COMMONWEALTH OF VIRGINIA

Information Technology Resource Management (ITRM)

ENTERPRISE ARCHITECTURE

HEALTH VOCABULARY DATA STANDARD

Virginia Information Technologies Agency (VITA)

Table of Contents

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 VITA Policy, Practice and Architecture group.

- This publication was reviewed by the VITA Master Data Governance group.

- This publication was reviewed by Health Information Technology Standards Advisory Committee (HITSAC).

- Online review was provided for agencies and other interested parties via the VITA Online Review and Comment Application (ORCA).

Definitions

Code Set: A code set is a set of codes used for encoding data elements, such as tables of terms, medical concepts, medical diagnostic codes, or medical procedure codes.

Data Owner: A data owner defines, manages and controls the use of data and ensures compliance with adopted standards within an Agency. The Agency Head or designee designates the Agency Data Owner(s) for the functional/subject areas within their jurisdictional control or authority and ensures adequate resources for Agency Data Owners to develop and maintain their respective functional/subject areas in support of the Commonwealth's Data Management Program.

Data Steward: A data steward 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.

External Standard: As used in this document, an external standard defined and maintained by an SDO to improve the ability to share electronic data and ensure semantic interoperability. Generally may apply to services, documents, vocabularies (i.e., reference terminologies) and/or messages. Includes extending (e.g., adding data elements or codes to) an existing external standard to accommodate requirements specific to the Commonwealth.

Internal Standard: As used in this document, an internal standard defined by one or more Commonwealth agencies where external standards do not exist and the internal standard has been approved by the Secretary of Technology.

Standard: A standard specific and, where applicable, technical documents containing directives and mandatory specifications governing the management, development, and use of information technology resources. (COV ITRM STANDARD GOV2000-01.1)

Standards Development Organization (SDO): A standards development organization is "a domestic or international organization that plans, develops, establishes, or coordinates voluntary consensus standards using procedures that incorporate the attributes of openness, balance of interests, due process, an appeals process, and consensus in a manner consistent with the Office of Management and Budget Circular Number A–119, as revised February 10, 1998." (Article I, Public Law 108–237).

Vocabulary: A vocabulary is a code set, nomenclature system or identifier list maintained by an organization to standardize a particular domain (e.g., human genes, clinical terminology, provider identification).

Scope

Health Vocabulary Data Standards define the external standards applicable to Agencies involved in the exchange of health information. This standard establishes the external, nationally recognized vocabulary and reference terminology standards applicable to health information exchange that will be used by Commonwealth agencies to ensure interoperability between agencies and between agencies and external entities.

Health Vocabulary Standard Governance

The Commonwealth Health Vocabulary Data Standard relies solely on external standards that are defined, owned and maintained by SDOs. VITA will maintain a complete catalogue of applicable external standards in a searchable Enterprise Data Standards Repository available on the VITA web site at http://www.vita.virginia.gov/oversight/dm/default.aspx?id=10344 and will review each adopted external standard at least once every three months to ensure that the Standards Repository remains current, accurate and complete.

The Data Owners responsible for ensuring timely implementation of and continuing compliance with each vocabulary standard within each agency 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

  ♦ Disability Services Agencies (DSA)[1]: Ernie Steidle, Chief Information Officer

  ♦ Department of Social Services (DSS): Robert Hobbelman, Chief Information Officer

The Data Stewards responsible for having a broad understanding of the agency's data, researching data usage, obtaining agreement from data owners and speaking

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[1] DSA agencies include: Department of Rehabilitative Services (DRS), Virginia Board for People with Disabilities (VBPD), Department for the Blind and Vision Impaired (DBVI), Virginia Department for the Deaf and Hard of Hearing (VDDHH) and the Woodrow Wilson Rehabilitation Center (WWRC).

authoritatively for the agency are as follows:

- ◆ VDA: Leonard Eshmont, Chief Information Officer

- ◆ DBHDS: Wendy Cary, Beverly Thomas

- ◆ DCLS: Vickie Tyson, IT Application Development and Project Manager

- ◆ VDH: Jason Hall, Diana Malik

- ◆ DMAS: Carrie McDermott, Karen Rowson

- ◆ DSA: Reid Gaillard

The Health Information Technology Standards Advisory Committee (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 subdivision 7 of § 2.2-2699 in the Code of Virginia.

To ensure semantic interoperability within state government and between state government and external partners, HITSAC has recommended that the Commonwealth adopt or adapt and implement external standards and implementation guides to the maximum extent possible. The HITSAC members are as follows:

- ◆ **Dr. Sallie Cook**, Chief Medical Officer, VHQC

- ◆ **Dr. James Harrison**, Associate Professor and Director of Biomedical Informatics, Departments of Public Health Sciences and Pathology, University of Virginia

- ◆ **Mr. Richard Pollack**, Vice President and Chief Information Officer, VCU Health System

- ◆ **Mr. John Quinn**, Chief Technology Officer of HL7, Inc.

- ◆ **Dr. Marshall Ruffin**, Executive Vice President and Chief Technology Officer, Inova Health Systems

The VITA Enterprise Solutions and Governance Directorate (ESG) has developed this Health Vocabulary Data Standard document in collaboration with the agency Data Stewards and HITSAC. The ESG resources responsible for supporting the Health Vocabulary Data Standard are as follows:

- ◆ Jerry Simonoff, Director Enterprise Solutions and Governance

- ◆ Todd Kissam, Chief Enterprise Architect

- ◆ Susan McCleary, HITSAC Administrator

- ◆ Akeisha Heard, Data Analyst

Components of the Health Vocabulary Data Standard

The Health Vocabulary Data Standard consists of the following components:

1. A business narrative describing each external standard (this document) approved for use by Commonwealth agencies.

Health Vocabulary Data Standard Authority

§ 2.2-225. Position established; agencies for which responsible; additional powers.

The position of Secretary of Technology (the Secretary) is created. …

Unless the Governor expressly reserves such power to himself, the Secretary may, with regard to strategy development, planning and budgeting for technology programs in the Commonwealth: …

12. Review and approve 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, as recommended by the CIO. …

§ 2.2-2007. Powers of the CIO.

A. In addition to such other duties as the Secretary may assign, the CIO shall: …

2. Direct the formulation and promulgation of policies, guidelines, standards, and specifications for the purchase, development, and maintenance of information technology for state agencies, including, but not limited to, those (i) required to support state and local government exchange, acquisition, storage, use, sharing, and distribution of geographic or base map data and related technologies, (ii) concerned with the development of electronic transactions including the use of electronic signatures as provided in § 59.1-496, and (iii) necessary to support a unified approach to information technology across the totality of state government, thereby assuring that the citizens and businesses of the Commonwealth receive the greatest possible security, value, and convenience from investments made in technology. …

12. Develop and recommend to the Secretary 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. …

§ 2.2-2010. Additional powers of VITA.

VITA shall have the following additional powers which, with the approval of the CIO, may be exercised by a division of VITA with respect to matters assigned to that division:

1. Prescribe regulations necessary or incidental to the performance of duties or execution of powers conferred under this chapter. …

4. Develop and adopt policies, standards, and guidelines for managing information

technology by state agencies and institutions. …

6. Direct the establishment of statewide standards for the efficient exchange of electronic information and technology, including infrastructure, between the public and private sectors in the Commonwealth.

8. Develop statewide technical and data standards for information technology and related systems to promote efficiency and uniformity. …

§ 2.2-2699.6. Powers and duties of the ITAC.

The ITAC shall have the power and duty to: …

3. Advise the CIO on strategies, standards, and priorities for the use of information technology for state agencies in the executive branch of state government; …

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; …

§ 2.2-2699.7. Health Information Technology Standards Advisory Committee.

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.

Health Vocabulary Data Standards

The following table lists the vocabularies 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 the source of information.

