

Designation: E2457 - 07

AnAmerican National Standard

# Standard Terminology for Healthcare Informatics<sup>1</sup>

This standard is issued under the fixed designation E2457; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon  $(\varepsilon)$  indicates an editorial change since the last revision or reapproval.

### 1. Scope\*

1.1 This terminology is intended to name and document the principal concepts, and their associated terms, that are utilized in the healthcare information domain and all of its specialized subdomains. It is applicable to all areas of healthcare about which information is kept or utilized. It is intended to complement and utilize those concepts already identified by other national and international standards bodies. It will identify alternate accepted terms for the same concept and its elected term. Its terms are intended to clarify and simplify usage in the dialog and documentation about the concepts, processes and data that are used to schedule, conduct and manage all phases of healthcare. This common usage will improve the quality and management of all facets of healthcare by means of explicit information used in referring to each of these facets. These health informatics terms have been collected here specifically in order to facilitate the consistent use of common concepts in informatics standards development and use throughout healthcare. A separate process from this standard that is described in ISO 15188 will manage the approval of biomedical and healthcare terms.

1.2 This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

### 2. Referenced Documents

- 2.1 ASTM Standards:<sup>2</sup>
- E1239 Practice for Description of Reservation/Registration-Admission, Discharge, Transfer (R-ADT) Systems for Electronic Health Record (EHR) Systems
- E1284 Guide for Construction of a Clinical Nomenclature for Support of Electronic Health Records

- E1384 Practice for Content and Structure of the Electronic Health Record (EHR)
- E1633 Specification for Coded Values Used in the Electronic Health Record
- E1762 Guide for Electronic Authentication of Health Care Information
- E1869 Guide for Confidentiality, Privacy, Access, and Data Security Principles for Health Information Including Electronic Health Records
- E1985 Guide for User Authentication and Authorization
- E1986 Guide for Information Access Privileges to Health Information
- E1987 Guide for Individual Rights Regarding Health Information
- E2087 Specification for Quality Indicators for Controlled Health Vocabularies
- E2147 Specification for Audit and Disclosure Logs for Use in Health Information Systems
- 2.2 CEN Standards:<sup>3</sup>
- EN-12017 Medical Informatics Vocabulary (MIVoc)
- EN-12264 Categorical Structure of Syntax of Concepts— Model for Representation of Semantics (MOSE)
- 2.3 ISO Standards:<sup>4</sup>
- ISO 704 Principles and Methods of Terminology
- ISO/DIS 860 International Harmonization of Concepts and Terms
- ISO/DIS 1087-1 Terminology—Vocabulary—Part 1 Theory and Application
- ISO/DIS 1087-2 Terminology—Vocabulary—Part 2 Computer Applications
- ISO 2382/4 Information Technology—Vocabulary— Organization of Data
- ISO 10241 Terminology—Standards Representation and Layout
- ISO 12200 Terminology—Computer Applications—
   Machine Readable Terminology Interchange Format
   ISO/IEC 12207 Life Cycle Processes
- ISO 12620 Terminology—Computer Applications—Data Categories

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<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> Available from European Committee for Standardization (CEN), 36 rue de Stassart, B-1050, Brussels, Belgium, http://www.cenorm.be.

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



ISO 15188 Project Management Guidelines for Terminology Interchange Format

2.4 Other Documents:

American National Standard Dictionary of Information Technology (ANSDIT) http://www.incits.org

CEN PrENV 11994 Medical Informatics Vocabulary

GALEN Generalized Architecture for Language, Encyclopedias and Nomenclatures in Medicine: Univ. of Manchester IEEE 610.5 Glossary of Data Management

Unified Medical Language System (UMLS) Knowledge Sources National Library of Medicine 7th Experimental Edition January 1996

