that they meet the following criteria:

- Their contribution to the conception and design of the study, to data analysis and the authorship of the text was extensive enough to justify their taking public responsibility for it;
They have reviewed the final version of the paper and approved it for publication.

Neither this manuscript, nor one with substantially similar content under their authorship, has been published or is being considered for publication elsewhere.

Yves Eggli is the author of the SQLape patient classification system used in the article and its promoter through the SQLape s.a.r.l. His co-authors do not have any competing interests.

Thank you in advance for considering this article for publication in BMC Health Services Research, please do not hesitate to contact me.

Yours sincerely,

Yves Eggli  
Corresponding author
Answer to the request of Mrs Flory Mae Calumpita regarding ethics statement

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<td>Research involving human subjects (including human material or human data) that is reported in the manuscript must have been performed with the approval of an appropriate ethics committee. A statement to this effect must appear in the Methods section of the manuscript, including the name of the body which gave approval, with a reference number where appropriate.</td>
<td>Our research involves only anonymous patient data. The data collected for the research were: patient’ anonymous sequential number, gender, age (in decade), cantons, drugs, months of prescription, ambulatory services, months of services, hospital diagnoses and procedures, year of the hospitalization. No ZIP codes or other potentially identifying information (birth, admission dates for instance) were used, according to the “Privacy rules: guide for researchers” [see reference 26]. Identifying a single person would not be possible. Consequently, data could be used without authorization from the patient or an ethics committee. The changes made in the manuscript (bold) are indicated in italics below. In the abstract: Our study is an observational study based on routine data of 2 million anonymous insured … In the method section; studied population: Our study is an observational study based on routine data from four Swiss health insurers for the years 2005 and 2006. Data were collected with the support of the Swiss Federal Office of Public Health [24]. Hospital data supplied by the Federal Statistical Office (inpatient diagnoses) are publicly available. Insurers’ data (dispensed drugs and ambulatory services) are not publicly available and were supplied only for the research project supported by the Federal Public Health Office, with the prerequisite of using the anonymous linkage code procedure of the Federal Statistical Office. All data were anonymous and did not include any information which might identify the individual (date of birth, ZIP code, etc.) [26]. References numbering have been updated.</td>
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