Adopted Vocabulary Data Standards by Domain

Domain	Name	Acronym
Admissions	*Point of Origin for Admission or Visit*	Source of Admission
Billing	*Advanced Billing Concept*	ABC
Billing	*All Patient Diagnosis Related Groups*	AP-DRG
Clinical terminology	*National Cancer Institute Thesaurus*	NCI Thesaurus
Clinical terminology	*Public Health Laboratory Interoperability Project*	PHLIP
Clinical terminology	*Systemized Nomenclature of Medicine-Clinical Terms*	SNOMED CT
Consent	*Health Level 7 Consent related vocabulary including Confidentiality Codes*	HL7 Consent Vocabulary
Countries	*ISO 3166 Country Codes*	ISO Country Codes
Demographics	*Centers for Disease Control and Prevention Race and Ethnicity Code Sets*	CDC Race and Ethnicity Code Sets
Demographics	*Department of Education Racial and Ethnic Data Standards*	DOE Racial and Ethnic Standards
Demographics	*Health Level 7 Vocabulary*	HL7 Vocabulary
Demographics	*Office of Management and Budget, Statistical Policy Directive No. 15, Race and Ethnic Standards for Federal Statistics and Administrative Reporting*	OMB
Dental	*Code on Dental Procedures and Nomenclature*	CDT
Diagnoses and procedures	*International Classification of Diseases, Ninth Revision, Clinical Modification*	ICD-9-CM
Diagnoses and procedures	*International Classification of Diseases, Tenth Revision*	ICD-10
Drugs	*Drug Enforcement Administration Prescriber Number*	DEA Prescriber Number
Drugs	*Federal Medication Terminologies*	Federal Medication Terminologies

Domain	Name	Acronym
Drugs	*Food and Drug Administration Center for Drug Evaluation and Research Data Standards Manual*	FDA/CDER DSM
Drugs	*Food and Drug Administration National Drug Code*	FDA NDC
Drugs	*RxNorm*	RxNorm
Drugs	*U.S. Veterans Health Administration National Drug File Reference Terminology Formulary*	VHA NDF-RT Formulary
Enzymes	*Enzyme Nomenclature*	Enzyme Codes
Genetics	*National Center for Biotechnology Information Entrez Taxonomy*	NCBI Taxonomy
Health and disability	*World Health Organization International Classification of Functioning, Disability and Health*	WHO ICF
Health care provider	*Health Care Provider Taxonomy*	Health Care Provider Taxonomy
Health insurance	*HIPAA National Provider Identifier*	HIPAA NPI
Human genes	*Gene Names*	HUGO Gene Names
Human genes	*Nomenclature for the description of sequence variants*	HGVS Description of Sequence Variants
Human genes	*National Center for Biotechnology Information Genetic Reference Sequences*	NCBI RefSeq
Human genes	*Online Mendelian Inheritance in Man*	OMIM
Ingredients	*Food and Drug Administration Unique Ingredient Identifier*	FDA UNII
Laboratory and clinical observations	*Logical Observation Identifiers Names and Codes*	LOINC
Measurements	*Unified Code for Units of Measure*	UCUM
Medical, surgical, and diagnostic services	*Current Procedural Terminology*	AMA CPT
Medical, surgical, and diagnostic services	*Healthcare Common Procedure Coding System*	HCPCS
Mental disorders	*Diagnostic and Statistical Manual of Mental Disorders*	DSM-IV-TR
Security	*Health Level 7 V3 Role Based Access Control Healthcare Permissions Catalog*	HL7 V3 RBAC

Domain	Name	Acronym
US States	*Codes for the Identification of the States, the District of Columbia, Puerto Rico, and the Insular Areas of the United States*	INCITS 38
US States	*United States Postal Service Postal Codes*	USPS Postal Codes
Vaccine Manufactures	*Manufacturers of Vaccines*	MVX
Vaccines	*Codes for Vaccine Administered*	CVX

Vocabulary Data Standards Descriptions

Advanced Billing Concept (ABC)

Maintained By	ABC Coding Solutions (formerly Alternative Link)
Description	ABC codes represent over 4,500 healthcare products and services. They fill gaps in older medical code sets such as CPT ® and HCPCS II and the retirement of state-specific HCPCS III codes. (ABC Coding Solutions)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Coding manuals and text files can be purchased from ABC Coding Solutions.
Website	http://www.abccodes.com/

All Patient Diagnosis Related Groups (AP-DRG)

Maintained By	New York State Department of Health and 3M Health Information Systems
Description	AP-DRG is a system used to classify hospital cases into one of approximately 500 groups.
Required Use(s)	Used for inpatient reimbursement.
Example Use(s)	
Version(s) to Use	25.1 is the current version, however version 23 is maintained for inpatient stays from the prior year.

Availability	DMAS maintains a free read-only version of the weights and LOS in an Excel format.
Website	http://www.dmas.virginia.gov/pr-hospital_rates.htm

Centers for Disease Control and Prevention Race and Ethnicity Code Sets (CDC Race and Ethnicity Code Sets)

Maintained By	U.S. Centers for Disease Control and Prevention (CDC)
Description	The main purpose of the code set is to facilitate use of federal standards for classifying data on race and ethnicity when these data are exchanged, stored, retrieved, or analyzed in electronic form. At the same time, the code set can be applied to paper-based record systems to the extent that these systems are used to collect, maintain, and report data on race and ethnicity in accordance with current federal standards. (CDC)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	PDF and Excel files are available at no cost on the CDC website.
Website	http://www.cdc.gov/nedss/DataModels/index.html

Code on Dental Procedures and Nomenclature (CDT)

Maintained By	American Dental Association (ADA)
Description	Set of codes that have a consistent format and are at the appropriate level of specificity to adequately encompass commonly accepted dental procedures. On August 17, 2000 the Code was named as a HIPAA standard code set.
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Print and electronic coding manuals can be purchased from ADA.
Website	http://www.ada.org/3827.aspx

Codes for the Identification of the States, the District of Columbia, Puerto

Rico, and the Insular Areas of the United States (INCITS 38)

Maintained By	American National Standards Institute
Description	ANSI codes are a standardized set of numeric or alphabetic codes issued by the American National Standards Institute (ANSI) to ensure uniform identification of geographic entities through all federal government agencies. INCITS 38:2009 specifically covers states and statistically equivalent entities.
	This was previously known as the Federal Information Processing Standard (FIPS) Code 5-2. The FIPS standard was withdrawn by National Institute of Standards and Technology (NIST) as a Federal Information Processing Standard on September 2, 2008 [Federal Register, September 2, 2008 (Volume 73, Number 170), page 51276, http://edocket.access.gpo.gov/2008/E8-20138.htm]. (U.S. Census Bureau)
Required Use(s)	
Example Use(s)	Upon admission of a patient to any Department of Behavioral Health and Developmental Services facility.
Version(s) to Use	ANSI INCITS 38:2009
Availability	A common-delimited file is available at no cost on the U.S. Census Bureau website.
Website	http://www.census.gov/geo/www/ansi/statetables.html

Codes for Vaccine Administered (CVX)

Maintained By	Centers for Disease Control and Prevention (CDC) National Center of Immunization and Respiratory Diseases (NCIRD)
Description	CVX is HL7 Table 0292, Vaccine Administered (CVX). It includes both active and inactive vaccines available in the U.S. (CDC)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Excel, PDF, flat and XML format files are available at no cost on the CDC website.
Website	http://www2a.cdc.gov/nip/IIS/IISStandards/vaccines.asp?rpt=cvx

Current Procedural Terminology (AMA CPT)

Maintained By	American Medical Association
Description	Describes medical, surgical, and diagnostic services to communicate uniform information about medical services and procedures among physicians, coders, patients, accreditation organizations, and payers for administrative, financial, and analytical purposes.
Required Use(s)	
Example Use(s)	
Version(s) to Use	2010
Availability	Coding manuals and ASCII text (TXT) data files are available for purchase on the AMA website.
Website	http://www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/cpt/about-cpt.shtml

Department of Education Racial and Ethnic Data Standards (DOE Racial and Ethnic Standards)

