

Standards List

This compilation collects the most important standards in all technical and non-technical areas of e-health. The document is broken into two sections – the ‘table-of-contents’, and a more detailed description. Each description is bookmarked, and tied to the table-of-contents entry.

Here follows a brief explanation of the fields associated to each standard:

Url: gives an URL where the standard is available, for free if possible.

Category: field shows the medical environment in which the standard is used.

Others: other interesting and latest information.

Relevance: in a range from 0 to 100, the relevance is a subjective parameter which designates the importance of the standard in relation to e-Health.

Other fields, like *name*, *brief name*, *organization*, *description* or *used in* need no further explanation.

Organization	Brief Name	Name
AENOR	UNE-CR 13694	Safety and Security Related Software Quality Standards for Healthcare (SSQS)
ANSI	HL7v2.XML	HL7 Version 2.5
ASTM	E2212-02^a	Standard Practice for Healthcare Certificate Policy
ASTM	E2184-02	Standard Specification for Healthcare Document Formats
ASTM	E1713-95	Standard Specification for Transferring Digital Waveform Data Between Independent Computer Systems
ASTM	E1762-95 (2003)	Standard Guide for Properties of Electronic Health Records and Record Systems
ASTM	e1467	Specification for transferring neurophysiologic data between independent computer systems
ASTM	E1239-00	Standard guide for description of reservation/registration-admission, discharge, transfer systems for Electronic Health Record (EHR) systems
ASTM	E1384-02^a	Standard guide for content and structure of the Electronic Health Record (EHR)
ASTM	E1744-98	Standard guide for view of emergency medical care in the computerized-based patient record

ASTM	E1715-01	An object-oriented model for registration, admitting, discharge, and transfer functions in computer-based patient record systems
ASTM	E1714-00	Standard guide for properties of a Universal Healthcare Identifier
ASTM	E1902-02	Specification for management of the confidentiality and security of dictation, transcription, and transcribed health records
ASTM	E2211-02	Specification for relationship between a person and a supplier of an electronic personal health record
ASTM	E2185-02	Standard specification for clinical XML DTDs in healthcare
ASTM	E2085-00a	Standard guide on security framework for healthcare information
ASTM	E2117-00	Standard guide for identification and establishment of a quality assurance program for medical transcription
ASTM	E1986-98	Standard guide for information access privileges to health information
ASTM	E1987-98	Standard guide for individual rights regarding health information
ASTM	E2084-00	Standard Specification for Authentication of Healthcare Information Using Digital Signatures
CEN	ENV13734	VITAL
CEN	EN12052	MEDICOM
CEN	ENV1064	Computer-assisted electrocardiography
CEN	CR14300	Interoperability of healthcare multimedia report systems
CEN	CR12069	Profiles for medical image interchange
CEN	ENV12388	Algorithm for Digital Signature Services in Health Care
CEN	ENV13608	Security for healthcare communication
CEN	ENV12251	Management and security of authentication by passwords
CEN	ENV13939	Medical Data Interchange: HIS/RIS-PACS and HIS/RIS
CEN	ENV13735	Interoperability of patient connected medical devices
CEN	ENV13607	Messages for the exchange of information on medicine prescriptions

CEN	ENV13606	Electronic healthcare record communication
CEN	ENV12967	Healthcare Information System Architecture (HISA)
CEN	ENV12612	Messages for the exchange of healthcare administrative information
CEN	ENV12537	Registration of information objects used for EDI in healthcare
CEN	ENV12443	Healthcare Information Framework (HIF)
CEN	ENV12018	Identification, administrative, and common clinical data structure for ICDs
CEN	env_12017	Medical Informatics Vocabulary (MIVoc)
CEN	ENV1613	Messages for exchange of laboratory information
CEN	ENV12264	Categorical structures of systems of concepts - Model for representation of semantics
CEN	ENV12381	Time Standards for Healthcare Specific Problems
CEN	ENV12538	Messages for Patient Referral and Discharge
CEN	ENV12539	Request and Report Messages for Diagnostic Services Departments
FDA		63 FR 64998
HL7	CCOWV1.5	Clinical Context Object Workgroup Version 1.5
IEEE	IEEE 1073.5.x	Point-of-care medical device communication
IEEE	IEEE 1073.2.1.2	Point-of-care medical device communication – Application Profiles – MIB Elements
IEEE	IEEE 1073.3.2	Medical Device Communications – Transport Profile – IrDA Based – Cable Connected
ISO	DTR16056	Interoperability of Telehealth Systems and Networks
ISO	ISO9241	Ergonomics requirements for office work with visual display terminals
ISO	ISO18812	Clinical analyser interfaces to laboratory information systems

