



Standard Specification for Coded Values Used in the Electronic Health Record¹

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^{ε1} NOTE—Figures reformatted as tables editorially in March 2015.

1. Scope*

1.1 This specification covers the identification of the lexicons to be used for the data elements identified in Appendix X1 of Guide E1384. It is intended to unify the representations for: (1) primary record of care data elements, (2) the data elements identified in other standard statistical data sets, (3) data elements used in other healthcare data message exchange format standards, or (4) in data gathering forms for this purpose, and (5) in data derived from these elements in order that data recorded in the course of patient care be exchangeable and be the source of accurate statistical and resource management data. This specification is applicable to all paper and automated systems.

2. Referenced Documents

2.1 ASTM Standards:²

E1239 Practice for Description of Reservation/Registration-Admission, Discharge, Transfer (R-ADT) Systems for Electronic Health Record (EHR) Systems

E1384 Practice for Content and Structure of the Electronic Health Record (EHR)

E1715 Practice for An Object-Oriented Model for Registration, Admitting, Discharge, and Transfer (RADT) Functions in Computer-Based Patient Record Systems

E1744 Practice for View of Emergency Medical Care in the Electronic Health Record

2.2 ANSI Standards:³

ANS X3.50 Representation of Date and Time

ANS X3.51 Representation of Common Units

2.3 ISO Standards:³

ISO 639 Names of Languages

ISO 2955 Representation of SI Units

ISO 3166 Names of Countries

ISO 5218 Representation of Human Sexes

ISO 8601 Representation Dates

2.4 Other Standards:

HL-7 Health Industry Level 7 Interface Standards⁴

3. Terminology

3.1 Acronyms:

3.1.1 NCHS—National Center for Health Statistics

3.1.2 NCVHS—National Committee for Vital and Health Statistics

3.1.3 NOS—not otherwise specified

4. Significance and Use

4.1 Purpose—The approval of Guide E1384, concerned with the structure and content of the computer-based patient record, now includes a formal indexing of data elements and a cataloging of the minimal essential value set for these elements. Indexing of these data elements with a unique identifier keyed to its position in the logical structure of Appendix X1 of Guide E1384 now provides a means of cataloging the value sets representing each data element (see Guide E1384). Guide E1239 describes conventions for representing many of the data values for data elements that are included in the more comprehensive listing in Guide E1384. A comprehensive listing of all of the value sets associated with Guide E1384 has not yet been assembled. This specification begins to catalog the representation conventions for a number of these elements and in particular to list the coded values. It is important that this catalog consider the traditionally assigned representations for each of these elements, and it must resolve differences in a manner that introduces systematics and consistency into the representation. The catalog must establish both a global framework consistent with international standardization and with long-term growth, while at the same time maximizing familiar or traditional representations. This standard has been developed with input from many organizations, including government agencies and other standards bodies and professional

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, http://www.ansi.org.

⁴ Available from Health Level 7, Mark McDougall, Executive Director, 900 Victors Way, Suite 122, Ann Arbor, MI 48108.

*A Summary of Changes section appears at the end of this standard

associations, and as a result of the effort to achieve consistency and comprehensiveness among the data dealt with by various standards efforts.

4.2 *General Values*—Early in the coordination of healthcare information standards an informal body, the Healthcare Information Standards Coordinating Committee (HISCC), identified certain common data element types and agreed upon conventions for representing these data element types in a standard manner. This set the stage for the development of the value sets for the CODED VALUE data type. The status of the standard noncoded data types, and their representations, agreed upon by the HISCC are:

4.2.1 *Person Names*—Guide E1239, Practice E1715, Practice E1744, and HL-7 use the same representation for American and European forms.

4.2.2 *Addresses*—Common format in Guide E1239, Practice E1715, and Practice E1744.

4.2.3 *Telephone Numbers*—Guide E1239 currently uses the same representation with area code enclosed in parentheses and country code preceding the parentheses.

4.2.4 *Dates*—Date and time represented as ANS X3.51-1986/ISO 8601-1988 with years in four digits; time not separated from date by “T” as permitted by ISO 8601.

4.2.5 *Numbers*—Numbers are represented either as integers or fixed point numbers; exponential notation not presently accepted in Guide E1239 or HL-7. Units of Measure by ISO 2955-1983 or ANS X3.50-86.

