Reviewer's report

Title: The use of regional platforms for managing electronic medical records for the production of regional public health indicators in France

Version: 5 Date: 3 October 2011

Reviewer: Daniel J Friedman

Reviewer's report:

This manuscript describes a potentially important French national development in the use of electronic medical records for population and public health purposes. The manuscript is thoughtful, interesting, and well-documented, and should be of substantial interest to international audiences. Some additional clarifications would improve the utility of the manuscript. These additional clarifications are of four types.

First, conceptual clarification is needed regarding whether the regional EMR data will be purely patient based or truly population based. It is not clear from my reading of the manuscript whether the individual national health identifier (INS) will be assigned to each French resident, and whether the EMR will be generated based on the INS or on patient encounters with the health care system, or both. Similarly, it is also not clear whether the EMR data are collected only from hospital patients, or from hospital and ambulatory care patients, or from hospital and ambulatory patients and also from additional sites or modes of care. The differentiation between population-based and patient-based EMRs is essential for understanding whether and how EMRs can be used for population and public health purposes. If it would be helpful, I could provide a couple of citations that may elucidate this point.

Second, terminological clarification is also necessary of at two key terms. The "electronic medical record" should be thoroughly defined, and hopefully compared to the standard ISO definition. Also, the "personal medical records (DMP)" should be defined. Will the regional EMR data be linked for each patient over-time?; I believe that the answer to this is "yes," but the answer should be clarified in the manuscript. Is the regional EMR data a "virtual EMR," or will the data exist for each patient (or resident?) in a single database?

Third, clarification is necessary regarding the use of EMRs for public health in several countries. I am more skeptical than the authors of the true applicability of the U.S. references (second paragraph, 3. Feasibility of setting up a regional epidemiological platform from a regional medical records management platform). The U.S. diabetes prevalence and incidence surveillance system was quite geographically limited, as was the example of the 35 Boston hospitals. I also suggest that the discussion of "medical record computerization rates are closely linked to care-system organization and government incentive policies" be slightly expanded (6. Improve EMR computerization rates and quality): of interest is not only EMR computerization rates, but also whether or not those data are
aggregated and used for population and public health purposes.

Fourth, clarification is needed of the current status of the use of EMRs for public health in Rhones-Alpes. I remain unsure of just how many of the 100 health targets can be measured using EMR data: a table, possibly on-line only, listing the targets and indicating which targets can be populated through EMR data would be helpful. The authors indicate that “the use of regional data for public health purposes is under consideration” (2. Design and development of a regional epidemiological platform) should be clarified. For example, will the regional data be used to populate the regional targets?

Level of interest: An exceptional article

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 that I have no competing interests.