ISO	ISO11073-20301	Point-of-care medical device communication – Application profile – Optional package, remote control
ISO	ISO/TR 18307	Interoperability and compatibility in messaging and communication standards -- Key characteristics
JAHIS		MDS A 0001 - 0017
NEMA	DICOM 3.0 2004	Digital Imaging and Communications in Medicine
Regenstrief Institute	LOINC	Logical Observation Identifiers Names and Codes

Name	Digital Imaging and Communications in Medicine
Brief name	DICOM
Organization	NEMA
Url	http://medical.nema.org/dicom/2003.html
Descriptions	DICOM (Digital Imaging and Communications in Medicine) defines the coding of medical images, the protocols of interchange between both sides and a security policy to hide information from third people.
Used_in	Computer tomography, image archives, telediagnostic, EEG, ECG
Category	Imaging
Others	DICOM 3.0 has added waveform support to allow EEG and ECG interchanges. Website of Reference : http://www.dclunie.com

Name	VITAL
Brief name	ENV 13734
Organization	CEN
Url	http://www.cs.tut.fi/~varri/vital.html
Descriptions	VITAL specifies a common representation of vital signs information. It is non-device dependent.
Used_in	Medical device communication
Category	User Interfaces
Others	It was specially created for real time services.

Name	MEDICOM
Brief name	EN 12052
Organization	CEN
Url	http://www.cenorm.be/catweb/11.100.htm
Descriptions	This standard is the European contribution to the well-known DICOM.
Used in	Imaging communication (see DICOM)
Category	Imaging
Others	EN 12052 supersedes the former ENV 12052, ENV12623 and ENV12922-1.

Name	Computer-assisted electrocardiography
Brief name	ENV 1064
Organization	CEN
Url	http://www.cenorm.be/catweb/11.040.50.htm
Descriptions	This standard has been taken up worldwide, not only by European countries
Used in	ECG Machines
Category	Medical Device Communications
Others	SCP-ECG (Standard Communication Protocol Computer Assisted Electrocardiography) Partially available at: http://www.ramit.be/scripts/imiawg16/1standard.cfm?ID=25

Name	Interoperability of healthcare multimedia report systems
Brief name	CR 14300
Organization	CEN
Url	http://www.tc251wgiv.nhs.uk/pages/pdf/pt34fwda.pdf
Descriptions	Provides interoperability of healthcare multimedia report systems
Used_in	
Category	Knowledge management
Others	It is not mandatory. It is a recommendation

Name	HL7 Version 2.5
Brief name	HL7 v2.XML
Organization	ANSI
Url	https://www.hl7.org/library/bookstore/
Descriptions	Old HL7 standards were focused on medical information exchange. With the addition of XML support, multimedia capabilities are now reliable
Used_in	Medical information Exchange
Category	Messages
Others	Better support for imaging has been introduced in version 2.5 compared with the previous one.

Name	Profiles for medical image interchange
Brief name	CR 12069
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Provides the set of profiles for a given user scenario. Defines greyscale, colour, volumetric and time sequences.
Used_in	
Category	Imaging
Others	CR 12069 is not a mandatory standard, it is a report.

Name	Algorithm for Digital Signature Services in Health Care
Brief name	ENV 12388
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Defines the algorithm used for digital signatures in medicine information exchange.
Used_in	SEMRIC project
Category	Security
Others	It is required to achieve legal acceptability of the information exchange. UNE-ENV 12388 is the Spanish equivalent standard. SEMRIC: Secure Medical Record Information Communication.

Name	Safety and Security Related Software Quality Standards for Healthcare (SSQS)
Brief name	UNE-CR 13694
Organization	AENOR
Url	http://www.cenorm.be/catweb/35.240.80.htm
Descriptions	Proposes several quality norms related to security and protection in e-Health software.
Used_in	
Category	Security
Others	It associates the system type with the appropriate security measures.

