Reviewer's report

Title: A Draft Framework for Measuring Progress towards the Development of a National Healthcare Information Infrastructure

Version: 1 Date: 14 March 2005

Reviewer: William Yasnoff

Reviewer's report:

Reviewer's report

---------------

- Major Compulsory Revisions

1. Some of the language is too sweeping and needs to be softened:
   a. Abstract: “…(NHII) that does not currently exist” should be changed to “…(NHII) that is incomplete” or “… (NHII) that is in the early stages of development.” Indicating that the NHII does not exist at all fails to account for the extensive efforts that have already been undertaken.
   b. page 4, first paragraph, “…we will be forced to accept less precision in our measurements” should be changed to “… we will likely need to accept less precision in our measurements.” It can reasonably be argued that information technology would allow measurements to maintain their precision even as they scale. While I agree with the authors, their assertion is too definite in the absence of any evidence.

2. The overall perspective is too focused on the current conceptual model of the NHII (which may change), rather than the ultimate requirements it must meet (which will likely be very stable). In fact, the measures proposed really relate to these requirements. For example (p. 9), “the percentage of patients in a region who have health data available through the RHIO” is a proposed category of measurement. The final phrase “through the RHIO” is superfluous – it really doesn’t matter how the health data is available – only that it is.

Revising the manuscript with this in mind would lead to helpful clarifications. There is no need to ignore the current NHII conceptual model. However, it would be good to explicitly state as many requirements as possible. This will also help to uncover potential omissions in the measurement framework, e.g. there is no proposed measure relating to the completeness of the health information available for each patient. If availability of complete information was stated as a requirement, such a measure would naturally follow. The authors have started along this path by referencing the IOM’s six desirable quality attributes for the health system (p.10); a similar list of desired attributes of the complete NHII would be a helpful contribution that should be more explicit in this manuscript.

- Minor Essential Revisions

1. “We define a cluster as two or more nodes that have an existing written data sharing agreement, …” (p.5). Wouldn’t it be better to also require that data actually be shared? While an agreement is positive, it seems that the measurement of progress would more reasonably be the actual movement of data, which presupposes that there is an agreement. At the very least, there should be separate measurements of agreements and actual data exchange if it is believed that tracking agreements provides a useful leading indicator of future data exchange activities.

2. typo on page 14, 5th line from the bottom: [… within the next 10 years”]. The closed quote does not have a matching open quote and should be deleted.

3. typo on page 7, 7th line from the bottom: [..] The comma should be deleted.

- Discretionary Revisions

The authors recommend HHS funding of an impartial expert group to create clear and consistent definitions of the NHII, but suggest that this group be led by a recognized leader in clinical
information systems measurement and evaluation appointed by HHS. This seems contradictory – if the group is led by an HHS appointee, wouldn’t there be a problem with the perception of impartiality? It would be helpful if the authors could expand a bit on the goals and assumptions behind their recommendations, and discuss the pros and cons of several alternative organizational structures that might accomplish their objectives. The Connecting for Health group from the Markle Foundation has recommended a “Standards and Policy Entity” that would be a public-private partnership. Is the organization proposed by the authors separate? Could the measurement function be added to the duties of the organization suggested by Markle? A more complete analysis of alternatives would inform further discussion of this issue and therefore be helpful to policymakers.

What next?

--------
This manuscript should be accepted after the recommended revisions are made.

Level of interest

-----------------
This is an important article that deals with an issue that is both timely and should be of great concern.

Quality of written English

--------------------------
Acceptable

Statistical review

------------------
No need for statistical review.

Declaration of competing interests

----------------------------------
No competing interests.

Open peer review

----------------
I agree to have this peer review statement (except for the confidential comments to the editors) posted on the web.

William A. Yasnoff, MD, PhD, Senior Advisor, NHII, U.S. Department of Health and Human Services

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.