Maintained By	US Department of Education (DOE)
Description	Describes how to collect and report racial and ethnic information. "These changes are necessary in order to implement the Office of Management and Budget's (OMB) 1997 Standards for the Classification of Federal Data on Race and Ethnicity (1997 Standards)." (DOE)
Required Use(s)	To report racial and ethnic data to DOE's Office of Special Education Programs (OSEP) for the early intervention program for children birth through age three (the Individuals with Disabilities Education Act (IDEA) Part C).
Example Use(s)	
Version(s) to Use	Federal Register Vol. 72, No. 202 (Friday, October 19, 2007)
Availability	PDF describing the requirements is available at no cost on the US Government Printing Office website.
Website	http://www.gpo.gov/fdsys/pkg/FR-2007-10-19/pdf/E7-20613.pdf

Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)

Maintained By	American Psychiatric Association

Description	"The *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*) is the standard classification of mental disorders used by mental health professionals in the United States. It is intended to be applicable in a wide array of contexts and used by clinicians and researchers of many different orientations (e.g., biological, psychodynamic, cognitive, behavioral, interpersonal, family/systems). The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (*DSM-IV*) has been designed for use across clinical settings (inpatient, outpatient, partial hospital, consultation-liaison, clinic, private practice, and primary care), with community populations. It can be used by a wide range of health and mental health professionals, including psychiatrists and other physicians, psychologists, social workers, nurses, occupational and rehabilitation therapists, and counselors. It is also a necessary tool for collecting and communicating accurate public health statistics." (APA)
Required Use(s)	For classifying behavioral health and developmental disorders.
Example Use(s)	Collected in CCS3, Avatar, Juvenile Restoration to Competency, and FIMS, not YSS-F or CARS. Reported in MH and SA federal block grant reports, as well as the above apps.
Version(s) to Use	DSM IV-TR (DSM IV Text Release)
Availability	Obtain a copy in book form via American Psychiatric Publishing, Inc, ISBN 978-0-89042-025-6. Obtain an institutional subscription for electronic access by contacting the following: American Psychiatric Publishing, Inc. 1000 Wilson Boulevard, Suite 1825 Arlington, Virginia 22209 Phone: (703) 907-8538; (800) 368-5777, ext. 8538 Fax: (703) 907-1091 Email: institutions@psych.org Web: www.appi.org To reprint or adapt for use, contact the following: Copyright Clearance Center 222 Rosewood Drive Danvers, MA 01923 Telephone: 508-750-8400 Fax: 508-750-4470 E-mail: info@copyright.com Web: www.copyright.com
Website	http://www.PsychiatryOnline.com ; http://www.psych.org/MainMenu/Research/DSMIV.aspx

Drug Enforcement Administration Prescriber Number (DEA Prescriber Number)

Maintained By	US Department of Justice, Drug Enforcement Administration (DEA)

Description	Under the framework of the Controlled Substances Act (CSA), the DEA is responsible for ensuring that all controlled substance transactions take place within the "closed system" of distribution established by Congress. Under this "closed system," all legitimate handlers of controlled substances – manufacturers, distributors, physicians, pharmacies, and researchers – must be registered with DEA and maintain strict accounting for all distributions.
Required Use(s)	
Example Use(s)	
Version(s) to Use	N/A
Availability	Applications to apply for a Prescriber Number is available on the DEA website. The DEA provides a list of active DEA registrants to the National Technical Information Service (NTIS) a component of the United States Department of Commerce. This list of active DEA registrants may be purchased from NTIS.
Website	http://www.deadiversion.usdoj.gov/drugreg/index.html ; http://www.ntis.gov/products/dea.aspx

Enzyme Nomenclature

Maintained By	Nomenclature Committee of the International Union of Biochemistry and Molecular Biology (NC-IUBMB) in consultation with the IUPAC-IUBMB Joint Commission on Biochemical Nomenclature (JCBN)
Description	List contains the accepted names of enzymes
Required Use(s)	The Enzyme Nomenclature is used to classify reactions they catalyse.
Example Use(s)	Recommended for use in reporting Newborn Screening results.
Version(s) to Use	N/A
Availability	A searchable database and lists by Enzyme Code (EC) are available at no cost on the IUBMB website.
Website	http://www.chem.qmul.ac.uk/iubmb/enzyme/

Federal Medication Terminologies (Federal Medication Terminologies)

Maintained By	Federal Medication (FedMed) interagency collaboration
Description	An agreed set of standard, comprehensive, freely and easily accessible Federal Medication Terminologies (FMT) to improve the exchange and public availability of medication information

Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	The list of FMT with links to their associated content are available on the NCI website.
Website	http://www.cancer.gov/cancertopics/cancerlibrary/terminologyresources/fmt

Food and Drug Administration Center for Drug Evaluation and Research Data Standards Manual (FDA/CDER DSM)

Maintained By	Food and Drug Administration
Description	The FDA Data Standards Manual (DSM) is a compilation of standardized nomenclature monographs that have been reviewed and approved by the FDA Data Standards Council through their Vocabulary Standards Work Group (VSWG) and through CDER Nomenclature Standards Committee (NSC). These nomenclature standards are considered binding upon all new automated databases, and upon all existing automated databases when undergoing a major redesign. (FDA)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	This manual is available at no cost on the FDA website.
Website	http://www.fda.gov/Drugs/DevelopmentApprovalProcess/FormsSubmissionRequirements/ElectronicSubmissions/DataStandardsManualmonographs/default.htm

Food and Drug Administration Established Name for active ingredient (FDA Established Name)

Maintained By	Food and Drug Administration

Description	An active ingredient is any component of a drug product intended to furnish pharmacological activity or other direct effect in the diagnosis, cure, mitigation, treatment, or prevention of disease, or to affect the structure or any function of the body of humans or other animals. Active ingredients include those components of the product that may undergo chemical change during the manufacture of the drug product and be present in the drug product in a modified form intended to furnish the specified activity or effect. (FDA)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Per the Consolidated Health Informatics (CHI) report for Medications: Active Ingredients, FDA Established Names are in the public domain. Most active ingredient names are freely available in the Orange Book (Approved Drug Products with Therapeutic Equivalence Evaluations) or in the NDC Directory.
Website	Orange Book: http://www.accessdata.fda.gov/scripts/cder/ob/default.cfm NDC Directory: http://www.accessdata.fda.gov/scripts/cder/ndc/default.cfm

Food and Drug Administration National Drug Code (FDA NDC)

Maintained By	Food and Drug Administration
Description	Each listed drug product listed is assigned a unique 10-digit, 3-segment number. This number, known as the NDC, identifies the labeler, product, and trade package size. The first segment, the labeler code, is assigned by the FDA. A labeler is any firm that manufactures (including repackers or relabelers), or distributes (under its own name) the drug. The second segment, the product code, identifies a specific strength, dosage form, and formulation for a particular firm. The third segment, the package code, identifies package sizes and types. Both the product and package codes are assigned by the firm. The NDC will be in one of the following configurations: 4-4-2, 5-3-2, or 5-4-1. (FDA)
Required Use(s)	
Example Use(s)	
Version(s) to Use	N/A

Availability	Downloadable files and a searchable database are available at no cost on the FDA website.
Website	http://www.accessdata.fda.gov/scripts/cder/ndc/default.cfm

Food and Drug Administration Unique Ingredient Identifier (FDA UNII)

Maintained By	Food and Drug Administration
Description	The overall purpose of the joint FDA/USP Substance Registration System (SRS) is to support health information technology initiatives by generating unique ingredient identifiers (UNIIs) for substances in drugs, biologics, foods, and devices. The UNII is a non- proprietary, free, unique, unambiguous, non semantic, alphanumeric identifier based on a substance's molecular structure and/or descriptive information. (FDA)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	UNIIs have been incorporated into the U.S. Department of Veterans Affairs's National Drug File Reference Terminology (NDF-RT), which in turn is available through NLM's Unified Medical Language System (UMLS). UNIIs are also available at no cost on the FDA website (http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/ucm162523.htm).
Website	http://www.fda.gov/ForIndustry/DataStandards/SubstanceRegistrationSystem-UniqueIngredientIdentifierUNII/default.htm

Gene Names (HUGO Gene Names)

Maintained By	European Bioinformatics Institute Human Genome Organization (HUGO) Gene Nomenclature Committee (HGNC)
Description	The HGNC approves both a short-form abbreviation known as a gene symbol, and also a longer and more descriptive name. Each symbol is unique and the committee ensures that each gene is only given one approved gene symbol. This allows for clear and unambiguous reference to genes in scientific communications, and facilitates electronic data retrieval from databases and publications.
Required Use(s)	
Example Use(s)	

Version(s) to Use	N/A
Availability	A searchable database and downloadable tab delimited flat file are available on the HGNC website.
Website	http://www.genenames.org/

Health Care Provider Taxonomy (Health Care Provider Taxonomy)

Maintained By	National Uniform Claim Committee, Code Subcommittee
Description	The Health Care Provider Taxonomy code set allows a single provider (individual, group, or institution) to identify their specialty category. Providers may have one or more than one value associated to them. When determining what value or values to associate with a provider, the user needs to review the requirements of the trading partner with which the value(s) are being used.
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	The code set can be browsed at no cost on the Washington Publishing Company website. A PDF version can be downloaded at no cost from the Washington Publishing Company website (http://www.wpc-edi.com/content/view/809/1).
Website	http://www.nucc.org ; http://www.wpc-edi.com/content/view/793/1

Health Level 7 Vocabulary (HL7 Vocabulary)

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."