Name	Security for healthcare communication
Brief name	ENV 13608
Organization	CEN
Url	http://www.cenorm.be/catweb/01.040.35.htm
Descriptions	Defines concepts for secure systems. Besides that, secure data objects and secure data channels are adressed.
Used_in	
Category	Security
Others	

Name	Management and security of authentication by passwords
Brief name	ENV 12251
Organization	CEN
Url	http://www.cenorm.be/catweb/35.240.80.htm
Descriptions	It addresses the management and security of authentication by passwords.
Used_in	
Category	Security
Others	Sometimes is mandatory to fulfill legal issues.

Name	Standard Practice for Healthcare Certificate Policy
Brief name	E2212-02 ^a
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2212.htm?E+mystore
Descriptions	Addresses the policy for digital certificates that support the authentication, authorization, confidentiality, integrity, and nonrepudiation requirements of persons and organizations that electronically create or transact health information.
Used_in	
Category	Security
Others	There are 3 types of certificate: one for computerized entities, one for individual person and the last one for clinical individuals.

Name	Standard Specification for Healthcare Document Formats
Brief name	E2184-02
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2184.htm?E+mystore
Descriptions	Defines requirements for the headings, arrangement, and appearance of sections and subsections when used within healthcare documents.
Used_in	
Category	Standards Methodology
Others	Use of this specification in conjunction with XML DTDs and the EHR (Electronic Health Records) would further enhance efficiency in time and cost.

Name	Standard Specification for Transferring Digital Waveform Data Between Independent Computer Systems
Brief name	E1713-95
Organization	ASTM
Url	
Descriptions	This standard defines transferring digital waveform data between independent computer systems.
Used_in	
Category	Messages
Others	It is also an ANSI approved standard. This standard is currently withdrawn!!

Name	Standard Guide for Properties of Electronic Health Records and Record Systems
Brief name	E1762-95 (2003)
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1762.htm?E+mystore
Descriptions	The standard defines a document structure for use by electronic signature mechanisms and the characteristics of the electronic signature itself.
Used_in	
Category	Security
Others	

Name	Interoperability of Telehealth Systems and Networks
Brief name	DTR 16056
Organization	ISO
Url	
Descriptions	Adresses the interoperability of telehealth systems and networks.
Used_in	
Category	Infrastructure architecture
Others	Part 2 of the standard is related to real-time e-Health systems.

Name	Ergonomics requirements for office work with visual display terminals
Brief name	ISO 9241
Organization	ISO
Url	http://www.iso.ch/iso/en/CatalogueListPage.CatalogueList?ICS1=13&ICS2=180
Descriptions	Ergonomics requirements for office work with visual display terminals.
Used_in	Visual display terminals
Category	User interfaces
Others	Its main purpose is to set up a user-friendly environment for general applications (including e-Health)

Name	Medical Data Interchange: HIS/RIS-PACS and HIS/RIS
Brief name	ENV 13939
Organization	CEN
Url	http://www.cenorm.be/catweb/35.240.80.htm
Descriptions	Describes the interchange of sanitary data. HIS/RIS-PACS and HIS/RIS.
Used_in	
Category	Medical Device Communications
Others	

Name	63 FR 64998
Brief name	
Organization	FDA
Url	http://www.fda.gov/cdrh/devadvice/313.html
Descriptions	Proposes a classification for five types of medical image management devices.
Used_in	
Category	Imaging
Others	FDA: US Food and Drugs Administration

Name	Medical record, image, text - information exchange
Brief name	MERIT-9
Organization	JAMI
Url	
Descriptions	It is related to the information exchange between different medical providers.
Used_in	
Category	Image
Others	The previous version used SGML. It is a Japanese standard.

Name	MDS A 0001 - 0017
Brief name	
Organization	JAHIS
Url	
Descriptions	Standard for electronic filing of medical images with security, compatibility and reproducibility.
Used_in	
Category	Imaging
Others	It is a Japanese standard.

Name	Specification for transferring neurophysiologic data between independent computer systems
Brief name	E1467
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1384.htm?E+mystore
Descriptions	Defines how vital signals such as EEG should be stored.
Used_in	
Category	Electronic Health Record
Others	It has not been used in favour of VITAL.

