Reviewer’s report

Title: Designing a Patient-Centered Personal Health Record for Prevention

Version: 1 Date: 25 August 2011

Reviewer: Gregory Downing

Reviewer’s report:

The authors present results demonstrating user response to a newly designed personal health record designed for patient’s with preventive health needs. The tool was prepared with input from primary care health practice groups as an electronic interface either coupled with an EHR system or a free standing website. The study reports data on a variety of factors about its design and use by patients. The paper is more descriptive of a development process and observations about clinical use by patients over a six month time period. It is not testing a hypothesis.

It is encouraging to see electronic tools being developed to enhance patient options for preventive health services. The interoperability of free standing tools with EHRs will be an important area for continued R&D. One key issue that the authors may wish to address is the scalability of personal prevention tools to broader networks and electronic environments.

Major Compulsory Revisions

1. Additional data needs. The data collected reflects a variety of clinics with different characteristics as a means of access to the tool by the patient. Given that this context is likely to resemble the larger primary care environment, several steps should be taken to present segmented data by clinical site. While the aggregate data are useful, the reader should have available to them the details from each clinical site.

2. Additional information could be helpful by segmenting the completion of data transfers from each of the EHR systems represented in the system. It would be helpful to know more details about 3 research trials cited on page 5. It would be of interest to know if the data presented in table 3 are the same data represented (same patients) from these studies.

3. Based on the percentages of the population represented by younger individuals in the office and IPHR users, it would seem that this is not generalizable to the primary care population in general. The authors should make reference to this more clearly in that the paper is geared toward a patient centered personal record, presumably for general primary care applications, yet the testing and development seems to be oriented toward a segment of that population - younger and primarily focused on prevention as a strategy for their clinical care. This is needed to enable readers to understand some potential limitations in scalability and generalizability to primary care populations. Ideally,
the title of the paper could be modified to specifically address prevention strategies in the context of patient centered medical care. (The authors point out elements of patient communication that were excluded in the design so as to focus on prevention - in fairness to the reader, more specificity in the title should be provided).

4. Although seemingly similar semantically, the authors make statements about the goal on page 6 and 8 that are slightly different. It would seem logical to place the goal statement for the IPHR at the end of the background. A clearer statement about the goal of the IPHR and a separate statement about the purpose of the paper would be helpful.

Minor Essential Revisions

1. If possible, it would be helpful to present additional data on revisits to the site by the patient (are these after additional visits?), and the time frame when the patient completed the information relative to the office visit. This would give the reader some bearing on stickiness of the information and the retention time for the information during the clinic visit.

2. The data shown indicates that the average patient sees 8+ pages of content. The results shown in the table seem to be one page of patient information. What are the other pages patients viewing - does this include links to other websites on preventive care services?

3. The term "user" seems to be context specific in some cases to the patient and in other situations to the provider. For example, on page 5, para 2 - not clear whether this reflects patient input, provider input or both.

4. Its not clear to me from the description of the tool as whether it is anticipated that patients are intended to use this information on a continual health maintenance basis. If so, could the authors provide examples of how serial information is displayed and handled. For instance in the example on on page 13, under the lipid profiles, if additional interventions are taken and subsequent lab values are presented that represent improvement are these sequentially represented in a time series (so as to demonstrate progress) or just the latest value? If the desired result is achieved, how do the health messages change and what are the likely implications for the patient if their condition is corrected (i.e., might they stop their intervention if the messages go away)?

Discretionary Revisions

1. I was confused by the opening statement in the background section of the abstract. The first two sentences seem to say that the focus on provider patient engagement has not been a focus of the recent legislation. That may very well be correct but its not clear how that relates the last sentence of that paragraph and what that has to do with the focus of the IPHR development. This last sentence should be modified to indicate what it is that the authors are comparing the degree of challenge to? It is recommended that the authors revise the background statement to make it more clear or relevant to their projects and the needs they seek to address.
2. Some additional work to the references would be helpful. When it citing specific legislation, indicating with more specificity to what section of the law or seeming more helpful, where in the CMS regulations(ref 10). Reference 38 has a typo.

3. On page 4, para 2 regarding "some PHRS are beginning to provide basic interpretation..." a reference or example would be useful.

**Level of interest:** An article whose findings are important to those with closely related research interests

**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.