

Federal Health Architecture

The Federal Health Architecture (FHA) is an e-government initiative managed by the Office of the National Coordinator for Health IT (ONC) within the Department of Health and Human Services (HHS). FHA was formed to coordinate health IT activities among the more than 20 federal agencies that provide health and healthcare services to citizens.



FHA and its federal partners are helping build a federal health information technology environment that is interoperable with private sector systems and supports the President's plan to enable better point-of-service care, increased efficiency and improved overall health in the U.S. population.

FHA is responsible for:

- Supporting federal efforts to deploy standardized health IT systems and measure health IT standard adoption
- Ensuring that federal agencies can seamlessly exchange health data among themselves, with state, local and tribal governments, and with private-sector partners
- Providing guidance to federal agencies on how to best manage and maintain health IT investments

FHA contributes to the national health IT agenda through:

- Input: FHA provides a coordinated federal voice and collaboration on national health IT solutions
- Implementation: FHA gives guidance to federal agencies on standards-compliant health IT investments that support interoperability
- **Accountability:** FHA ensures accountability for health IT programs in the federal government in an effort to advance interoperability

At their core, all FHA activities focus on improving citizen access to care, improving quality of care and reducing costs.

Input into the Standards & Interoperability (S&I) Framework

Federal agencies have a significant stake in the standards and specifications used nationwide, and therefore, they participate in ONC's S&I Framework. FHA coordinates federal participation in S&I Framework initiatives to ensure that the input of federal healthcare stakeholders is incorporated into healthcare transformation outcomes.

FHA requirements serve as a key input into the S&I Framework use case development approach, ensuring that the standards harmonization outcomes achieved are aligned to federal needs. FHA provides key technical inputs and real-world demonstrations for S&I Framework specifications.

A CONNECTed Federal Health IT Community

Among its many accomplishments, FHA and the federal partners are responsible for developing CONNECT, an open source software that allows health organizations to securely exchange health-related information through health information exchanges. CONNECT is based on the standards and governance outlined by the Nationwide Health Information Network.

The CONNECT open source software enables health IT systems to securely communicate via nationally recognized standards. With CONNECT, information can be shared securely via the Internet among doctor's offices, federal agencies, state agencies, disability organizations, public health organizations, pharmacies and other health stakeholders. This enables health professionals to request, send and receive medical records so critical information can follow patients as they navigate through the health care system.

CONNECT was developed by more than 20 federal agencies working together through FHA. Rather than each federal agency independently building its own separate Nationwide Health Information Network compliant gateway, they decided to collaborate and create a single platform to enable the secure exchange of health information.



The collaboration that led to CONNECT's development was unprecedented in the federal government. It has saved the government an estimated \$200 million in development costs versus each agency building its own solution. Equally as compelling is the result of this collaboration. Once the solution was built, federal agencies decided to release CONNECT to the entire healthcare industry to be used by any organization without any cost for the software license.

Today, CONNECT is used as a framework to literally "connect" providers, insurers, federal agencies, states and others. What started as an intergovernmental solution evolved into a public/private collaborative project that brings together constituents from all levels of the government and the private sector.

FHA was able to release CONNECT to the open market because the CONNECT program and stakeholders opted from the beginning to use open source technology. By employing open source technologies within CONNECT, agencies and health IT stakeholders could deploy the solution separately and keep costs low.

Today the CONNECT community includes more than 2,000 organizations and has won many innovation awards, including the *Wall Street Journal* Award for Technology Innovation in Healthcare.

With the CONNECT program, FHA is meeting the need for a solution to fulfill an organization's requirement to share health information using Nationwide Health Information Network standards and achieve nationwide health IT interoperability.

Federal Health Information Model (FHIM)

FHA is working with federal agencies to build the Federal Health Information Model (FHIM), a modeling initiative focused on producing a logical, health information model that supports semantic interoperability among federal agencies and their health information exchange partners. The model is built by harmonizing information from federal partners and standards development organizations (SDOs) and presenting it in logical and conceptual views based on specialized health domains.

This logical model uses the HL7 Reference Information Model (RIM) as its reference model and is designed to support multiple Office of Interoperability and Standards initiatives, including CONNECT and the S&I Framework. FHA and its stakeholders also use the FHIM to view and analyze information exchanges that have been identified by federal partners and SDOs, and the FHIM model is also used to support the development of National Information Exchange Model (NIEM) compliant information exchanges by the S&I Framework.

Agencies Participating in FHA

































































More information about the CONNECT open source solution and community can be found at www.connectopensource.org.