FEDERATED HEALTH INFORMATION MODEL (FHIM)

ORGANIZATIONAL SPECIFICS

Standards Organizations:	The Open Group
Technical Committees:	
Other Partnering Organizations:	
Government Organizations:	Office of the National Coordinator for Health IT (ONC), Department of Defense, Veterans Affairs, Department of Health and Human Services
Industry Sector(s) / Technology:	Healthcare
Program / Activity Website URL(s):	https://fhim.org/about/intro-to-fhim

STANDARDS DRIVEN PUBLIC-PRIVATE PARTNERSHIP (PPP) OBJECTIVES

PPP Drivers:

Federal Health Information Model (FHIM) development started in 2007 under the authority of the Clinger-Cohen Act of 1996 and was managed by the Office of the National Coordinator for Health IT (ONC) and its Federal Health Architecture (FHA) program. The purpose of the FHIM project was to coordinate efforts of the Veterans Affairs (VA), Department of Defense (DoD), Department of Health and Human Services (DHHS), and other "partner" federal agencies involved in the development of electronic medical records and engage with multiple private sector standards development organizations (SDOs). The FHIM uses standards from SNOMED International CT, LOINC, and RxNorm and coordinated with HL7 International, NCPDP, ANSI's ASC X12, and other SDOs. It has been implemented in the U.S. public sector and the private sector worldwide.

In 2019, ONC named The Open Group as the sole steward of the FHIM. The Open Group is a global consortium that enables the achievement of business objectives through technology standards and open-source initiatives by fostering a culture of collaboration, inclusivity, and mutual respect among our diverse group of 900+ memberships. The Open Group membership includes customers, systems and solutions suppliers, tool vendors, integrators, academics, and consultants across multiple industries.

PPP Goals:

The goal of the PPP was to make the FHIM available as an open-source resource to users worldwide by locating it at The Open Group and the FHIM-dedicated website. The FHIM website includes a wide variety of resources, including:

1. A six-minute plain-language animation describing why the FHIM is needed, how it works, and who can benefit from it.
2. The FHIM model, newly conceptualized as the **Federated** Health Information Model.
3. Introduction of the **FHIM Profile Builder (FPB)**, a standards-based API profile builder, along with two training videos.
4. Multiple resource documents about the FHIM, the FHIM model, USCDI requirements, The Open Group assessment of the FHIM, and key transfer papers and presentations.

Public Sector Role & Participation:

The alpha version of the FPB was funded by ONC during the FHIM transition to The Open Group. However, it did not provide additional funding to advance its development. The FHIM has been stable since its transfer to the Open Group. Should public and/or private entities wish to extend the FHIM and its FPB, the Open Group Healthcare Forum would facilitate this work through The Open Group standards development process.

Because The Open Group is the steward and not the owner of the FHIM, it is not in a position to create the FHIM as a commodity. It can track how many unique hits the site receives, but cannot track how the FHIM is used by those who go

to the site. If, however, an entity wanted to join the Healthcare Forum to work together with other members to advance the FHIM or to further develop the FPB, this opportunity exists and is consistent with the ONC decision to invest in this PPP.

Implementation Methods:

From 2018-2019, with the support of ONC, The Open Group convened over two dozen internationally recognized public and private sector healthcare interoperability experts (the FHIM Transition Council, or FTC) on a regular basis to talk about the FHIM and published a report entitled [Analysis of the Feasibility and Benefits of Moving Stewardship of the FHIM to The Open Group.](#) The report notes that members unanimously agreed that one of its highest value propositions lies in its ability to help developers and clinical stakeholders build interoperability components (using [HL7 FHIR](#), CDA, V2, etc.) that can be used easily, without special effort, in APIs, components, and services. Further details can be found in Appendix B of the report.

The FTC agreed:
- FHIR is immensely popular, in large part because it is easy to use and solves the data transfer problem in interoperability.
- However, the architecture of FHIR standards does not ensure that health data shared in one implementation instance can be shared in other instances.
- As a result, the widespread adoption of FHIR is producing thousands of profiles that cannot be reused without special effort.
- A FHIM profile builder would assist the FHIR, CDA, V2 communities by producing consistent, reusable standard-based profiles, and thereby help significantly advance interoperability.

Thus, the transfer of the FHIM to The Open Group began the development of a [FHIM Profile Builder](#), which can assist the FHIR, CDA, V2 and other communities by producing consistent, reusable, standards-based profiles, and thereby help significantly advance interoperability.

Measurement of Success:

All goals of the FHIM transition PPP were met and the development of the FPB went beyond the initial scope. Since the transfer to The Open Group, there have been over 20,000 unique visitors to the FHIM website and over 36,000 page views.

Key Takeaways:

1. In this PPP, the federal government invested over $5M and approximately 200k person-hours to develop the FHIM platform to address the significant interoperability needs of the federal partners. In 2018, after about a decade of work, the decision was made to pursue interoperability through other means and, if possible, to find a public SDO to adopt the role of FHIM Steward.
2. The Open Group accepted the role of FHIM Steward in 2019 and, in the process of doing so, convened a council of experts who advised on the most productive next steps.
3. The FHIM now resides at www.fhim.org at The Open Group. As an open-source standard, others are free to use the standard and tens of thousands have visited the FHIM website since its establishment in 2019.

Advice for Others:

This PPP was successful when viewed from its original scope of work. However, during the collaboration, it became apparent that additional positive contributions could be made through further development of a FHIM Profile Builder (FPB). This work could have been coordinated with the ONC and collaborations could have been pursued with other SDOs and private sector organizations, such as Epic and Cerner, for example. This can still be done. The federal government can help leverage such an outcome, but if it does not, it is less likely to occur given that private companies are not incentivized to collaborate in the development of a common information model to enhance interoperability more broadly than they do today.