### 3. Significance and Use

- 3.1 This standard vocabulary is intended to be used as a reference about terms used in standards for healthcare informatics and in general discussions about informatics issues relating to the healthcare sector, including: clinical care, resource management, policy, clinical or health services research or biomedical research in basic or applied areas of science that refer to the healthcare sector. It contains "Elected Terms" rather than the "Preferred" terms used in the terminologic literature. This is a usage coined within the CEN TC-251 community to reflect the fact that there is consensus agreement on the usage of a particular form rather than an imposition. This consensual agreement to usage better reflects the incentives for common usage rather than mandates. Alternate forms (Synonymy) of an elected term exist and are cataloged for the same concept, in accordance with ISO/DIS 1087-1, ISO 704, ISO 12620, and EN-12017, ISO/DIS 860, EN-12264, and ANSDIT.
- 3.2 The system used to classify these terms is in the full context of all of the terminology of biomedicine, as well as about the healthcare system itself as it is used throughout the health domain. It has drawn on the terms used in both EN-12017 and in UMLS for biomedicine (Guide E1284, Specification E1633, ISO 12200, GALEN). The coding scheme described in Section 5 used to represent this classification was developed for this terminology from the Unified Medical Language System documentation produced by the National Library of Medicine.

### 4. Terminology

- 4.1 *Vocabulary about Vocabulary*—This section lists those terms used for vocabulary in this document which do not appear in the above referenced standards; however, the following general terms in ISO/DIS 1087-1 are included for understanding:
  - 4.2 ISO/DIS 1087-1 Terms:

**admitted term**—term accepted as a synonym for a preferred term by an authoritative body.

**designation**—representation of a concept by linguistic or non-linguistic means.

Discussion—In terminologic work, Symbols and Terms are the two designations.

**glossary**—document that contains a list of terms from a subject field and their designations.

**preferred term**—term recommended by an authoritative body. **special language**—language for special purposes.

**technical dictionary**—dictionary of terminologic entries or designation-related information, from one or more specific subject fields.

**term**—designation consisting of one or more words which denote a given concept in a special language (language for special purposes).

**terminology**—set of terms belonging to one special language.

**vocabulary**—technical dictionary that contains designations and definitions from one or more special subject fields.

4.3 Definitions of Terms Specific to This Standard:

candidate term—that form which has been submitted to the reference body for election as that to be used in data interchange and in situations requiring wide understanding but which has not yet achieved that election.

data element—(1) named unit of data that, in some contexts, is considered indivisible and in other contexts may consist of data items; and (2) a named identifier of each of the entities and their attributes that are represented in a database. ANSI X3.172-1990

data item—named component of a data element; usually the smallest component.

ANSI X3.172-1990

data value—instance of a data item. ANSI X3.172-1990

elected term—that form which is rapidly and fully understood as representing the defined concept and which has been agreed by consensus that it will stand for that concept in the wide majority of situations where that concept is noted.

**lexicon**—collection of terms used in a particular profession or subject area. d-52557bc929b4/astm-e2457-07

4.4 Acronyms:

**ANSI HITSP**—American National Standards Institute Health Information Technology Standards Panel

**CEN**—Committee European Normalization

HL7—Health Level Seven

ISO—International Standards Organization

SDO—Standards Developer Organization

### 5. Classification Schema

5.1 The rationale for placement of healthcare informatics terms within an existing schema involves combination of concepts given in EN-12017 with that of the Semantic Types used in UMLS (v-7, p. 30) by adding groups and subgroups from EN-12017 to new sub categories in UMLS. The locations of these insertions are shown as follows:

EN 12017 classification shown in ( ) Extensions to UMLS Semantic Type in **Bold** 