Required Use(s)	
Example Use(s)	Used to report Patient demographic information such as Race, Ethnicity, Sex/Gender, Next of KIN and message type and version release.
Version(s) to Use	
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

Health Level 7 Consent Related Vocabulary including Confidentiality Codes (HL7 Consent Vocabulary)

Maintained By	Health Level 7
Description	
Required Use(s)	
Example Use(s)	
Version(s) to Use	
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

Health Level 7 V3 Role Based Access Control Healthcare Permissions Catalog (HL7 RBAC)

Maintained By	Health Level 7

Description	The vocabulary contained in this permission catalog provides information supporting access control decision and enforcement functions as defined by ISO 10181-3. Other forms of access control information are possible including entity based access control and context based access control outside the scope of these definitions. This vocabulary does not presume or prevent organizations from executing these controls or other local constraints used for other purposes (e.g., cardinality constraints regarding the number of persons asserting a role with a specific permission at a particular time). Specifically, this vocabulary does not prohibit use of logical rules and policies that an entity may choose to execute. This vocabulary is consistent with OASIS XACML and ANSI INCITS RBAC standards allowing entities to integrate RBAC into their total access management solution. This vocabulary is appropriate for RBAC only and may not be appropriate for use by other security services. There is nothing in these definitions to suggest that RBAC completely defines all aspects of access control information, only that which is necessary for interoperability defined by roles. (HL7)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
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 ; http://wiki.hl7.org/index.php?title=Product_Sec_RBAC

Healthcare Common Procedure Coding System (HCPCS)

Maintained By	US Department of Health & Human Services, Centers for Medicare & Medicaid Services
Description	"For Medicare and other health insurance programs to ensure that these claims are processed in an orderly and consistent manner, standardized coding systems are essential. The HCPCS Level II Code Set is one of the standard code sets used for this purpose. The HCPCS is divided into two principal subsystems, referred to as level I and level II of the HCPCS. Level I of the HCPCS is comprised of CPT (Current Procedural Terminology), a numeric coding system maintained by the American Medical Association (AMA)."
	"Level II of the HCPCS is a standardized coding system that is used primarily to identify products, supplies, and services not included in the CPT codes, such as ambulance services and durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) when used

	outside a physician's office. Because Medicare and other insurers cover a variety of services, supplies, and equipment that are not identified by CPT codes, the level II HCPCS codes were established for submitting claims for these items. … In October of 2003, the Secretary of HHS delegated authority under the HIPAA legislation to CMS to maintain and distribute HCPCS Level II Codes." (CMS)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Downloadable files are available at no cost on the CMS website (https://www.cms.gov/HCPCSReleaseCodeSets/02_HCPCS_Quarterly_Update.asp).
Website	https://www.cms.gov/MedHCPCSGenInfo/01_Overview.asp

HIPAA National Provider Identifier (HIPAA NPI)

Maintained By	US Department of Health & Human Services, Centers for Medicare & Medicaid Services
Description	The National Provider Identifier (NPI) is a Health Insurance Portability and Accountability Act (HIPAA) Administrative Simplification Standard. The NPI is a unique identification number for covered health care providers. The NPI is a 10-position, intelligence-free numeric identifier (10-digit number). This means that the numbers do not carry other information about healthcare providers, such as the state in which they live or their medical specialty. (CMS)
Required Use(s)	Covered health care providers and all health plans and health care clearinghouses must use the NPIs in the administrative and financial transactions adopted under HIPAA.
Example Use(s)	
Version(s) to Use	N/A
Availability	Applications to receive a NPI are available on the CMS website.
Website	https://www.cms.gov/nationalprovidentstand/

Nomenclature for the Description of Sequence Variants (HGVS Description of Sequence Variants)

Maintained By	Human Genome Variation Society

Description	Discussions regarding the uniform and unequivocal description of sequence variants in DNA and protein sequences (mutations, polymorphisms) were initiated by two papers published in 1993; Beaudet AL & Tsui LC and Beutler E. The original suggestions presented were widely discussed, modified, extended and ultimately resulted in nomenclature recommendations that have been largely accepted and are applied world-wide. Current rules (den Dunnen, JT and Antonarakis, SE [2000]) however do not extensively cover all types of variants and the more complex changes. These pages will list, based on the last publication, the existing nomenclature recommendations as well as the most recent suggestions.
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Procedures are available at no cost on the HGVS website
Website	http://www.hgvs.org/mutnomen/

International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)

Maintained By	U.S. Department of Health and Human Servies; ICD-9-CM Coordination and Maintenance Committee (comprised of U.S. National Center for Health Statistics [NCHS] and the Centers for Medicare and Medicaid Services [CMS])
Description	The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is based on the World Health Organization's Ninth Revision, International Classification of Diseases (ICD-9). ICD-9 classifies morbidity and mortality information for statistical purposes, and for the indexing of hospital records by disease and operations, for data storage and retrieval. ICD-9-CM is the official system of assigning codes to diagnoses and procedures associated with hospital utilization in the United States. (CDC)
Required Use(s)	
Example Use(s)	Recording clinical diagnoses and procedures.
Version(s) to Use	Sixth Edition

Availability	Rich Text Format (RTF) files can be downloaded at no cost from the CDC website below. A CD-ROM containing Folio InfoBase format files can be purchased from the U.S. Government Printing Office. Various vendors provide subscriptions; DBHDS uses Ingenix.
Website	http://www.cdc.gov/nchs/icd/icd9cm.htm

International Classification of Diseases, Tenth Revision (ICD-10)

Maintained By	World Health Organization (WHO)
Description	The ICD is the international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use. These include the analysis of the general health situation of population groups and monitoring of the incidence and prevalence of diseases and other health problems in relation to other variables such as the characteristics and circumstances of the individuals affected, reimbursement, resource allocation, quality and guidelines.
	In addition to enabling the storage and retrieval of diagnostic information for clinical, epidemiological and quality purposes, these records also provide the basis for the compilation of national mortality and morbidity statistics by WHO Member States. (WHO)
	U.S. National Center for Health Statistics (NCHS) "is using a copy modified and corrected by NCHS. The NCHS version converts the English spellings to American spellings and incorporates changes made after the WHO version was published." (CDC)
Required Use(s)	Used to classify diseases and other health problems recorded on many types of health and vital records including death certificates and health records.
Example Use(s)	
Version(s) to Use	
Availability	The vocabulary is available in HTML format on the WHO website at no cost. Print, CD-ROM, and downloadable versions can be purchased from the WHO website. NCHS lists of causes used to publish mortality data are available. The detailed each cause list can be obtained from the Web site at ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/ICD10/" (according to http://www.cdc.gov/nchs/data/dvs/icd10fct.pdf). Centers for Medicare and Medicaid Services (CMS) has a website (http://www.who.int/classifications/icd/en/) detailing the transition from ICD-9 to ICD-10.
Website	http://www.who.int/classifications/icd/en/

ISO 3166 Country Codes (ISO Country Codes)