Name	Interoperability of patient connected medical devices
Brief name	ENV 13735
Organization	CEN
Url	http://www.tc251wgiv.nhs.uk/pages/pdf/pt35fwd3.pdf
Descriptions	The standard sets up the basis of interoperability among patient connected devices taking account of VITAL standard to achieve device and signal interoperability.
Used_in	Medical devices
Category	Medical Device Communication
Others	This standard and VITAL standard are designed to work together. Each one specifies a level of interoperability.

Name	Messages for the exchange of information on medicine prescriptions
Brief name	ENV 13607
Organization	CEN
Url	http://www.medis.or.jp/2_kaihatu/iso/iso_tc215_wg5/data/part7_f_en13607.pdf
Descriptions	Specifies a message, called prescription dispensing report message, containing information about prescription items that is sent from the dispensing agent to any other party that is legally permitted to receive such message.
Used_in	
Category	Messages
Others	Also available at: http://www.cenorm.be/catweb/35.240.80.htm

Name	Electronic healthcare record communication
Brief name	ENV 13606
Organization	CEN
Url	http://www.cenorm.be/catweb/35.240.80.htm
Descriptions	Purposes a scheme to define a healthcare record in order the information is recognizable and understandable in different applications.
Used_in	EHR Products
Category	Knowledge management
Others	It is divided in four parts. Part 1: Extended architecture Part 2: Domain term list Part 3: Distribution rules Part 4: Messages for the exchange of information

Name	Healthcare Information System Architecture (HISA)
Brief name	ENV 12967
Organization	CEN
Url	http://www.ehto.org/ikb/standards/centc251/hisa/toc.html
Descriptions	Describes the Healthcare Information System Architecture (HISA), which is a description of the middleware layer used in healthcare.
Used_in	Implementations in Denmark
Category	Infrastructure Architecture
Others	It is described with diagrams.

Name	Messages for the exchange of healthcare administrative information
Brief name	ENV 12612
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Specifies messages for the exchange of healthcare administrative information to provide safe, efficient and effective healthcare delivery within hospitals and in primary care.
Used_in	
Category	Messages
Others	The messages do not cover the reimbursement nor the admission, discharge and transfer processes themselves, but make such processes much easier because of the overall availability of registration and identification data. More Info at: http://www.ramit.be/

Name	Registration of information objects used for EDI in healthcare
Brief name	ENV 12537
Organization	CEN
Url	http://www.cenorm.be/catweb/35.240.70.htm
Descriptions	Defines the registration of information objects used for EDI in healthcare for the purpose of information interchange related to healthcare.
Used_in	
Category	Terminology
Others	It has two parts. Part 1: The Register Part 2: Procedures for the registration of information objects used for electronic data interchange (EDI) in healthcare

Name	Healthcare Information Framework (HIF)
Brief name	ENV 12443
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Creates a basic framework to guide healthcare informatics developers. It is a first step in standardising the architectures that will support the latest approaches to the delivery of computer systems such as are required to provide the global information
Used_in	
Category	Infrastructure Architecture
Others	

Name	Identification, administrative, and common clinical data structure for ICDs
Brief name	ENV 12018
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	This standard proposes a standardised framework for data structures used with respect to Intermittently Connected Devices (ICDs).
Used_in	
Category	Infrastructure architecture
Others	An ICD is a device that stores and transmits person related data in such a fashion that the originator of the information may not receive confirmation of receipt by the recipient. Overview info available at: http://www.ramit.be/scripts/imiawg16/1standard

Name	Medical Informatics Vocabulary (MIVoc)
Brief name	ENV 12017
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Defines the Medical Informatics Vocabulary, which is a foundation for the development of a vocabulary of terms used in Medical Informatics.
Used_in	
Category	Terminology
Others	

Name	Messages for exchange of laboratory information
Brief name	ENV 1613
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Provides a complete implementable specification of the laboratory messages by implementation guidelines to supplement the message difinitions. It also provides comprehensive data and structured tables.
Used_in	
Category	Messages
Others	These coding schemes are commonly used to provide precise and unambiguous representation of the data

Name	Point-of-care medical device communication
Brief name	IEEE 1073.5.x
Organization	IEEE
Url	
Descriptions	Efforts are underway to add standards for enabling internetworking of medical devices across a LAN/WAN.
Used_in	
Category	Medical Device Communication
Others	It is not a standard, it is a serie of standards that will be published soon. More info available at: http://www.ieee1073.org/standards/standards-at-a-glance/standardsataglace.html

Name	Point-of-care medical device communication – Application profile – Optional package, remote control
Brief name	ISO 11073-20301
Organization	ISO
Url	
Descriptions	Describes an optional application profile optional packages for remote control.
Used_in	
Category	Medical Device Communication
Others	Some functions are similar or complement the european standard ENV13735.