A. Entity

- 2. Conceptual entity
- 1. Idea or Concept
- 2. Finding

- 3. Organism Attribute
- 4. Intellectual Product
- 5. Language
- 6. Occupation or Discipline
- 1. Biomedicine Occupation or Discipline
- 2. Professional, Service, Administrative, Agricultural or Manufacturing Occupation
- 7. Organization (1.2.3)
- 1. Healthcare related organization
- 1. Healthcare-delivery organization (1.2.3.1)
- 2. Issuing organization (1.2.3.2)
- 3. Registration authority (1.2.3.3)
- 4. Sponsoring authority (1.2.3.4)
- 5. Healthcare Facility
- 2. Professional Society
- 3. Self-help or relief organization
- 4. Healthcare party (1.2.4)
- 1. Laboratory service provider (1.2.4.1)
- 2. Laboratory service requester (1.2.4.2)
- 3. Subject of Investigation (1.2.4.3)
- 4. Consent (1.2.4.4)
- 5. Healthcare accountability (1.2.5)
- 1. Contract
- 2. Management
- 3. Professional License
- 6. Healthcare Enterprise (1.2.7.1)
- 1. Healthcare enterprise constituencies (1.2.7.1.1)
- 2. Healthcare enterprise dimensions (1.2.7.1.2)
- 3. Healthcare enterprise view (1.2.7.1.3)
- 7. Organizational policies (1.2.7.2)
- 8. Organizational strategies (1.2.7.3)
- 8. Group attribute
- 9. Group
- 1. Professional or Occupational Group
- 1. Healthcare Players (1.2)
  - 1. Healthcare professionals (1.2.2)
  - 1. Healthcare practitioner (1.2.2.1)
  - 2. Healthcare workers
- 2. Population
- 3. Family
- 4. Age 5. Patient or Disabled Group
- 1. Individual Patient
- 10. Resources (1.3)
- 1. Healthcare Informatics (1.3.1)
- 1. Health Information Technology (1.3.1.1)
  - 1. Health Information Technology Components (1.3.1.1.1) 869927b()6.1. Anthropogenic phenomenon 29b4/astm=2457-07
- 2. Healthcare Technology (1.3.2)
  - 1. Health technology components (1.3.2.1)
  - 2. Interventional equipment (1.3.2.2)
  - 3. ECG Devices (1.3.2.3)
  - 4. Safety (1.3.2.4)
- 3. Healthcare System/Setting
- 11. Informatics (2.)
- 1. Informatics Basics (2.1)
- 1. Terminology (2.1.1)
- 1. Concept (2.1.1.1)
- 1. Concept Type (2.1.1.1.1)
- 2. Concept System (2.1.1.1.2)
- 3. Composite Concept (2.1.1.1.3)
- 4. Type of Modifier (2.1.1.1.4)
- 2. Characteristic (2.1.1.2)
- 3. Term (2.1.1.3)
- 4. Object (2.1.1.4)
- 2. Modelling (2.1.2)

  - 1. Information Domain (2.1.2.1)
  - 2. Functional Domain (2.1.2.2)
  - 3. View (2.1.2.3)
- 4. Modeling Technique (2.1.2.4)
- 2. Information Systems (2.2)
- 1. Information System (2.2.1)
- 2. Information (2.2.2)
- 3. Data Security (2.2.3)
  - 1. Confidentiality (2.2.3.1)
  - 2. Privacy (2.2.3.2)
  - 3. Cryptography (2.2.3.3)
- 4. Access Control (2.2.3.4)
- 5. Data Availability (2.2.3.5)

