

COMMONWEALTH OF VIRGINIA



Information Technology Resource Management (ITRM)

ENTERPRISE ARCHITECTURE

**CONNECTVIRGINIA
HEALTH INFORMATION EXCHANGE (HIE)**

IMPLEMENTATION GUIDE STANDARD

Virginia Information Technologies Agency (VITA)

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1 Publication Version Control

The following table contains a history of revisions to this publication.

Version	Date	Revision Description	Contact
1.0	01/28/2013	Initial document	Joe Grubbs
1.1	02/05/2013	Revised document to reflect changes from ConnectVirginia	Joe Grubbs
1.2	02/11/2013	Revised document based on input from OAG	Joe Grubbs

Identifying Changes in This Document

- See the latest entry in the revision table above
- Vertical lines in the left margin indicate the paragraph has changes or additions. Specific changes in wording are noted using italics and underlines; with italics only indicating new/added language and italics that is underlined indicating language that has changed.

The following examples demonstrate how the reader may identify updates and changes:

Example with No Change – The text is the same. The text is the same.

Example with Revision – The text is the same. *A wording change, update or clarification is made in this text.*

Example of New Text – *This text is new.*

2 Reviews

- VITA's Commonwealth Data Governance (CDG) staff prepared the first draft of this publication based on information provided by staff from the ConnectVirginia Health Information Exchange (HIE), the statewide HIE operated by Community Health Alliance, Inc., a Virginia private, nonprofit (501(c)(3)) organization, under contract with the Virginia Department of Health (VDH).
- VITA staff revised the document based on input from VITA's counsel in the Office of the Attorney General (OAG).

3 Definitions

The terms used in this Business Narrative comply with the adopted definitions maintained in the Commonwealth of Virginia's Information Technology Resource Management (ITRM) Glossary. The ITRM Glossary can be accessed at http://www.vita.virginia.gov/uploadedFiles/VITA_Main_Public/Library/PSGs/PSG_Sections/COV_ITRM_Glossary.pdf

4 Background

On October 25, 2011, the Virginia Department of Health (VDH) announced its award to Community Health Alliance, Inc., (CHA), a Virginia private, nonprofit organization, of the contract to develop and implement Virginia's statewide health information exchange (HIE). CHA formed the HIE under the business name, ConnectVirginia (www.connectvirginia.org).

ConnectVirginia's governance structure is headed by its Governing Body, which consists of health care professionals and executives from across the Commonwealth. In conjunction with the ConnectVirginia Executive Director, the Governing Body oversees implementation of technical and policy components of the HIE. The Governing Body received updates from ConnectVirginia staff during development of the implementation guides covered under the ConnectVirginia HIE Implementation Guide Standard.

ConnectVirginia offers a secure, confidential system to support the exchange of patient medical records among health care providers. ConnectVirginia utilizes certified internet-based technology to allow medical information to be exchanged by participating providers. This gives participating providers more complete medical information, supporting higher quality of patient care, and enables them to coordinate treatment with other providers.

ConnectVirginia supports two primary services: DIRECT and EXCHANGE:

- DIRECT Messaging functionality is built upon the national Direct Project and is similar to a one-way secure e-mail for the exchange of Protected Health Information (PHI). Regular e-mail is not appropriate for the exchange of PHI due to the inherent risk of information being compromised or accessed by unauthorized users. ConnectVirginia DIRECT Messaging mitigates these risks by providing an easy way for any licensed and regulated health care provider to share information electronically in a secure way, even if they don't have an Electronic Health Record (EHR).
- EXCHANGE implements a collection of standards, policies and message-based services providing a secure method to query and retrieve patient data across all ConnectVirginia EXCHANGE participants. ConnectVirginia EXCHANGE is based on the Nationwide Health Information Network (NwHIN) specifications and standards supported and maintained by the Office of the National Coordinator for Health Information Technology (ONC), U.S. Department of Health and Human Services.

