Reviewer's report

Title: Can we use the pharmacy data to estimate the prevalence of chronic conditions? A comparison of multiple data sources

Version: 4 Date: 25 July 2011

Reviewer: Ronald Cossman

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Major Compulsory Revisions
1. How do you reconcile the differences between prescription drug usage, which is applied to the entire population to determine a rate, versus the hospital discharge and registry of exempts, which is limited to those seeking attention by a medical professional and/or medical facility? In other words, the denominator is not the same. Either adjust such that you can compare to Rx rates or drop the comparison entirely.
2. One methodological issue that is not addressed is the difference between actual prevalence rates and the rate of those who have been diagnosed and are being treated with a drug regimen. See: http://www.pophealthmetrics.com/content/7/1/16 as a starting point.
3. How do these comparisons differ across time?

Minor Essential Revisions
1. The manuscript could be improved and polished by a line edit for word choice and construction.

Discretionary Revisions
1. I would prefer to see the equations/process by which the Rx calculations were made.
2. I would like to see a discussion of the applicability of these rates to the general public and/or limitations to this methodology.
3. Are there other sources of Rx other than the pharmacy?
4. How do these rates compare to published rates (regardless of data source) in other regions of Italy?

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

Declaration of competing interests:

I declare that I have no competing interests.