- 6. Data Integrity (2.2.3.6)
- 7. Security Audit (2.2.3.7)
- 8. Security Policy (2.2.3.8)
- 9. Threat (2.2.3.9)
- 10. Physical Security (2.2.3.10)
- 3. Processes (2.3)
- 1. Data access (2.3.1)
- 2. Imaging (2.3.2)
- 3. Communication (2.3.3)
- 4. Measurement (2.3.4)
- 4. Devices (2.4)
- 1. Intermittently Connected Device (2.4.1)
- 2. Healthcare Person Device (2.4.2)
- 3. Electronic Healthcare Cards (2.4.3)
- 5. Data (2.5)
- 1. Data types (2.5.1)
- 2. Data structures (2.5.2)
- 3. Codes (2.5.3)
- 4. Record (2.5.4)
- 1. Healthcare record (2.5.4.1)
- 5. Register (2.5.5)
- 6. Healthcare statistics (2.5.6)
- 7. ECG Data (2.5.7)
- B. Event
- 1. Activity
- 3. Occupational Activity
- 1. Healthcare Activity (1.1)
- 1. Healthcare Service (1.1.1)
- 1. Diagnostic Procedure (1.1.1.1)
  - 1. Investigation (1.1.1.1.1)
  - 1. Laboratory Examination (1.1.1.1.1.1)
- 2. Therapeutic/Preventive Procedure
- 1. Surgical Deed (1.1.1.2)
- 2. Nursing Procedure (1.1.1.3)
- 2. Nursing Procedure (\*
  3. Administrative service
  - 4. Clinical Service
  - 2. Ancillary Service (1.1.1.2)
- 3. Telemedicine (1.1.1.3)
  - 4. Healthcare Scheduling/appointing (1.1.2)
  - 5. Clinical Orders (1.1.3)
  - 1. Laboratory service order (1.1.3.1)
  - 6. Quality assurance (1.1.4)
  - 2. Research Activity
  - 3. Governmental or Regulatory Activity
  - 4. Educational Activity
  - 2. Phenomenon or Process

  - 2. Natural phenomenon
  - 1. Biologic Function
  - 1. Physiologic Function 2. Pathologic Function

## 6. Terms and Definitions: Current Elected Terms

6.1 Annex A1 contains the entries currently elected by the subcommittees of ASTM Technical Committee E31 and submitted to other SDOs of the ANSI HITSP. Terms not fully agreed upon by these bodies are also listed in the next section on candidate terms. This Elected term list is prepared according to ISO 10241. A number of terms come from the CEN Standard EN-12017 MIVOC.

### 7. Terms and Definitions: Candidate Terms

7.1 Annex A2 includes that list of candidate terms (without definitions) for which full consensus has not yet been reached but which are widely used either in the elected or alternate forms. Continuing work is underway to elect the form which is intended to be that widely recognized for the defined concept. Upon election, the term entry (with elected definition) will be transferred to Annex A1. Terms are further classified in Appendix X1 by the taxonomy given in 4.1.

### 8. Keywords

8.1 healthcare information domain; health informatics; terminology; vocabulary

### **ANNEXES**

(Mandatory Information)

### A1. ELECTED TERMS

#### ACCESS

(1) Possibility to retrieve medical information stored in a database or remote application. Access should be limited by security authentication mechanisms. (2) The provision of an opportunity to approach, inspect, review, retrieve, store, communicate with or make use of health information system resources (for example, hardware, software, systems or structure) or patient identifiable data and information, or both. [E1869]
Source 3

### ACCESS CONTROL

Prevention of use of a resource by unidentified or unauthorized entities or both. [adapted from CEN/TC-251 directory]

#### ACCESS CONTROL LIST

Piece of access control information, associated with a target, which specifies the initiators who may access some target. Source 16

#### **ACCOUNTABILITY**

Property that ensures that actions of an entity may be traced uniquely to the entity. [ISO 7498-2] Authority under which an action (a function, an activity, a task) is to be performed. It represents a relationship between two agents, where one agent is responsible to another for the completion of some action under the authority of the other, that authorizes the first in the carrying out of the action. [PT010 (1993)]

Source 2

### ACCREDITATION

Formal process by which an agency or organization evaluates and recognizes an institution or program of study as meeting certain predetermined criteria or standards.

Source 6

### ACQUIRING CARDIOGRAPH

Cardiograph recording the original ECG signal. [ENV 0164]

Source 2

### ASTM E2457-07

### ACTIVITY standards.iteh.ai/catalog/standards/sist/8a28fa99-7b06-4a95-accd-52557bc929b4/astm-e2457-07

Activity is to be distinguished from the performer of the activity. Thus an activity is an answer to What? questions, and takes the form of a verb. [ANSAPT0101] Action for the creation, the acquisition or furnishing of a "product", e.g. register a patient. [CEN Global Glossary] Source 2

### ADDITIONAL DIAGNOSIS

Any diagnosis, other than the principal diagnosis, that describes a condition for which a patient receives treatment or which the physician considers of sufficient significance to warrant inclusion for investigative medical studies.