The implementation guides covered under the ConnectVirginia HIE Implementation Guide Standard comply with NwHIN specifications, ONC standards and Health Level Seven (HL7) standards. The ConnectVirginia implementation guides have been developed to comply with and implement HL7 Clinical Document Architecture (CDA), Version 3. ConnectVirginia's EXCHANGE service supports the transmittal of clinical documentation compliant with the HL7 Continuity of Care Document (CCD) standards. For more information, visit:

Nationwide Health Information Network (now eHealth Exchange)

<http://healthwayinc.org/index.php/exchange>

Office of the National Coordinator for Health Information Technology

www.healthIT.gov

Health Level 7 International (HL7)

<http://www.hl7.org>

5 Scope

The ConnectVirginia HIE Implementation Guide Standard establishes as Commonwealth ITRM Standards the implementation guides used to structure and support the onboarding, testing and certification of participant nodes in ConnectVirginia EXCHANGE. These implementation guides set the technical requirements for onboarding to ConnectVirginia EXCHANGE. The ConnectVirginia HIE Implementation Guide Standard shall be applicable to all Commonwealth of Virginia agencies seeking to participate in and become onboarded onto ConnectVirginia EXCHANGE.

However, in addition to the technical requirements, ConnectVirginia participants are required to execute and maintain the ConnectVirginia Trust Agreement, the agreement governing HIE participation. The ConnectVirginia Trust Agreement is outside the scope of this standard. Adoption of the ConnectVirginia HIE Implementation Guide Standard shall not imply that Commonwealth agencies may execute the Trust Agreement without any further requirements. Commonwealth agencies seeking to participate in ConnectVirginia are advised to have a legal review of the ConnectVirginia Trust Agreement and any restrictions relating to information exchanges to ensure compliance with applicable law.

For more information on the Connect Virginia Trust Agreement and related policies and procedures, visit <http://www.connectvirginia.org/resources>.

6 Governance

The ConnectVirginia HIE Implementation Guide Standard was developed by ConnectVirginia in collaboration with MEDfx, ConnectVirginia's technology solutions partner and MedVirginia, ConnectVirginia's resource for clinical content expertise. The ConnectVirginia HIE Implementation Guide Standard was reviewed by HITSAC during its February 2013 meeting. HITSAC advises the Information Technology Advisory Council (ITAC) on the adoption of nationally recognized technical and data standards for health information technology systems or software pursuant to § 2.2-2699.7, *Code of Virginia*.

The ConnectVirginia HIE Implementation Guide Standard shall be owned by ConnectVirginia and the Virginia Department of Health and maintained by VITA in a searchable Enterprise Architecture Data Standards Repository available at <http://www.vita.virginia.gov/oversight/dm/default.aspx?id=10344>.

7 Components

The ConnectVirginia HIE Implementation Guide Standard consists of the following:

1. Business Narrative describing the standard (this document)
2. Implementation Guides consisting of the following:

ConnectVirginia EXCHANGE Onboarding and Certification Guide

http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGEOnboardingandCertificationGuidev1_4CVAFnal.pdf

ConnectVirginia EXCHANGE Services Implementation Guide

http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGEServicesImplementationGuidev1_4CVAFinal.pdf

ConnectVirginia EXCHANGE Clinical Content Implementation Guide

<http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGEClinicalContentImplementationGuideCVAFINAL.pdf>

ConnectVirginia EXCHANGE Node Certification Testing Guide

<http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGENodeCertificationTestingGuidev12.pdf>

8 Authority

The following section references the statutory authority granted by the *Code of Virginia* to the Secretary of Technology to establish the ConnectVirginia HIE Implementation Guide Standard. The section also cites provisions in the *Code* relating to the role of the Chief Information Officer (CIO) of the Commonwealth, the Information Technology Advisory Council (ITAC) and HITSAC in the development, review and adoption of Commonwealth Enterprise Architecture Standards.

