Health Information Interoperability Project Charter

Overview

The Health Information Interoperability Project ("HII Project") is an open source software development project, chartered by the Open Health Tools Board, to enable interoperability between Oregon's Medicaid Transformation Grant project and selected organizations' electronic health record systems and other health information sources. The associated health information will be from multiple data sources and multiple contributors.

The HII Project will be part of a wider set of open source efforts:

1. The project will utilize the Eclipse tools and Platform, the OHT Platform and Tools, and other development and run time platforms and tools as appropriate.
2. It will include collaboration with the following OHT projects: the HL7 Messaging Tools Project led by NHS, the OHT Test and Conformance Project led by Canada InfoWay, the OHT Terminology Tools project led by IHTSDO and NeHTA, and the Medical Device Interoperability Project.
3. It will include collaboration with the OHT member standards organizations including HL7, HSSP, IHTSDO, and OMG, as well as others such as IHE, HITSP, and Medicaid Information Technology Architecture (MITA) as needed.

The HII Project will partner with the Oregon Department of Human Services and its associated Medicaid Transformation Grant project, the Health Record Bank Oregon.

The project charter is a living document that will be updated to reflect the evolution of the mission and development processes over time.

Mission

The mission of the HII Project is to quickly and efficiently enable information interoperability between a specified set of health information sources / contributors and the Health Record Bank (HRB) Oregon. Specifically the HII Project will work to integrate the information interoperability requirements of the HRB using the appropriate Health Standards and provide Open Source Code which meets the interoperability needs of the Health Record Bank. The project will:

1. Focus on creating components, models, message designs, specifications, and conformance tests in support of the interfaces required to enable interoperability with a patient-centric Health Record Bank.
2. Help drive related Open Health Tools projects and provide them with a real-world environment and test bed for the gradual development and implementation of production code to enable interoperability.
3. Identify and drive requirements for implementation of specific use cases, for example the AHIC Consumer Empowerment Use Case and IHE Integration Profiles such as XDS, XPHR.

Scope

The HII Project will serve as a test bed and real-world laboratory in partnership with the HRB Project. Neither the HII Project nor the HRB Project will create critical dependencies on each other. Rather, both projects will communicate their schedules, plans and deliverables through an open and transparent, process. The HRB Project expects to make their developed APIs public and will provide to the HII Project the required standard references and necessary data and metadata on HRB specific health data sources/contributors, legacy applications and organizations, and necessary devices with which it wishes to interoperate. While the development RFP has not been published nor a vendor selected, the HRB Project will strive for open source implementations of open standards based interfaces to the greatest extent. The HRB Project can not guarantee nor does it expect that EHR vendors and other health data sources will make their APIs Public Domain or Open Source, but will proceed under a plan to thinly encapsulate vendor IP in isolating interfaces while the bulk of the HRB interfaces will be available as Open Source.

The isolating interfaces may require re-engineering or vendor licensing/agreement of IP usage on each new instance.

While the HII Project will be coordinated with the above referenced OHT projects and standards organizations; it will avoid creating critical bottlenecks by not placing irresolvable dependencies on those projects. For example, if required tools and definitions are not yet available, the HII Project will proceed according to known requirements with the goal of harmonizing at a later time.

The HII Project will provide a reference implementation for interoperability tools and processes that can be replicated in other regions and with other models of health information interoperability. Oregon will be the first of several states to provide definitions, functional specifications, interface requirements and message definitions. The HII project developers will utilize the OHT/ CollabNet development environment and conform to the Open Health Tools Development Process.

The adoption and distribution services for implementation will be provided by OHT, which It will use the OSU hosting and bandwidth services site at OSU.

Expected Contributions

The HII Project will use a two-phased approach. In Phase I, an initial implementation will be created based on conventional Service Oriented Architectures and Web Services technology. Phase II will incorporate a more scalable and higher performance implementation of the OHT Platform (both the Health Services Bus and the associated common services) that spans a wider range of operating platforms, including devices, desktops, servers, and mainframes.

The HII Project is intended to:

1. Provide OHT interoperability platform services and interfaces underpinning the development of a Healthcare Services Bus (HSB) and a set of common services covering key functional areas such as Patient Information, Infrastructure, Interoperability and Analysis; as well as extensibility technologies such as Web Services and OSGi component model.

2. Provide OHT Interoperability Tools that will enable:
    - **Semantic interoperability:** Manage, develop, update, search and deploy medical terminologies and ontologies so that the same information has the same meaning from one system to another.
    - **Testing:** Provide a testing, conformance, and simulation environment where the results are expected to help vendors assess the conformance of their products and information exchange with the Oregon Health Record Bank and standards such as HL7.
    - **Messaging Standards:** Define how information is packaged and communicated from one party to another, to expedite the development of messaging architectures and increase access to standards.
    - **Data Sources:** Integrate the information from legacy applications, data, and transaction systems with other legacy systems or new applications. This includes Data Interchange and Legacy System Adapters.
    - **Devices:** Integrate information from medical devices.
    - **Analysis:** Implement health data analysis services such as Aggregation, Reporting and Analytics.
3. Provide clinical scenarios and graphic illustrations of one or more desired use cases to drive functionality and technical specifications.
4. Provide implementation and adoption services to include:
    - Technical Support
    - Implementation methodologies and documentation

- Education, training materials and courseware
- Legacy Adapter workshops
- Jump start programs
- Rural implementation programs
- Web help information and collaboration environment

The HRB Project will provide the Health Record Bank as a real world example of open standards based developed interfaces to electronic health information held in vendor systems and data stores.

Outcomes:

The Oregon HRB Project and HII Project will improve the efficiency and effectiveness of Medicaid: 1) improve care quality by providing otherwise unavailable information about previous tests, lab results, diagnoses, and health system visits, thereby allowing for better-informed clinical work-ups and facilitating care coordination; 2) reduce costs by reducing duplication of tests, procedures, office and emergency room visits, and hospitalizations; and 3) enhance patient engagement by providing more easily accessible information and instructions that will result in better partnership and participation.

The measures that will define the success of the project include the following:

- Number of organizations that are enabled to interoperate with the HRB Oregon
- Number of patients establishing and using accounts to gather and view their personal health information.
- Number of patients providing proxy access to their clinicians and social service providers.
- Number of clinicians and social service professionals reporting that they have received information through HRB Oregon and reporting that they regularly use information from HRB Oregon.

IP Issues

All open source code and other IP will be contributed under the terms of the Eclipse Public License. Exceptions will be made on a case by case basis where interfaces to existing systems and legacy adapters require IP licensed under other terms. However, the use of such other licensed IP will be minimized and isolated in modules that can be separately distributed.

Deviations

No deviations from the OHT Development Process or other Policies are anticipated.

Sponsors:

Core sponsor:
Open Health Tools
PO Box 258
825-C Merrimon Ave
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Complementary Sponsor:
Oregon Department of Human Services
Division of Medical Assistance Programs
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