Source 6

### ADMISSION

(1) Formal acceptance by a hospital of a patient who is to be provided with room, board, and continuous nursing services in an area of the hospital where patients stay overnight. [E1239] (2) Initiation of a single patient encounter or visit. Note: An admission has the following potential characteristics: (a) assignment of a unique identifier; (b) relation to a specific encounter type (provision of healthcare services to an inpatient); (c) representation of a unit of administrative, accounting, financial or statistical significance or combinations thereof; (d) accordance to business rules; (e) relation to point of entry; (f) being based on a physician's order:

(g) relation to specific medical problem; (h) relation to engagement of specific health care services; and (i) assignment of a fixed location at the time of admission (for example, examination room, inpatient room/bed). [adapted from ANSI HISPP comments on CEN TC 251/93-147 MIVoc]

### ADMISSION-DISCHARGE-TRANSFER SUBSYSTEM

Subsystem of a HOSPITAL INFORMATION SYSTEM that provides the function of PATIENT admission, discharge, and transfer, and maintains the hospital CENSUS. [adapted from Shortliffe]

Source 2

### ADMITTING DIAGNOSIS

Statement of the provisional condition given as the basis for admission to the hospital for study. Source 7

### AGENT

Description of the responsibilities of the individuals and organizational units within the healthcare enterprise. An agent must always be an appropriate answer to Who? questions. [ANSA PT0101(1993)]



#### Source 2

#### AI FRT

Written or acoustic signals to announce the arrival of messages and results, and to avoid possible undesirable situations, such as contradictions, conflicts erroneous entry, tasks that are not performed in time or exceptional results. A passive alert will appear on a screen in the form of a message. An active alert, calls for immediate attention, and the appropriate person is immediately notified by beeper.

### ALERTING SYSTEM

Computer based system that automatically generates alerts as a consequence of monitoring or other information processing activities. cf: CONSULTATION SYSTEM, CRITIQUING SYSTEM. [adapted from Source 2]

Source 2

### AMBULATORY CARE

Services provided to patients who are neither hospitalized nor institutionalized as INPATIENTS in a healthcare facility which is the site of the encounter. Source 7

#### AMBULATORY CARE CLINIC

An entity or unit of a medical or dental treatment facility that is organized and staffed to provide medical treatment in a particular specialty and/or subspecialty; and holds regular hours in a designated place.

Source 6

### AMBULATORY CARE INFORMATION SYSTEM

Information system to deal with the care of OUTPATIENTS.

Source 2

#### AMBULATORY SURGERY CENTER

Free-standing or hospital based facility offering elective surgical procedures on patients who are admitted and discharged from the facility on the day of the surgery.

Source 7

### AMBULATORY SURGERY PROGRAM

Facility program for the performance of elective surgical procedures on patients who are admitted and discharged on the day of surgery.

Source 6

#### ANALYTIC FORM

Structured representation of a composite concept as a composition of concepts using semantic links. [PT003 (1993)]

Source 2

### ANCILLARY SERVICE

Service in a hospital or healthcare facility, which is not part of the healthcare domain.

Source 2

### ANCILLARY SERVICE VISIT

Appearance of an OUTPATIENT in a unit of a HOSPITAL or outpatient facility to receive service(s), tests, or procedures; it is ordinarily not counted as an encounter.