Name	Point-of-care medical device communication – Application Profiles – MIB Elements
Brief name	IEEE 1073.2.1.2
Organization	IEEE
Url	
Descriptions	MIB Element definitions from the revised DIM standard
Used_in	
Category	Medical Device Communication
Others	More information at: http://www.ieee1073.org/standards/standards-at-a-glance/standardsataglance.html

Name	Medical Device Communications – Transport Profile – IrDA Based – Cable Connected
Brief name	IEEE 1073.3.2
Organization	IEEE
Url	http://standards.ieee.org/catalog/olis/meddev.html
Descriptions	Describes the IrDA-based, RS-232, cable connected transport between devices connectivity. It also set up the basis for firmware upgrades for medical devices.
Used_in	Medical devices
Category	Medical Device Communication
Others	This new transport profile offers a key advantage in fostering implementation and adoption of the IEEE 1073 Medical Information Bus Standards. More info at: http://www.ieee1073.org/standards/11073-30200/11073-30200.html

Name	Categorical structures of systems of concepts - Model for representation of semantics
Brief name	ENV 12264
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	The standard provides the vocabulary and the guidelines to describe the categorial structure of a concept system: the structure consists in practice of a list of involved categories with reference to the available authoritative sources for detailed value
Used_in	
Category	Terminology
Others	Medical Informatics deals with a great number of large, overlapping coding systems that are facing each other and conflicting in the coming Integrated Healthcare Information Environment. This standard tries to solve these conflicts.

Name	Time Standards for Healthcare Specific Problems
Brief name	ENV 12381
Organization	CEN
Url	http://www.cenorm.be/catweb/11.020.htm
Descriptions	Provides a set of basic entities, with precisely defined properties and interrelationships among them, that is sufficient to allow an unambiguous representation of time-related expressions.
Used_in	
Category	Terminology
Others	

Name	Messages for Patient Referral and Discharge
Brief name	ENV 12538
Organization	CEN
Url	http://www.cenorm.be/catweb/35.240.70.htm
Descriptions	It refers to referral and discharge but also covers the request for specialist services and the reports by the specialist service provider, including clinic letters and discharge summaries.
Used_in	
Category	Messages
Others	Graphical or image information that forms part of a request for or report of a specialist healthcare service is excluded.

Name	Request and Report Messages for Diagnostic Services Departments
Brief name	ENV 12539
Organization	CEN
Url	http://www.cenorm.be/catweb/11.040.50.htm
Descriptions	It provides the description of the scope of the messages and its functionality and implementation guidelines for different scenarios.
Used_in	X-rays, CAT, NMR, ultrasound scans, ECGs, lung-function tests, anatomic pathology and nuclear medicine
Category	Messages
Others	The scope is limited to character-based messages, therefore is not related to multimedia.

Name	Standard guide for description of reservation/registration-admission, discharge, transfer systems for Electronic Health Record (EHR) systems
Brief name	E1239-00
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1239.htm?L+mystore+qviz5936+1085659001
Descriptions	This guide identifies the minimum information capabilities needed by an ambulatory care system or a resident facility R-ADT system.
Used_in	
Category	Electronic Health Record
Others	

Name	Standard guide for content and structure of the Electronic Health Record (EHR)
Brief name	E1384-02 ^a
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1384.htm?E+mystore
Descriptions	This guide covers all types of healthcare services, including those given in acute care hospitals, nursing homes, skilled nursing facilities, home healthcare, and specialty care environments as well as ambulatory care.
Used_in	
Category	Electronic Health Record
Others	They apply both to short term contacts (for example, emergency rooms and emergency medical service units) and long term contacts (primary care physicians with long term patients).