4.2.6 *Strings*—7-bit ASCII characters; multilingual character sets not yet defined.⁵

5. Assignment of Coded Values

5.1 The major important data elements in Guide E1384 having coded data types and the current status of the cataloging of their values are:

01035	Patient Multiple Birth code (5.2.23)
01040	Sex (5.2.20)
01042	Biogeographic Ancestry (Race) (5.2.3)
01045	Ethnicity (5.2.4)
01047	Religion (5.2.7)
01052	Marital status (5.2.2)
01055	Nationality/Country of Origin (5.2.6)
01057	Language (5.2.5)
01060	Educational Level (5.2.8)
	Educational Certification (5.2.9)
01062	Current Work Status (5.2.24)
01065	Occupation (5.2.11) also 01070,01090.03
01067	Current Vocational Status (5.2.25)
01085	Usual Living arrangement (5.2.26)
01099	Foreign Residency Code (5.2.27)
01090.03	Family Relationship (5.2.10)
01155	Color Eyes (5.2.38)
01160	Color Hair (5.2.39)
01175	Body Build for Identification (5.2.40)
02052	Durable Power of Attorney Status (5.2.28)
06001.01.15	Immunization reaction/result (5.2.63)
04001.50	Professional Specialty (5.2.16)
08005	Birth method (5.2.64)
08095	Health History Response (5.2.76)
09001.12	Body System/Region (5.2.22)
09001.13	Exam Finding (5.2.77)
09001.30	Tooth ID (5.2.74)

⁵ The boldface numbers in parentheses refer to the list of references at the end of this standard.

09001.30.05	Tooth Surface (5.2.75)
09001.30.06	Tooth Sensitivity Code (5.2.65)
09001.30.07	Tooth Mobility Code (5.2.66)
09001.40.1	Prosthesis Type (5.2.67)
11001.01.24	Test Specimen Source (5.2.68)
14001.A002	Patient (Encounter) Type/Admission Source (5.2.17)
14001.A004	Confidentiality Status (5.2.1)
14001.A010	Encounter Status (5.2.69)
14001.A013	Facility Care/Healthcare setting (5.2.18)
14001.A016	Reason for Visit (5.2.19)
14001.A020	Encounter patient Arrival Condition (5.2.70)
14001.A021	Mode of Arrival (5.2.29)
14001.A030	Nature of Injury (5.2.30)
14001.A033	Mode of Injury (5.2.31)
14001.A034	Product of Injury (5.2.37)
14001.A040	Injury On the Job Status (5.2.71)
14001.A044	Protective Equipment Used (5.2.32)
14001.A063	Patient Admission Type (5.2.12)
14001.A110	Professional Specialty (5.2.16)
14001.A133	Accommodation type (5.2.15)
14001.A163.01	Patient In-residence Transfer Type (5.2.13)
14001.A170	Diagnosis (5.2.33)
14001.A170.01	Diagnosis Type (5.2.34)
14001.A170.02	Diagnosis Status Code (5.2.35)
14001.A186.01	Current Clinical Status (5.2.36)
14001.A206	Police Hold Status (5.2.72)
14001.A213	Medical Examiner Notification Code (5.2.73)
14001.A223	Source of Payment Code (5.2.21)
14001.F050	Discharge Disposition Category (5.2.14)

This standard identifies the current value list for each of these elements as of the approval date of this standard (see footnote 1) and states the evolving status of this catalog as the knowledge of the use of these elements expands as a result of ongoing investigation. Each element is identified by the index assigned to it in the revised Appendix X1 of Guide E1384. Moreover, the definition for that element from the Data Element Catalog (1) is included with the value set.

5.2 *Value Set Tables*—These tables collect the representation of coded data values for specific data elements in computer-based patient record structures identified in Appendix X1 of Guide E1384. The terms listed here are the minimal essential ones but may be further subclassified to include more specific terms by appropriate extensions of the included terms.

5.2.1 *Confidentiality Status*—This data element, Index: 14001.A004, contains the minimal commonly used values appearing in both manual and automated systems.

Unwed mother	UWM
Celebrity	VIP
Psychiatric patient	PSY
Employee	EMP
AIDS patient	AID
HIV patient	HIV
Alcohol/Drug patient	ETH
Usual control	U
Restricted	R
Very restricted	V

5.2.2 *Marital Status*—This data element, Index: 01052, encompasses the values noted by Westermeyer (2), Bureau of Census, the VA DHCP system, the DoD CHCS system, the X12 835 Transaction Set (3), UB-82 (4), and used in common practice.

Never married	B
Single	S
Married	M
Divorced	D
Divorced/annulled	L
Divorced/separated	H
Annulled	N

