FHIM interoperability specifications are developed using the following process:

* Model information in the FHIM (a platform independent model (PIM)) - refer to the FHIM information modeling process and style guide
* Define terminologies and value sets for coded data attributes in the FHIM - refer to the FHIM terminology modeling process guide
* Follow the Model Driven Architecture (MDA) process guide and use the MDHT to produce a draft implementation standard
  + Identify specific the use case(s) for exchange of information and the target Platform Specific Model (PSM) to support the exchange
  + Constrain the FHIM and associated terminologies/value sets to generate a PIM that contains the information needed to support the use case(s)
  + Use the use case PIM to generate the target PSM
  + Use the PSM to generate artifacts for the target interoperability specification standard, including:
    - Documentation that is automatically transformed from the UML models to Darwin Information Typing Architecture (DITA) XML (an OASIS Standard) which is then published to Portable Document Format (PDF) and HyperText Markup Language (HTML) formats. Developer documentation includes the complete aggregate list of all inherited elements and conformance rules.
    - Java APIs to create, consume and validate XML documents
    - Conformance rules modeled in UML are transformed to Object Constraint Language (OCL) expressions that are executed by the Java runtime
* Pilot test the draft interoperability specification standard
* Submit the draft interoperability specification standard to an SDO for ballot/approval

FHIM interoperability specifications are developed to meet the following definition of health interoperability:

Interoperability has been generically defined as “The ability of software and hardware on different machines from different vendors to share data.” In a health environment, a higher degree of interoperability is required and can be measured by the degree to which all health information relevant to an individual is completely, timely, reliably, accurately, securely, and accessibly integrated to support health services provided to the individual. Above all, interoperability means that the intended meaning of the information is interpreted in the same way by the sender and the receiver. Information needs to be understood at the point of care and available to local decision support mechanisms. Achieving interoperability is no easy task due to the complexities of health concepts. Achieving health interoperability requires:

* Information that is computable and understandable, i.e., the ability for information shared by systems to be understood at the level of formally defined concepts;
* Information that is in a standardized, coded format whenever possible;
* Information that can be used by systems addressing payment, research and clinical uses, including computations to support clinical decision making and performance measurement;
* Display of information from outside sources with that generated internally; and
* Information that can be stored in coded form within a data repository other than the repository that generated it.

As a result, FHIM interoperability specifications are not just the FHIM model, but a complete set of artifacts to fully support interoperability, including:

* Harmonized information concepts that are defined to meet the above definition of interoperability
* Harmonized terminology and value set information that is defined to fully support semantic interoperability
* Implementation guides/interoperability specifications that includes the information concept and terminology/value set information described above as well as APIs for developers to develop instance implementations of the interoperability specification, a test suite for verifying that the implementation fully conforms to the interoperability specification and other electronic information to assist developers in developing their instance implementations.

FHIM can also export the information model and its contents into an XML Model Interchange (XMI) format that can be used by federal partners for other purposes, such as designing physical databases in their organizations.