The Secretary of Technology

§ 2.2-225. Position established; agencies for which responsible; additional powers
<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+2.2-225>

The Chief Information Officer (CIO) of the Commonwealth

§ 2.2-2007. Powers of the CIO
<http://lis.virginia.gov/cgi-bin/legp604.exe?000+cod+2.2-2007>

The Virginia Information Technologies Agency

§ 2.2-2010. Additional powers of VITA
<http://lis.virginia.gov/cgi-bin/legp604.exe?000+cod+2.2-2010>

The Information Technology Advisory Council (ITAC)

§ 2.2-2699.6. Powers and duties of the ITAC
<http://lis.virginia.gov/cgi-bin/legp604.exe?000+cod+2.2-2699.6>

The Health Information Technology Standards Advisory Committee (HITSAC)

§ 2.2-2699.7. Health Information Technology Standards Advisory Committee (As Amended)
<http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+2.2-2699.7>

9 Overview

The ConnectVirginia HIE Implementation Guide Standard establishes as Commonwealth ITRM Standards the implementation guides used to structure and support the onboarding, testing and certification of participants in ConnectVirginia, Virginia's statewide HIE. The implementation guides listed below shall, by reference, be the set of guides covered under the ConnectVirginia HIE Implementation Guide Standard.

During the certification and testing phase for each onboarding, modifications may be made to the implementation guides covered by the ConnectVirginia HIE Implementation Guide Standard. Therefore, the ConnectVirginia HIE Implementation Guide Standard shall be defined based on the most current Business Narrative and version of the implementation guides published in the Enterprise Architecture Data Standards Repository. The ConnectVirginia HIE Implementation Guide Standard shall be reviewed on an as-needed basis and an updated version published to ensure consistency with ConnectVirginia policies and procedures.

Implementation Guides

The *ConnectVirginia EXCHANGE Onboarding and Certification Guide* provides an overview of the ConnectVirginia statewide HIE including the architecture, services offered, as well as the technical information required to begin the onboarding process. The guide provides a brief description of the onboarding and certification process, followed by detailed steps including the business and the technical requirements.

http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGEOnboardingandCertificationGuidev1_4CVAFnal.pdf

The *ConnectVirginia EXCHANGE Services Implementation Guide* provides the standards and specifications necessary for a node to achieve interoperability with ConnectVirginia EXCHANGE. The Transport message (service) specifications use national open standards, primarily from the Nationwide Health Information Network (NwHIN) Interface Specifications.

http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGEServicesImplementationGuidev1_4CVAFinal.pdf

The *ConnectVirginia EXCHANGE Clinical Content Implementation Guide* provides the requirements for the clinical data content and its proper formatting and construction. This guide provides guidance, clarity, and standardization in the development of consolidated HL7 Clinical Document Architecture (CDA) documents.

<http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGEClinicalContentImplementationGuideCVAFINAL.pdf>

The *ConnectVirginia EXCHANGE Node Certification Testing Guide* details the testing criteria that a node must successfully complete to verify its compliance with the standards that ConnectVirginia EXCHANGE has chosen to implement. The guide also covers other tests that verify the node's secure connectivity to the exchange and its ability to correctly provide the audit and reporting data required by ConnectVirginia.

<http://vita2.virginia.gov/oversight/EDM/ConnectVirginia/ConnectVirginiaEXCHANGENodeCertificationTestingGuidev12.pdf>

10 Compliance

The Commonwealth of Virginia has established the ConnectVirginia HIE Implementation Guide Standard to structure and support the onboarding, testing and certification of Commonwealth agency participants in the ConnectVirginia HIE.

As of April 1, 2013, Commonwealth agencies seeking to onboard to ConnectVirginia must comply with the ConnectVirginia HIE Implementation Guide Standard.

Commonwealth agencies unable to comply with the standard must request an exception using the VITA Exception Form available on the Web at

http://www.vita.virginia.gov/uploadedFiles/Oversight/EA/Data_Management_Group/EA%20Change-Exception%20Request%20Form.doc

The completed form should be emailed to ea@vita.virginia.gov.