SHR Background

As a part of the RHEA project, a health information exchange (HIE) was designed and developed to support maternal health in Rwanda. This included a Shared Health Record (SHR) component, based on OpenMRS (http://openmrs.org/). This is currently implemented and operational within a single district of Rwanda. You can find more information about this project here.

As a part of the OpenHIE initiative that grew out of the RHEA project, our SHR community was tasked with reviewing the existing SHR tool and evaluating the question: "what makes a good SHR that will meet the future aims of the OpenHIE initiative?". The objective of the review was to provide a recommendation of whether we should use or modify an existing technology or build something ourselves i.e. taking the "adopt, adapt, develop" approach.

The evaluation process

The process and methodology we used to evaluate options for the Shared Health Record were:

- 1. Document use cases and requirements for a Shared Health Record
 - a. Initial discussions
 - b. SHR Use Cases and Requirements
- 2. Performance test the current OpenMRS SHR used in the RHIE
 - a. Performance evaluation of OpenMRS
 - b. Estimated load figure for a Rwandan national deployment
- 3. Create a tool to evaluate Shared Health Record software that is closely linked to the requirements
 - a. Shared Health Record Evaluation Tool
- 4. Compile a list of software that could be used as a Shared Health Record
 - a. Shared Health Record Tools for review
- 5. Evaluate list software options using the evaluation tool
 - a. Shared Health Record Evaluation Tool
- 6. Write up results of the evaluation and come to consensus on a recommended way forward (ie. Use/modify an existing tool or build from scratch)
 - a. Shared Health Record options and recommendation

The recommendation

Following the evaluation, the OpenHIE SHR community decided that the best option for OpenHIE to move forward with would be to utilise the existing SHR using OpenMRS, with the addition of certain enhanced features. This was due to the fact that OpenMRS is a widely adopted and supported EMR which has successfully been implemented in low-resource settings across the world. It was designed to be an edge node EMR but the clear separation of the data model and the interfaces, the powerful API and the usage of a modular approach to build extended functionality enable OpenMRS to function as a central shared health record repository.