Maintained By	International Organization for Standardization (ISO)
Description	"The existence of various country codes developed by different organizations can be confusing if you exchange goods or information in our ever more integrated world. To make sure that communication works you need an accepted, up-to-date country code standard. ISO 3166 is this commonly accepted International Standard and the ISO 3166/MA has been updating it since 1974." (ISO)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	The list of short country names and alpha-2 code elements from ISO 3166-1 are available on the ISO website in HTML, semicolon delimited text and XML formats. Microsoft Access 2000 databases as well as printed copies are available for order on the ISO website.
Website	http://www.iso.org/iso/country_codes.htm

Logical Observation Identifiers Names and Codes (LOINC)

Maintained By	Regenstrief Institute, Inc
Description	"The purpose of LOINC® is to facilitate the exchange and pooling of clinical results for clinical care, outcomes management, and research by providing a set of universal codes and names to identify laboratory and other clinical observations." (Regenstrief)
Required Use(s)	
Example Use(s)	Used to order laboratory tests and to report testing method performed to derrive clinical result.
Version(s) to Use	
Availability	Microsoft Access and tab-delimited formats files can be downloaded at no cost from the LOINC website.
Website	http://www.loinc.org

Manufacturers of Vaccines (MVX)

Maintained By	Centers for Disease Control and Prevention (CDC) National Center of Immunization and Respiratory Diseases (NCIRD)

Description	MVX is HL7 Table 0227, Manufacturers of Vaccines (MVX). It includes both active and inactive manufacturers of vaccines in the U.S. (CDC)
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	Excel, PDF, flat and XML format files are available at no cost from the CDC website.
Website	http://www2a.cdc.gov/nip/IIS/IISStandards/vaccines.asp?rpt=mvx

National Cancer Institute Thesaurus (NCI Thesaurus)

Maintained By	National Cancer Institute
Description	NCI Thesaurus (NCIt) provides reference terminology for many NCI and other systems. It covers vocabulary for clinical care, translational and basic research, and public information and administrative activities.
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	A searchable database and downloadable files are available at no cost on the NCI website.
Website	http://ncit.nci.nih.gov/

National Center for Biotechnology Information Entrez Taxonomy (NCBI Taxonomy)

Maintained By	National Center for Biotechnology Information, U.S. National Library of Medicine
Description	The NCBI taxonomy database contains the names of all organisms that are represented in the genetic databases with at least one nucleotide or protein sequence.
Required Use(s)	
Example Use(s)	

Version(s) to Use	
Availability	A searchable database is available at no cost on the NCBI website.
Website	http://www.ncbi.nlm.nih.gov/taxonomy

National Center for Biotechnology Information Genetic Reference Sequences (NCBI RefSeqGene)

Maintained By	U.S. National Library of Medicine National Center for Biotechnology Information
Description	RefSeqGene defines genomic sequences to be used as reference standards for well-characterized genes. These sequences, labeled with the keyword RefSeqGene, serve as a stable foundation for reporting mutations, for establishing conventions for numbering exons and introns, and for defining the coordinates of other variations.
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	A searchable database and downloadable files are available at no cost on the NCBI website.
Website	http://www.ncbi.nlm.nih.gov/refseq/rsg/

Office of Management and Budget, Statistical Policy Directive No. 15, Race and Ethnic Standards for Federal Statistics and Administrative Reporting (OMB)

Maintained By	Office of Management and Budget
Description	OMB's Statistical Policy Directive No. 15 provided a common language to promote uniformity and comparability for data on race and ethnicity for the population groups specified in the Directive. They were developed in cooperation with Federal agencies to provide consistent data on race and ethnicity throughout the Federal Government.
Required Use(s)	
Example Use(s)	

Version(s) to Use	
Availability	The list is available on the OMB website at no cost.
Website	http://www.whitehouse.gov/omb/fedreg_1997standards/

Online Mendelian Inheritance in Man (OMIM)

Maintained By	McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine
Description	"OMIM is a comprehensive, authoritative, and timely compendium of human genes and genetic phenotypes. The full-text, referenced overviews in OMIM contain information on all known mendelian disorders and over 12,000 genes. OMIM focuses on the relationship between phenotype and genotype." (NLM)
Required Use(s)	
Example Use(s)	Used to identify and report genetic disorders detected during Newborn Screening testing.
Version(s) to Use	
Availability	The searchable database is available on the National Library of Medicine website at no cost.
Website	http://www.ncbi.nlm.nih.gov/omim

Public Health Information Network Vocabulary Access and Distribution System (PHIN-VADS)

Maintained By	U.S. Centers for Disease Control and Prevention (CDC)
Description	PHIN Vocabulary Standards is a key component in supporting the development and deployment of standards-based public health information systems. PHIN Vocabulary Services seeks to promote the use of standards-based vocabulary within PHIN systems and foster the use and exchange of consistent information among public health partners. The use of PHIN Vocabulary Standards ensures that vocabularies are aligned with PHIN standards and with appropriate industry and Consolidated Health Informatics Initiative (CHI) vocabulary standards. These standards are supported by the PHIN Vocabulary Access and Distribution System (VADS) for accessing, searching, and distributing standards-based vocabularies used within PHIN to local, state and national PHIN partners. It promotes the use of standards-based vocabulary within PHIN systems to support the exchange of consistent information among Public Health Partners.

Required Use(s)	Division of Consolidated Laboratory Services (DCLS) and Department of Health (VDH) use specific value set codes for Electronic Lab Reporting, Immunization, and Syndromic Surveillance.
Example Use(s)	
Version(s) to Use	See Appendix A for the list of relevant value set codes for VDH and DCLS.
Availability	The values can be found in the Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS) database.
Website	https://phinvads.cdc.gov

Point of Origin for Admission or Visit (Source of Admission)

Maintained By	National Uniform Billing Committee and the Centers for Medicare and Medicaid Services
Description	"The provider enters the code indicating the source of referral for this admission or visit."
Required Use(s)	Upon admission of a patient to any Department of Behavioral Health and Developmental Services facility.
Example Use(s)	
Version(s) to Use	Per Change Request (CR) # 6801, effective date July 1, 2010
Availability	Publications and subscriptions are available from the National Uniform Billing Committee and the Centers for Medicare and Medicaid Services.
Website	http://www.nubc.org ; http://www.cms.gov

Public Health Laboratory Interoperability Project (PHLIP) Codes

Maintained By	Association of Public Health Laboratories (APHL)
Description	PHLIP Codes are a aggregation of multiple code sets used specifically for PHLIP messaging; while these sets are largely defined elsewhere (e.g., SNOMED and LOINC), many codes are specific to the PHLIP project. When a LOINC and/or SNOMED CT code is not available for an APHL or CDC specific data exchange, APHL will assign a local code for data exchange between public health labs and CDC that is used to convey the test ordered or the result determined.
Required Use(s)	Used by Public Health Laboratories throughout the nation to convey test ordered, methods performed, and results reported that are specific to an APHL or CDC project.

Example Use(s)	
Version(s) to Use	
Availability	The values can be found in the Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS) database (https://phinvads.cdc.gov).
Website	http://www.aphl.org/aphlprograms/informatics/collaborations/phlip/pages/default.aspx

RxNorm (RxNorm)

Maintained By	U.S. National Library of Medicine (NLM)
Description	"RxNorm provides normalized names for clinical drugs and links its names to many of the drug vocabularies commonly used in pharmacy management and drug interaction software, including those of First Databank, Micromedex, MediSpan, Gold Standard Alchemy, and Multum. By providing links between these vocabularies, RxNorm can mediate messages between systems not using the same software and vocabulary." (NML)
Required Use(s)	
Example Use(s)	To report clinical test results and specimen source types.
Version(s) to Use	
Availability	The U.S. National Library of Medicine (NLM) distributes RxNorm at no cost on their website to organizations as part of the Unified Medical Language System (UMLS).
Website	http://www.nlm.nih.gov/research/umls/rxnorm/

Systemized Nomenclature of Medicine-Clinical Terms (SNOMED CT)

Maintained By	International Health Terminology Standards Development Organisation (IHTSDO)
Description	SNOMED CT is a "multilingual clinical healthcare terminology" used "to accurately record health care encounters." (IHTSDO)
Required Use(s)	To report clinical test results and specimen source types.
Example Use(s)	

