What constitutes an OpenHIE SHR?

Overview

Within the OpenHIE project there are two major functions that a Shared Health Record should perform:

1. The SHR should receive and **store clinical documents** for patients and respond to queries to **retrieve a patients clinical documents**.
2. The SHR should be able to **respond to queries for existing data** about a patient that was received from the clinical documents.

Standards and Workflows

A core principle of the OpenHIE architecture is to allow the various infrastructure services (such as the SHR) to be interchangeable. Thus, the SHR must support some standard interfaces such that different implementation that are developed can be swapped in as needed. Various standards have been evaluated and the SHR community has decided that the core standards that an OpenHIE SHR must support are as follows:

- The interface standard: **IHE's XDS.b profile** - (technical specifications), Query for Existing Data (**QED**) (technical specifications) and the FHIR-based Mobile Health Documents profile (**MHD**) (technical specifications)
- The document standard: **HL7 CDA** release 2 content modules - (technical specifications)
- The document content standards: **IHE's PCC profiles** - (technical specifications)

The context in which an SHR should use the above standard profiles is described in the **OpenHIE workflows that an SHR is required to support**. Each of these workflows describes a particular interaction that an SHR must support. To be OHIE SHR component, the SHR application must be able to support the OHIE workflows listed below. Implementations may support only the workflows needed to support their use case:

- **Save patient-level clinical data workflow - V1.0**
- **Query patient-level clinical data workflow - V1.0**

Requirements

In addition to the above an SHR should **closely match the requirements defined by OpenHIE** as can be found here.

Support of OpenHIE Non-functional Requirements

An OpenHIE component should consider the following OpenHIE Non-Functional Requirements - Draft

Additional levels of support

The above forms the base standards that an OpenHIE SHR must support. A number of those standards contain many different profiles that a SHR implementation may choose to support for a variety of use cases. OpenHIE SHRs may be built incrementally to support additional profiles. These different categories of support have been broken down into different phases. These phases are listed below:

SHR Level 1 - (at least one content profile + query for existing data)

A phase 1 OpenHIE SHR **must** implement the following:

- XDS.b's provide and register document, stored query and retrieve document transactions
- At least one of the Patient Care Coordination CDA content profiles which profile the CDA Continuity of Care Document (CCD) specification.
- The Query for Existing Data (QED) profile

SHR Level 2 - (all PCC content profiles + query for existing data + referrals)

A phase 2 OpenHIE SHR **must** implement the following:

- XDS.b's provide and register document, stored query and retrieve document transactions
- ALL of the Patient Care Coordination CDA content profiles which profile the CDA Continuity of Care Document (CCD) specification.
- The Emergency Department Referral (EDR) PCC profile which supports referrals
- The Query for Existing Data (QED) profile

SHR Level 3 - (clinical documents + query for existing data + referrals + some form of data export - [perhaps lab and drug profiles])

A phase 3 OpenHIE SHR **must** implement the following:

- XDS.b's provide and register document, stored query and retrieve document transactions
- ALL of the Patient Care Coordination CDA content profiles which profile the CDA Continuity of Care Document (CCD) specification.
- The Emergency Department Referral (EDR) PCC profile which supports referrals
- The Query for Existing Data (QED) profile
- A to-be-determined mechanism to export data for reporting purposes