Name	Standard guide for view of emergency medical care in the computerized-based patient record
Brief name	E1744-98
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1744.htm?E+mystore
Descriptions	It addresses the identification of the information that is necessary to document emergency medical care in a computerized patient record that is part of a paperless patient record system.
Used_in	
Category	Electronic Health Record
Others	

Name	An object-oriented model for registration, admitting, discharge, and transfer functions in computer-based patient record systems
Brief name	E1715-01
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1715.htm?E+mystore
Descriptions	Details the objects that make up the reservation, registration, admitting, discharge, and transfer functional domain of the computer-based record of care.
Used_in	
Category	Electronic Health Record
Others	It is intended to amplify guide E1239 with an object-oriented focus.

Name	Standard guide for properties of a Universal Healthcare Identifier
Brief name	E1714-00
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1714.htm?E+mystore
Descriptions	This guide covers a set of requirements outlining the properties of a national system creating a universal health care identifier (UHID).
Used_in	
Category	Electronic Health Record
Others	Use of the UHID is expected to be limited to the population of the United States.

Name	Specification for management of the confidentiality and security of dictation, transcription, and transcribed health records
Brief name	E1902-02
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1902.htm?E+mystore
Descriptions	It describes certain steps that shall be taken by those involved in the processes of dictation and transcription of healthcare documentation.
Used_in	
Category	Security
Others	It also seeks to identify certain dictation and transcription practices that may increase the risks of infringing on privacy and violating security of healthcare documentation.

Name	Standard specification for clinical XML DTDs in healthcare
Brief name	E2185-02
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2182.htm?E+mystore
Descriptions	This guide provides a compendium of information for the use of E2183 XML DTDs within health care. This guide describes design considerations, the architecture of the DTDs, and implementing systems using the E2183 DTDs.
Used_in	
Category	Standards Methodology
Others	

Name	Standard guide on security framework for healthcare information
Brief name	E2085-00a
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2085.htm?E+mystore
Descriptions	Describes a framework for the protection of healthcare information. It addresses both storage and transmission of information.
Used_in	
Category	Security
Others	It makes use of well-known security algorithms such as SHA-1, triple-DES and others.

Name	Standard guide for information access privileges to health information
Brief name	E1986-98
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1986.htm?E+mystore
Descriptions	This guide covers the process of granting and maintaining access privileges to health information. It directly addresses the maintenance of confidentiality of personal, provider, and organizational data in the healthcare domain.
Used_in	
Category	Security
Others	

Name	Standard guide for individual rights regarding health information
Brief name	E1987-98
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E1987.htm?E+mystore
Descriptions	This guide outlines the rights of individuals, both patients and providers, regarding health information and recommends procedures for the exercise of those rights.
Used_in	
Category	Knowledge management and Security
Others	This guide is intended to amplify Guide E1869.

Name	Standard Specification for Authentication of Healthcare Information Using Digital Signatures
Brief name	E2084-00
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2084.htm?E+mystore
Descriptions	This specification covers the use of digital signatures to provide authentication of healthcare information, as described in Guide E 1762. It describes how the components of a digital signature system meet the requirements specified in Guide E 1762.
Used_in	
Category	Security
Others	This includes specification of allowable signature and hash algorithms, management of public and private keys, and specific formats for keys, certificates, and signed healthcare documents.

Name	Interoperability and compatibility in messaging and communication standards -- Key characteristics
Brief name	ISO/TR 18307
Organization	ISO
Url	http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=33396
Descriptions	Describes a set of key characteristics to achieve interoperability and compatibility in trusted health information interchange between communicant application systems.
Used_in	
Category	Messages
Others	The key characteristics describe inter-application interoperability needs of the healthcare community, in particular the subject of care, the healthcare professional/caregiver, the healthcare provider organization, its business units and the integrated data

Name	Logical Observation Identifiers Names and Codes
Brief name	LOINC
Organization	Regenstrief Institute
Url	http://aurora.regenstrief.org/doc/HL7/LOINC/loinman1.html
Descriptions	The purpose of the LOINC database is to facilitate the exchange and pooling of results, such as blood hemoglobin, serum potassium, or vital signs, for clinical care, outcomes management, and research.
Used_in	US healthcare framework
Category	Terminology
Others	The Regenstrief Institute provides mapping utility called the Regenstrief LOINC Mapping Assistant (RELMA) to facilitate searches through the LOINC database.