Source 7/standards.iteh.ai/catalog/standards/sist/8a28fa99-7b06-4a95-accd-52557bc929b4/astm-e2457-0

### ANCILLARY SERVICES INFORMATION SYSTEM

Information system designed to provide support for the management, monitoring, planning, scheduling and request processing of ANCILLARY SERVICE functions. [adapted from the CEN TC 251 directory]

Source 2

### APPOINTMENT SCHEDULING SYSTEM

System for planning of appointments between resources, such as clinicians and facilities, and PATIENTs. Note: Used in order to minimize waiting time, prioritize appointments and to optimize the utilization of resources. [adapted from the CEN TC 251 directory]

Source 2

### ARDEN SYNTAX

A syntax designed to facilitate the sharing of medical knowledge bases. In its present form the focus is on knowledge that can be represented as a set of independent modules that can provide therapeutic suggestions, alerts, diagnosis scores, etc. Each module is called a Medical Logic Module (MLM) which is made up of slots grouped into maintenance, library, and knowledge categories. [from Hripcsak etal 1990] The syntax has provisions for querying clinical databases and representing time. The syntax is based largely on HELP and Regenstrief Medical Record systems. The Arden Syntax is named after the Arden Homestead in Harriman, NY, where a meeting was held to address the sharing of medical knowledge.

Source 3

### ASN.1 ENCODING RULES

Rules specifying the representation during transfer of the value of any ASN.1 type. [ISO 8824]

Source 2

### ASYMMETRIC AUTHENTICATION METHOD

Method for demonstrating knowledge of a secret in which not all authentication information is shared by both entities. [ISO/IEC 10118-2] [PT009 (1994)] Source 2

ATTENDING PHYSICIAN



The physician with defined clinical privileges who has primary responsibility for diagnosis and treatment of the patient. A Physician with privileges to practice the specialty independently. The physician may have either primary or consulting responsibilities depending on the case. There will always be only one primary physician, however, under very extraordinary circumstances, because of the presence of complex, serious and multiple, but related, medical conditions, a patient may have more than one attending physician providing treatment at the same time.

Source 6

#### **AUDIT LOG**

Record of actions (for example, additions, deletions, changes, queries) performed on data.

Source 17

#### **AUDIT TRAIL**

(1) Record of the resources which were accessed or used or both by whom. Note: This may involve a formal monitoring technique for comparison between the actual use of a medical information system and pre-established criteria. (2) Documentary evidence of monitoring each operation of individuals on health information. [National Research Council 1991] Audit trails may be comprehensive or specific to the individual and information. For example, an audit trail may be a record of all actions taken by anyone on a particularly sensitive file. [OTA 1993]
Source 2

#### **AUTHENTICATE**

To denote authorship of an entry made in a patient's medical or dental record by means of a written signature, identifiable initials, a computer key, or a personally-used rubber stamp; also refers to the process of certifying copies as genuine.

Source 6

### **AUTHENTICATION**

(1) Method to establish security services by means of simple or strong authentication. There are two kinds of authentication: data origin authentication and peer entity authentication. (2) The provision of assurance of the claimed identity of an entity, receiver or object. [E1869, E1762, CPRI]

#### AUTHORIZATION

Mechanism for obtaining consent for use and disclosure of health information. [CPRI, AHIMA] Source 4

#### **AUTHORIZE**

Granting to a user the right of access to specified data and information, a program, a terminal or a process. [E1869] Source 9

### BASE CONCEPT

Concept without characteristics.

Source 2

(https://standards.iteh.ai)

### BED, AVAILABLE

Operating bed not currently assigned to a patient.

Source 6

### BED. OPERATING

Bed that is currently set up and ready in all respects for the care of a patient. It must include supporting space, equipment, and staff to operate under normal circumstances. Excluded are transient patient beds, bassinets, incubators, labor beds and recovery beds.

Source 6/standards.iteh.ai/catalog/standards/sist/8a28fa99-7b06-4a95-accd-52557bc929b4/astm-e2457-07

### BEDSIDE WORKSTATION

Workstation in a PATIENT room (or examination room). Note: It can be associated with a single bed, or several beds. [adapted from RICHE] Source 2

### BED CENSUS

Statistic of bed usage in a hospital at a given time.