Version(s) to Use	
Availability	The U.S. National Library of Medicine (NLM) distributes SNOMED CT at no cost to organizations, under the terms of the standard IHTSDO affiliate license which is included in the Unified Medical Language System (UMLS) license agreement. SNOMED CT can be downloaded or received on DVD by requesting a UMLS Metathesaurus license and creating a UMLS Terminology Services (UTS) account at https://uts.nlm.nih.gov/home.html.
Website	http://www.ihtsdo.org/

U.S. Veterans Health Administration National Drug File Reference Terminology Formulary (VHA NDF-RT Formulary)

Maintained By	Veterans Health Administration (VHA)
Description	National Drug File Reference Terminology (NDF-RT) is produced by the Veterans Health Administration (VHA) as an extension of the VHA National Drug File (VANDF) formulary. It organizes the drug list into a formal representation. NDF-RT is used for modeling drug characteristics including ingredients, chemical structure, dose form, physiologic effect, mechanism of action, pharmacokinetics, and related diseases. NDF-RT is part of the Federal Medication Terminologies (FMT), and three components -- Mechanism of Action, Physiologic Effect, and Structural Class - are used in FDA Structured Product Labeling (SPL).
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	A searchable database and downloadable files are available at no cost on the National Cancer Institute website.
Website	http://nciterms.nci.nih.gov/pages/vocabulary.jsf?dictionary=NDF-RT

Unified Code for Units of Measure (UCUM)

Maintained By	Regenstrief Institute, Inc
Description	"The Unified Code for Units of Measure is a code system intended to include all units of measures being contemporarily used in international science, engineering, and business. The purpose is to facilitate unambiguous electronic communication of quantities together with their units." (Regenstrief)

Required Use(s)	Used in reporting of clinical laboratory results and testing methods performed.
Example Use(s)	
Version(s) to Use	
Availability	HTML and XML documents are available at no cost on the UCUM website.
Website	http://unitsofmeasure.org/

United States Postal Service Postal Codes (USPS Postal Codes)

Maintained By	United States Postal Service
Description	A list of official USPS abbreviations for state abbreviations.
Required Use(s)	
Example Use(s)	
Version(s) to Use	N/A
Availability	An HTML list is available at no cost on the USPS website.
Website	http://www.usps.com/ncsc/lookups/abbreviations.html#states

World Health Organization International Classification of Functioning, Disability and Health (WHO ICF)

Maintained By	World Health Organization
Description	The International Classification of Functioning, Disability and Health, known more commonly as ICF, is a classification of health and health-related domains. These domains are classified from body, individual and societal perspectives by means of two lists: a list of body functions and structure, and a list of domains of activity and participation. Since an individual's functioning and disability occurs in a context, the ICF also includes a list of environmental factors.
Required Use(s)	
Example Use(s)	
Version(s) to Use	
Availability	A searchable database is available at no cost on the WHO website.

Website	http://www.who.int/classifications/icf/en/

Health Vocabulary Data Standard Compliance

The Commonwealth of Virginia has established the vocabularies and reference terminologies cited herein to be standards when communicating or exchanging health data.

As of January 1, 2015, agencies and institutions implementing new or updating existing data exchanges or applications that transmit or contain health information must comply with all aspects of the Health Vocabulary Data Standard prior to production use of the data exchange or application.

Agencies and Institutions which are unable to comply with the standard must request an exception using the VITA Exception Form available 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.

General Guidance

♦ Where standards leave room for interpretation, standards will be harmonized across agencies, applications, health information technology projects and data exchange processes. VITA will consult with stakeholders and HITSAC as needed to affect harmonization.

♦ To the fullest extent possible, a common framework and infrastructure will be utilized for the development, adoption, and maintenance of health information standards.

♦ Standards adopted will be used to promote semantic interoperability across health information systems, as well as the efficient and effective sharing of data between Commonwealth agencies and between agencies and external partners.

♦ Standards-based data exchanges will be used to breakdown artificial boundaries between health information systems.

Appendix A PHIN-VADS Value Set Codes

Division of Consolidated Laboratory Services (DCLS)

CODING SYSTEM	CODE SET NAME	FULL USE	PHIN VADS VALUE SET	OTHER CODING SYSTEMS USED BASED ON MESSAGE DEFINITIONS
CDC LOCAL	Observation Method	No	PHVS_LabTestMethods_CDC	LRN-B
HL70001	Administrative Sex	Yes	PHVS_AdministrativeSex_HL7_2x	
HL70002	Marital Status	No	PHVS_MaritalStatus_HL7_2x	
HL70003	Trigered Event	Yes	PHVS_EventType_HL7_2x	
HL70005	Race	Yes	PHVS_RaceCategory_CDC	
HL70008	Acknowledgment Code	Yes	PHVS_AcknowledgmentCode_HL7_2x	
HL70063	Next of Kin Relationship	No	PHVS_Relationship_HL7_2x	
HL70076	Message Code	Yes	PHVS_MessageType_HL7_2x	
HL70085	Observation Result Status	Yes	PHVS_ObservationResultStatus_HL7_2x	
HL70103	Processing ID	Yes	PHVS_ProcessingID_HL7_2x	
HL70104	Message Version ID	Yes	PHVS_VersionID_HL7_2x	
HL70105	Source of Comment	Yes	PHVS_SourceOfComment_HL7_2x	
HL70119	Order Control Code	Yes	PHVS_OrderControlCodes_HL7_2x	
HL70125	Value Type	Yes	PHVS_ValueType_HL7_2x	
HL70136	Yes/No Response	Yes	PHVS_YesNoUnknown_CDC	HL7 V3 NULL FLAVOR
HL70155	Acknowledgment Type	Yes	PHVS_AcceptApplicationAcknowledgmentConditions_HL7	
HL70189	Ethnicity	Yes	PHVS_EthnicityGroup_CDC_Unk	HL7 V3 NULL FLAVOR
HL70200	Name Type Code	No	PHVS_NameType_HL7_2x	

CODING SYSTEM	CODE SET NAME	FULL USE	PHIN VADS VALUE SET	OTHER CODING SYSTEMS USED BASED ON MESSAGE DEFINITIONS
HL70201	Telecom Use Code	No	PHVS_TelecommunicationUseCode_HL7_2x	
HL70202	Telecom Equipment Type	No	PHVS_TelecommunicationEquipmentType_HL7_2x	
HL70203	ID Type Code	No	PHVS_IdentifierType_CDC	
HL70204	Organizational Name Type	No	PHVS_TypeOfOrganizationalNameType_HL7_2x	
HL70299	Encoding Type	Yes	PHVS_Encoding_HL7_2x	
HL70354	Message Structure	Yes	PHVS_MessageStructure_HL7_2x	
HL70357	HL7 Error Code	Yes	PHVS_MessageErrorConditionCodes_HL7_2x	
HL70364	Comment Type	No	PHVS_CommentType_CDC	
HL70391	Universal ID Type	No	PHVS_UniversalIdType_HL7_2x	
HL70396	Code System Name	No	PHVS_CodingSystem_HL7_2x_Table0396	
HL70444	Name Assembly Order	Yes	PHVS_NameAssemblyOrder_HL7_2x	
HL70445	Identity Reliability Code	No	PHVS_IdentityReliabilityCode_HL7_2x	
HL70516	Severity	Yes	PHVS_ErrorSeverity_HL7_2x	
HL70790	Address Type	No	PHVS_AddressType_HL7_2x	
INCITS 31:2009	County	Yes	PHVS_County_FIPS_6-4*	
ISO 3166-1	Country	No	PHVS_Country_ISO_3166-1	
ISO 3166-2	State or Province	No	PHVS_State_FIPS_5-2	
LOINC	Observation ID for Lab Tests	No	Multiples, Based largely on PHVS_LabTestName_NND	Local, PHLIP (PHVS_LabTestOrder_PHLIP_Flu), LRN-B
LOINC	Healthcare Service Location	No	NHSNHealthcareServiceLocationCode	Local