Name	Clinical Context Object Workgroup Version 1.5
Brief name	CCOW V1.5
Organization	HL7
Url	http://www.hl7.org/special/Committees/ccow_sigvi.htm
Descriptions	CCOW V1.0 defined the overall technology-neutral context management architecture (CMA), a core set of data definitions, rules for application user interfaces, and the translation of the CMA to Microsoft's COM/ActiveX technology.
Used_in	
Category	User Interfaces
Others	This version also support technology mapping to SOAP.

Name	Clinical analyser interfaces to laboratory information systems
Brief name	ISO 18812
Organization	ISO
Url	http://www.cenorm.be/catweb/35.240.80.htm
Descriptions	Specifies general messages for electronic information exchange between analytical instruments and laboratory information systems within a clinical laboratory.
Used_in	
Category	Messages and Medical Device Communication
Others	Covers the specification of messages used by communicating parties and the syntax in which they are communicated. It does not cover the transport mechanisms used for the message interchange.

Name	Specification for relationship between a person and a supplier of an electronic personal health record
Brief name	E2211-02
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2211.htm?E+mystore
Descriptions	This specification covers the relationship between a consumer, organization or custodian and a managing organization (such as a web site or other organization).
Used_in	
Category	User Interfaces
Others	This specification will not address personal health records (PCHR) that are created and managed by patients on paper records.

Name	Standard guide for identification and establishment of a quality assurance program for medical transcription
Brief name	E2117-00
Organization	ASTM
Url	http://www.astm.org/cgi-bin/SoftCart.exe/DATABASE.CART/REDLINE_PAGES/E2117.htm?E+mystore
Descriptions	It establishes a quality assurance program for dictation, medical transcription, and related processes. Quality assurance is necessary to ensure the accuracy of healthcare documentation.
Used_in	
Category	Standards Methodology
Others	This guide establishes essential and desirable elements for quality healthcare documentation, but it is not purported to be an exhaustive list.

Name	
Brief name	
Organization	
Url	
Descriptions	
Used_in	
Category	
Others	
Relevance	

Glossary of terms and abbreviations

The Standards Development Organizations assign different codes to the formal deliverables of Standard Documents and to the stages of standards development.

CEN standards:

EN: are the ultimate goal of European Standardization and will be valid as national standards in all CEN countries.

ENV: are established as prospective standards for provisional application in technical fields where the innovation rate is high or where there is an urgent need for guidance and primarily where the safety of persons or goods is not involved. ENVs do not have to be adopted by the members, but they must be announced and made available. CEN/TC251 has adopted a strategy where many work items are first started targeting an ENV which can be approved more rapidly than a full EN. In most cases are ENVs later revised and converted to full ENs.

CR: Informative material related to standardization or existing standards can be published as CEN Reports. CEN/TC 251 has often decided to start a new area of activity by publishing as a CR an informative document outlining principles for coming standardization.

ISO standards:

AWI: Approved Work Item, which is prior to a working draft.

WD: Working draft, which is a preliminary draft for discussion by working group.

CD TR/TS: Committee Draft Technical Report/ Specification, which is a complete draft for vote and technical comment by national bodies.

CDV: Committee Draft for Vote (IEC).

DIS: Draft International Standard.

FCD: Final Committee Draft (JTC1).

DTR: Draft Technical Report.

DTS: Draft Technical Specification, which are already final drafts for vote and editorial comment by national bodies.

FDIS: Final Draft International Standard, which is an intended text for publication for final approval.

ISO TR/TS: ISO Technical Report or Technical Specification, which is an already published document.

Other abbreviations:

XML: eXtended Markup Language

EHR: Electronic Health Record

DICOM: Digital Imaging and Communications in Medicine

NEMA: National Electric and Manufacturers Association

HL7: Health Level 7

CEN: European Committee of Normalization

AENOR: Normalization Spanish Association

ECG: Electrocardiogram

ASTM: American Society for Testing and Materials

ISO: International Organization for Standardization

IEC: International Electrotechnical Commission

JTC 1: Joint Technology Committee 1

LOINC: Logical Observation Identifiers Names and Codes
CCOW: Clinical Context Object Workgroup
CMA: Context Management Architecture
ITU: International Telecommunications Union