COMMONWEALTH OF VIRGINIA

Information Technology Resource Management (ITRM)

ENTERPRISE ARCHITECTURE

HEALTH MESSAGING DATA STANDARD

Virginia Information Technologies Agency (VITA)

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Health Messaging Standard Owners

The health messaging data standard owners shall have authority for the interpretation and application of this standard. The owners responsible for the development and ongoing maintenance of the Commonwealth's Health Messaging Data Standard are as follows:

- Department for the Aging (VDA): Leonard Eshmont, Chief Information Officer
- Department of Behavioral Health and Developmental Services (DBHDS): Sanford Hostetter, Chief Information Officer
- Department of General Services Division of Consolidated Laboratory Services (DCLS): Wanda Andrews, Director of Laboratory Operations
- Department of General Services Division of Consolidated Laboratory Services (DCLS): Vickie Tyson, IT Application Development and Project Manager
- Department of Health (VDH): Debbie Secor, Chief Information Officer
- Department of Health Professions (DHP): Patricia A. Paquette, Chief Information Officer
- Department of Medical Assistance Services (DMAS): Sylvia Hart, Chief Information Officer
- Department of Rehabilitative Services (DRS): Ernie Steidle, Chief Information Officer
- Department of Social Services (VDSS): Robert Hobbelman, Chief Information Officer

The Data Stewards associated with each agency are as follows:

- VDA: ?
- DBHDS: ?
- DCLS: ?
- VDH: ?
- DHP: ?
- DMAS: ?
- DRS: ?
- VDSS: ?

Health Information Technology Standards Advisory Committee (HITSAC) members are as follows:

- Mr. Geoff Brown, Senior Vice President and Chief Information Officer of Inova Health System
- Mr. Richard Pollack, Vice President and Chief Information Officer, VCU Health System
- Mr. John Quinn, Chief Technology Officer of HL7, Inc.
- Dr. Marshall Ruffin, Chief Technology and Health Information Officer UVA Health System

The VITA Enterprise Solutions and Governance (ESG) has supported the development of the Health Messaging data standard and has reviewed it for completeness and accuracy according to data management best practices. The ESG resources responsible for supporting the Health Messaging standard are as follows:

- Jerry Simonoff, Director Enterprise Solutions and Governance

- Susan McCleary, HITSAC Administrator
- Akeisha Heard, Data Analyst
- Michael Hammel, Enterprise Architect

Publication Version Control

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

Version	Date	Revision Description
1.0	<mark>mm/dd/201</mark>1	Initial Document

Reviews

- This publication was reviewed by the Policy, Practice and Architecture group.
- Online review was provided for agencies and other interested parties via the VITA Online Review and Comment Application (ORCA).

Components of the Health Messaging Data Standard

The Health Messaging Data Standard consists of the following components:

1. A business narrative describing the standard (this document)

Health Messaging Data Standard Background

Effective March 2010, Code of Virginia § 2.2-2699.5 created the Information Technology Advisory Council (ITAC) to advise the Chief Information Officer (CIO) and Secretary of Technology on information technology:

> A. The Information Technology Advisory Council (ITAC) is established as an advisory council, within the meaning of § 2.2-2100, in the executive branch of state government. The ITAC shall be responsible for advising the CIO and the Secretary of Technology on the planning, budgeting, acquiring, using, disposing, managing, and administering of information technology in the Commonwealth.

As part of their duties, ITAC advises the CIO on data standards (The Code of Virginia § 2.2-2699.6):

> The ITAC shall have the power and duty to:
>
> 5. Advise the CIO on statewide technical and data standards for information technology and related systems, including the utilization of nationally recognized technical and data standards for health information technology systems or software purchased by a state agency of the Commonwealth;

The Health Information Technology Standards Advisory Committee (HITSAC) was established in Code of Virginia § 2.2-2699.7 as a health care and information technology advisory committee of ITAC:

> The ITAC may appoint an advisory committee of persons with expertise in health care and information technology to advise the ITAC on the utilization of nationally recognized technical and data standards for health information technology systems or software pursuant to subdivision 5 of § 2.2-2699.6. The ITAC, in consultation with the Secretary of Health and Human Resources, may appoint up to five persons to serve on the advisory committee. Members appointed to the advisory committee shall serve without compensation, but shall be reimbursed for all reasonable and necessary expenses incurred in the performance of their duties as provided in § 2.2-2825. The CIO, the Secretary of Technology, and the Secretary of Health and Human Resources, or their designees, may also serve on the advisory committee.

