Reviewer's report

**Title:** Indivo: a Personally Controlled Health Record for Health Information Exchange and Communication

**Version:** 2  **Date:** 14 August 2007

**Reviewer:** Pekka Ruotsalainen

**Reviewer's report:**

**General**

I am sure that the INDIVO has a business plan. "Business plan is a document that summarises the operational and financial objectives of the business (e.g. services in this case) and contains detailed plan showing how the objectives are to be realised"

I have found the following objectives:
- Receiving EHR data from legacy systems,
- Preservation of patients care data,
- Distribution stored data to care professionals under patient's control,
- Distribution of care data for secondary use,
- The use PHR data for person's own purposes,
- Collection of health related data for distribution to non professional, and
- To be platform for patient centric integration of health information.

The realisation is described just in this report.

I propose that writers still clarify INDIVOs external connections. Especially how it communicates with legacy systems.

An other clarification neede, is to explain types of data captured from different sources and stored in INDIVO. I found that there are data from legacy systems (e.g. legal patient records), survey data and comments and opinions. It will be a good idea to add a picture descibing the data-flow between INDIVO and systems/service connected to it.

I also propose that writers will clarify the security model. It is a positive fact that a policy based access model is used. It will be a good idea to separate identification and privilege management from each other. Identification service can be external (e.g. PKI services) but privileges will be (hopeful) set by the patient.

It is not clear to me why "an institutional security policy" is needed and who is the institute (hospital, primary health care center or a private doctor)?

I like to know if INDIVO will meet HIPAA rules?
It has not been mentined, how the integrity of stored documents is proven? It should be explained.

The "conflict" between security policies is not easy to understand? If the PCHR is controlled by patient and she owns it, she also sets security rules! From other side if some actions are permitted by service provider's security policy, the PCHR will be a part of the service providers EHR-system and INDIVO is not complete controlled by the patient. Explain this diöemma, please.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

Based on the report, the PCHR is only a copy of the EHR of legacy systems. Is this true? Do the service provider organisation still have own EHR-systems or will INDIVO substitute it?

The patient can also hide parts of the content of his/her record. What is doctors reaction to this fact?

How often INDIVO is used in daily practise and for what purpose?

Other questions writers can explain:
- Who has the responsibility of the availability and security of the INDIVO?
- How long information is preserved in INDIVO ?
- Who pays the costs?
- Why an internal document format is used? Why not HL7 CDA R2?
- How patient's explicit consent is collected and managed ?

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a