CODING SYSTEM	CODE SET NAME	FULL USE	PHIN VADS VALUE SET	OTHER CODING SYSTEMS USED BASED ON MESSAGE DEFINITIONS
LOINC	Ordered Test/Panel/Test Set	No	PHVS_LabTestOrderables_CDC	LRN-B
LOINC	Epidemiological Observation ID's	No	PHLIP Local	PHLIP, Local
LOINC	Drug Susceptibility Tests	No	NHSNDrugSusceptibilityTestsCode	SNOMED-CT
MIME	Data Subtype	No	PH_MIME_MediaType_IANA	
SNOMED-CT	Coded Lab Test Results	No	Multiples including PHVS_Microorganism_CDC,	Local, PHLIP (PHVS_LabTestResult_ PHLIP_Flu and PHVS_LabTestInterpre tation_Flu), LRN-B
SNOMED-CT	Animal Type	No	PHVS_Animal_CDC	ITIS, Local
SNOMED-CT	Body Site	No	PHVS_BodySite_HITSP	
SNOMED-CT	Specimen Source	Yes	PHVS_Specimen_CDC	HL70487, HL70070, LRN-B
SNOMED-CT	Sample Condition	No	CDC Local	LRN-B
SNOMED-CT	Sample Category	No	CDC Local	LRN-B
SNOMED-CT	Specimen Collection Method	No	PHVS_SpecimenCollectionMethod_CDC	LRN-B
UCUM	Units of Measure	Yes	PHVS_UnitsOfMeasure_CDC	

Department of Health (VDH)

Category	Value Set Name	Value Set Code
ELR	Abnormal Flag (HL7 27)	PHVS_AbnormalFlag_HL7_27
ELR	Accept Application Acknowledgment Conditions (HL7)	PHVS_AcceptApplicationAcknowledgmentCondition s_HL7
ELR	Acknowledgment Code (HL7)	PHVS_AcknowledgmentCode_HL7_2x
ELR	Address Type (HL7)	PHVS_AddressType_HL7_2x

Category	Value Set Name	Value Set Code
ELR	Administrative Sex (HL7)	PHVS_AdministrativeSex_HL7_2x
ELR	Admission Level of Care (HL7)	PHVS_AdmissionLevelOfCareCode_HL7_2x
ELR	Admission Source (HL7)	PHVS_AdmitSource_HL7_2x
ELR	Admission Type (HL7)	PHVS_AdmissionType_HL7_2x
ELR	Alternate Character Set Handling Scheme (HL7)	PHVS_AlternateCharacterSetHandlingScheme_HL7_2x
ELR	Alternate Character Sets (HL7)	PHVS_AlternateCharacterSets_HL7_2x
ELR	Animal	PHVS_Animal_CDC
ELR	Authorization Mode (HL7)	PHVS_AuthorizationMode_HL7_2x
ELR	Body Site Value Set	PHVS_BodySite_HITSP
ELR	Check Digit Scheme (HL7)	PHVS_CheckDigitScheme_HL7_2x
ELR	Coding System HL7 2x Table 0396	PHVS_CodingSystem_HL7_2x_Table0396
ELR	Comment Type	PHVS_CommentType_CDC
ELR	Confidentiality Code (HL7)	PHVS_ConfidentialityCode_HL7_2x
ELR	Country	PHVS_Country_ISO_3166-1
ELR	County	PHVS_County_FIPS_6-4
ELR	Data Subtype	PHVS_MIME_MediaSubType_IANA
ELR	Degree License Certification (HL7)	PHVS_DegreeLicenseCertificate_HL7_2x
ELR	Diagnosis (ICD-9 CM)	PHVS_AdministrativeDiagnosis_CDC_ICD-9CM
ELR	Diagnostic service section ID (HL7)	PHVS_DiagnosticServiceSectionID_HL7_2x
ELR	Discharge Disposition (HL7)	PHVS_DischargeDisposition_HL7_2x
ELR	Encoding Type (HL7)	PHVS_Encoding_HL7_2x
ELR	Error Severity (HL7)	PHVS_ErrorSeverity_HL7_2x
ELR	Ethnicity group	PHVS_EthnicityGroup_CDC
ELR	Evaluation Finding	PHVS_EvaluationFinding_CDC
ELR	Event Type (HL7)	PHVS_EventType_HL7_2x
ELR	Extended Priority Codes (HL7)	PHVS_ExtendedPriorityCodes_HL7_2x
ELR	Healthcare Service Location (NHSN)	NHSNHealthcareServiceLocationCode
ELR	Identifier Type	PHVS_IdentifierType_CDC
ELR	Identity Reliability Code (HL7)	PHVS_IdentityReliabilityCode_HL7_2x
ELR	Lab Test Name (NND)	PHVS_LabTestName_NND
ELR	Lab Test Result Name	PHVS_LabTestName_CDC
ELR	Language	PHVS_Language_ISO_639-2_Alpha3
ELR	Marital Status (HL7)	PHVS_MaritalStatus_HL7_2x

Category	Value Set Name	Value Set Code
ELR	Message Error Condition Codes (HL7)	PHVS_MessageErrorConditionCodes_HL7_2x
ELR	Message Structure (HL7)	PHVS_MessageStructure_HL7_2x
ELR	Message Type (HL7)	PHVS_MessageType_HL7_2x
ELR	Microorganism	PHVS_Microorganism_CDC
ELR	Modifier or Qualifier	PHVS_ModifierOrQualifier_CDC
ELR	Name Address Representation (HL7)	PHVS_NameAddressRepresentation_HL7_2x
ELR	Name Assembly Order (HL7)	PHVS_NameAssemblyOrder_HL7_2x
ELR	Name Type (HL7)	PHVS_NameType_HL7_2x
ELR	Nature of Abnormal Test (HL7)	PHVS_NatureOfAbnormalTesting_HL7_2x
ELR	Observation Method	PHVS_LabTestMethods_CDC
ELR	Observation Result Handling (HL7)	PHVS_ObservationResultHandling_HL7_2x
ELR	Observation Result Status (HL7)	PHVS_ObservationResultStatus_HL7_2x
ELR	Order Control Code (HL7)	PHVS_OrderControlCodes_HL7_2x
ELR	Order Status (HL7)	PHVS_OrderStatus_HL7_2x
ELR	Order Type (HL7)	PHVS_OrderType_HL7_2x
ELR	Ordered Test	PHVS_LabTestOrderables_CDC
ELR	Organizational Name Type (HL7)	PHVS_TypeOfOrganizationalNameType_HL7_2x
ELR	Patient Class (HL7)	PHVS_PatientClass_HL7_2x
ELR	Problem Value Set	PHVS_ProblemList_HITSP
ELR	Processing ID (HL7)	PHVS_ProcessingID_HL7_2x
ELR	Processing Mode (HL7)	PHVS_ProcessingMode_HL7_2x
ELR	Production Class (HL7)	PHVS_ProductionClass_HL7_2x
ELR	Race Category	PHVS_RaceCategory_CDC
ELR	Relationship (HL7)	PHVS_Relationship_HL7_2x
ELR	Religion (HL7)	PHVS_Religion_HL7_2x
ELR	Response Flag (HL7)	PHVS_ResponseFlag_HL7_2x
ELR	Result status (HL7)	PHVS_ResultStatus_HL7_2x
ELR	Risk Codes (HL7)	PHVS_RiskCodes_HL7_2x
ELR	Source of Comment (HL7)	PHVS_SourceOfComment_HL7_2x
ELR	Specimen	PHVS_Specimen_CDC
ELR	Specimen Action Code (HL7)	PHVS_SpecimenActionCode_HL7_2x
ELR	Specimen Additive or Preservative (HL7)	PHVS_AdditiveOrPreservative_HL7_2x
ELR	Specimen Appropriateness (HL7)	PHVS_SpecimenAppropriateness_HL7_2x