Scope

This standard details the messaging that agencies in the Health and Human Resources secretariat and their partners use to indicate medical terminology, medical procedures, measurements and other relevant data in their information technology systems and data exchanges.

[discussion of why DSO are doing this]

Definitions

Concatenation: Concatenation is the state of being linked together as in a chain; union in a linked series. These are data attributes typically joined together to create uniqueness. (e.g. combining tax identification type and tax identifier to ensure identification numbers issued by Social Security and the IRS are unique).

Data Dictionary: A data dictionary is a centralized repository of information about data such as meaning, relationships to other data, origin, usage, and format." ⁽ACM, IBM Dictionary of Computing, 10th edition, 1993) A data dictionary includes such items as complete and accurate definitions of both entities and attributes, attribute domains, valid values, synonyms or aliases, default values, data type and length, required/not required constraints, etc.

Data Owner: The Agency Data Owners define, manage and control the use of data within their organizations. The Agency Head or designee designates the Agency Data Owner(s) for the functional/subject areas within their jurisdictional control or authority. They also ensure adequate resources for Agency Data Owners to effectively develop and maintain their respective functional/subject areas in support of the Commonwealth's Data Management Program.

Data Steward: A data steward is the person assigned by an agency to represent the agency's interagency data needs and ensure that proposed standards meets those needs. The Agency Data Steward works on behalf of their Agency Data Owner. The data steward should have a broad understanding of the agency's data, be able to research data usage, and be empowered to obtain agreement from data owners and speak authoritatively for the agency.

Message: A message is a character string that contains data encoded according to a particular set of encoding rules. Encoding rules determine how (i.e. using what syntax) data elements are stored within messages. (http://www.ringholm.com/docs/00200_en.htm)

Messaging Standard: A messaging standard defines the structure and content of messages that are exchanged between systems. A standard can be defined by an international or national standard-developing organization (SDO), such as American National Standards Institute (ANSI), or by a particular agency, such as Centers for Disease Control and Prevention (CDC).

Health Messaging Data Standards

The following table lists the messaging standards that are adopted as standards by the Commonwealth of Virginia. The text that follows describes each adopted standard, when the standard will be used, availability and source of information.

Adopted Messaging Data Standards

Name	Acronym
CDC HIV Grant	CDC HIV Grant
CDC HIV Routine	CDC HIV Routine
Health Layer 7 Messaging	HL7 Messaging

Messaging Data Standards Descriptions

CDC HIV Grant

Maintained By

Centers for Disease Control and Prevention

Description

[Unknown]

Use

[When should it be used? Listed on DCLS's HIV Routine Results exchange]

Availability

[Unknown]

Website

[Unknown]

CDC HIV Routine

Maintained By

Centers for Disease Control and Prevention

Description

[Unknown]

Use

[When should it be used? Listed on DCLS's HIV Grant Results exchange]

Availability

[Unknown]

Website

[Unknown]

Health Level 7 Messaging (HL7 Messaging)

Maintained By

Health Level 7

Description

"Version 2 Messages, formally published as "Application Protocol for Electronic Data Exchange in Healthcare Environments" is an interoperability specification for transactions produced and received by computer systems. These specifications are published as a collection of chapters that describe the transaction interactions by domain.

Version 3 Messages is an interoperability specification for transactions that are derived from the HL7 V3 Foundation models and vocabulary and define communications produced and received by computer systems. V3 Messages include the concepts of message wrappers, sequential interactions, and model-based message payloads. These specifications are published as a collection of topics that describe the transaction interactions by domain." (HL7)

Use

[When should it be used? When should 2.x be used versus 3.x?]

Availability

Membership at the organizational, support or benefactor level to HL7 is required to access the standard documentation. Documentation may also available as part of software packages that handle HL7 messages.

Website

http://www.hl7.org

<Name> (Acronym)

Maintained By

<text>

Description

Use

<When should it be used?>

Availability

<text>

Website

<URL>

Health Messaging Data Standard Compliance

The Commonwealth of Virginia have established the above messaging standards to be standards when dealing with health data.

As of January 1, 2016, agencies and institutions implementing new applications or upgrading applications that contain health information must comply with all aspects of the Health Messaging Data Standard prior to production use of the application.

Agencies and Institutions which are unable to comply with the standard must inform the Data Standard Owners using the VITA Exception Form available at http://www.vita.virginia.gov/uploadedFiles/Oversight/EA/Data_Management_Group/EA%20 Change-Exception%20Request%20Form.doc. The completed form should be emailed to ea@vita.virginia.gov.

General Guidance

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