Category	Value Set Name	Value Set Code
ELR	Specimen Child Role (HL7)	PHVS_SpecimenChildRole_HL7_2x
ELR	Specimen Collection Method	PHVS_SpecimenCollectionMethod_CDC
ELR	Specimen Collection Method (HL7)	PHVS_SpecimenCollectionMethod_HL7_2x
ELR	Specimen Condition	PHVS_SpecimenCondition_CDC
ELR	Specimen Handling Code	PHVS_EntityHandling_CDC
ELR	Specimen Quality (HL7)	PHVS_SpecimenQuality_HL7_2x
ELR	Specimen Reject Reason (HL7)	PHVS_SpecimenRejectReason_HL7_2x
ELR	Specimen Role	PHVS_SpecimenRole_CDC
ELR	State	PHVS_State_FIPS_5-2
ELR	Telecommunication Equipment Type (HL7)	PHVS_TelecommunicationEquipmentType_HL7_2x
ELR	Telecommunication Use Code (HL7)	PHVS_TelecommunicationUseCode_HL7_2x
ELR	TQ Conjunction ID (HL7)	PHVS_TQConjunctionID_HL7_2x
ELR	Type of Data	PHVS_MIME_MediaType_IANA
ELR	Type of Referenced Data (HL7)	PHVS_TypeOfReferencedData_HL7_2x
ELR	Units of Measure	PHVS_UnitsOfMeasure_CDC
ELR	Universal ID Type (HL7)	PHVS_UniversalIdType_HL7_2x
ELR	Value Type (HL7)	PHVS_ValueType_HL7_2x
ELR	Version ID (HL7)	PHVS_VersionID_HL7_2x
ELR	Visit Indicator (HL7)	PHVS_VisitIndicator_HL7_2x
ELR	Yes No Indicator (HL7)	PHVS_YesNo_HL7_2x
Immunization	Accept Application Acknowledgment Conditions (HL7)	PHVS_AcceptApplicationAcknowledgmentConditions_HL7
Immunization	Acknowledgment Code (HL7)	PHVS_AcknowledgmentCode_HL7_2x
Immunization	Action Code (IIS)	PHVS_ActionCode_IIS
Immunization	Address Type (HL7)	PHVS_AddressType_HL7_2x
Immunization	Administrative Gender (HL7 V3)	PHVS_AdministrativeGender_HL7_V3
Immunization	Administrative Site (IIS)	PHVS_AdministrativeSite_IIS
Immunization	Check Digit Scheme (HL7)	PHVS_CheckDigitScheme_HL7_2x
Immunization	Coding System HL7 2x Table 0396	PHVS_CodingSystem_HL7_2x_Table0396
Immunization	County	PHVS_County_FIPS_6-4
Immunization	Degree License Certification (HL7)	PHVS_DegreeLicenseCertificate_HL7_2x
Immunization	Error Severity (HL7)	PHVS_ErrorSeverity_HL7_2x
Immunization	Ethnicity Group including Unknown	PHVS_EthnicityGroup_CDC_Unk
Immunization	Event Type (IIS)	PHVS_EventType_IIS

Category	Value Set Name	Value Set Code
Immunization	Evidence Of Immunity (IIS)	PHVS_EvidenceOfImmunity_IIS
Immunization	Financial Class (IIS)	PHVS_FinancialClass_IIS
Immunization	Identifier Type (IIS)	PHVS_IdentifierType_IIS
Immunization	Immunization Funding Source (IIS)	PHVS_ImmunizationFundingSource_IIS
Immunization	Immunization Information Source	PHVS_ImmunizationInformationSource_HITSP
Immunization	Immunization Profile Identifier (IIS)	PHVS_ImmunizationProfileIdentifier_IIS
Immunization	Immunization Registry Status (IIS)	PH_ImmunizationRegistryStatus_IIS
Immunization	Immunization Schedule Identifier (IIS)	PHVS_ImmunizationScheduleIdentifier_IIS
Immunization	Language	PHVS_Language_ISO_639-2_Alpha3
Immunization	Manufacturers of vaccines (MVX)	PHVS_ManufacturersOfVaccinesMVX_CDC_NIP
Immunization	Message Error Condition Codes (HL7)	PHVS_MessageErrorConditionCodes_HL7_2x
Immunization	Message Structure (IIS)	PHVS_MessageStructure_IIS
Immunization	Message Type (IIS)	PHVS_MessageType_IIS
Immunization	Name Type (IIS)	PHVS_NameType_IIS
Immunization	Observation Identifier (IIS)	PHVS_ObservationIdentifier_IIS
Immunization	Order Control Code (IIS)	PHVS_OrderControlCode_IIS
Immunization	Organizational Name Type (IIS)	PHVS_OrganizationalNameType_IIS
Immunization	Patient Class (IIS)	PHVS_PatientClass_IIS
Immunization	Processing ID (HL7)	PHVS_ProcessingID_HL7_2x
Immunization	Publicity Code (IIS)	PHVS_PublicityCode_IIS
Immunization	Quantity Limited Request (IIS)	PHVS_QuantityLimitedRequest_IIS
Immunization	Query Name (IIS)	PHVS_QueryName_IIS
Immunization	Query Priority (IIS)	PHVS_QueryPriority_IIS
Immunization	Query Response Status (IIS)	PHVS_QueryResponseStatus_IIS
Immunization	Race Category	PHVS_RaceCategory_CDC
Immunization	Relationship (IIS)	PHVS_Relationship_IIS
Immunization	Route Of Administration (IIS)	PHVS_RouteOfAdministration_IIS
Immunization	Substance Refusal Reason (IIS)	PHVS_SubstanceRefusalReason_IIS
Immunization	Telecommunication Equipment Type (HL7)	PHVS_TelecommunicationEquipmentType_HL7_2x
Immunization	Telecommunication Use Code (HL7)	PHVS_TelecommunicationUseCode_HL7_2x
Immunization	Treatment Completion Status (HL7)	PHVS_CompletionStatusForValidValues_HL7_2x
Immunization	Universal ID Type (HL7)	PHVS_UniversalIdType_HL7_2x

Category	Value Set Name	Value Set Code
Immunization	Vaccination Contraindication (IIS)	PHVS_VaccinationContraindication_IIS
Immunization	Vaccination Reaction (IIS)	PHVS_VaccinationReaction_IIS
Immunization	Vaccination Special Indication (IIS)	PHVS_VaccinationSpecialIndication_IIS
Immunization	Vaccines administered (CVX)	PHVS_VaccinesAdministeredCVX_CDC_NIP
Immunization	Version ID (IIS)	PHVS_VersionID_IIS
Immunization	Yes No Indicator (HL7)	PHVS_YesNo_HL7_2x
Syndromic Surveillance	Age Unit (Syndromic Surveillance)	PHVS_AgeUnit_SyndromicSurveillance
Syndromic Surveillance	Cause of Death (ICD-10)	PHVS_CauseOfDeath_ICD-10_CDC
Syndromic Surveillance	Country	PHVS_Country_ISO_3166-1
Syndromic Surveillance	Diagnosis (ICD-9 CM)	PHVS_AdministrativeDiagnosis_CDC_ICD-9CM
Syndromic Surveillance	Diagnosis Type (HL7)	PHVS_DiagnosisType_HL7_2x
Syndromic Surveillance	Disease	PHVS_Disease_CDC
Syndromic Surveillance	Ethnicity group	PHVS_EthnicityGroup_CDC
Syndromic Surveillance	Facility / Visit Type (Syndromic Surveillance)	PHVS_FacilityVisitType_SyndromicSurveillance
Syndromic Surveillance	Gender (Syndromic Surveillance)	PHVS_Gender_SyndromicSurveillance
Syndromic Surveillance	Identifier Type (Syndromic Surveillance)	PHVS_IdentifierType_SyndromicSurveillance
Syndromic Surveillance	Observation Identifier (Syndromic Surveillance)	PHVS_ObservationIdentifier_SyndromicSurveillance
Syndromic Surveillance	Patient Class (Syndromic Surveillance)	PHVS_PatientClass_SyndromicSurveillance
Syndromic Surveillance	Pulse Oximetry Unit	PHVS_PulseOximetryUnit_UCUM
Syndromic Surveillance	Race Category	PHVS_RaceCategory_CDC
Syndromic Surveillance	State	PHVS_State_FIPS_5-2
Syndromic Surveillance	Temperature Unit	PHVS_TemperatureUnit_UCUM