Source 2

### **BIRTH CERTIFICATE**

Official record of an individual birth, certified by a physician, and including birth date, place of birth, parentage, and other required identifying data, filed with the local registrar of vital statistics.

Source 6

### RIT

Either of the digits 0 or 1 when used in the pure binary numeration system. [ISO 2382-4]

Source 2

### **BITSTRING TYPE**

Simple type whose distinguished values are an ordered sequence of zero, one or more bits. [ISO 8824]

Source 2

### BOARD-CERTIFIED

Physician or other health professional who has passed an examination given by a professional specialty board and has been certified by that board as specialist in that subject.

Source 6

### **BOOLEAN TYPE**

Simple type with two distinguished values. Possibilities are true or false. [ISO8824] [PT009 (1994)]

Source 2



### **BOUNDARIES**

Set of distinctions which separate the function of one system from another; a barrier separating the functions of two systems.

Source 15

### **CALIBRATION**

Set of operations which establish, under specified conditions, the relationship between values indicated by a measuring instrument or measuring system, or values represented by a material measure or reference material, and the corresponding values of a quantity realized by a reference standard.

Source 3

#### CARE

Management of, responsibility for, or attention to the safety and well-being of another, or other persons.

Source 4

#### CASE MIX

Grouping of PATIENTS according to disease or procedure categories with homogeneous costs, following a scoring system using mean values by hospital, in relation with means obtained from national statistics. [adapted from CEN/TC 251 directory] Categories of patients, classified by disease, procedure, method of payment, or other characteristics, in an institution at any given time, usually measured by counting or aggregating groups of patients sharing one or more characteristics. [from DOD Glossary of Healthcare Terminology]

Source 2

#### **CENSUS**

Statistic of bed usage in a hospital at a given time.

Source 2

#### CERTIFICATION

Process by which governmental or non-governmental agency or association evaluates and recognizes a person who meets pre-determined standards; sometimes used with reference to materials and services. "Certification" is usually applied to individuals and "accreditation" to institutions.

Source 6

### CHANGE-MANAGEMENT VIEW

Change-management View is a level of abstraction corresponding to the main phases of healthcare enterprise model development. [derived from ENV 40 003] [PT010 (1993)]

Source 2

### CHARACTER

Member of a set of elements that is used for the representation, organization or control of data. [ISO 2382-4]

Source 2

### CHARACTER SET

Finite set of different characters that is complete for a given purpose. [ISO 2382-4]

Source 2

### CHIEF OF SERVICE

Member of a hospital staff who is elected or appointed to serve as the medical and/or administrative head of a clinical service.

Source 6

### CLASSIFICATION .....

Systematic placement of things or concepts into categories which share some common attribute, quality, or property. A classification structure is a listing of terms that depict hierarchical structures.

Source 3

### CLINIC

Outpatient facility providing a limited range of healthcare services, and assuming overall medical responsibility for the patients.

Source 7

### CLINIC OUTPATIENT

PATIENT admitted to a clinical service of a hospital for diagnosis or therapy on an ambulatory basis in a formally organized unit of a medical or surgical specialty or subspecialty. The clinic assumes overall medical responsibility for the patient.

Source 8

### CLINICAL DATA CENTERS

All computer-based (and manual) systems which handle and store patient record and heath information, that is, solo practitioners, clinics, hospitals, state departments of health, health maintenance organizations.

Source 9

### CLINICAL DECISION SUPPORT SYSTEM

Computer system designed to help healthcare professionals make clinical decisions. [adapted from Shortliffe]

Source 2

### CLINICAL INFORMATION

Information about a patient, relevant to health or treatment of that patient, that is recorded by, or on behalf of, a healthcare professional data and information collected from the patient or the patient's family by a healthcare practitioner or healthcare organization. A healthcare practitioner's objective measurement or subjective evaluation of a patient's physical or mental state of health; descriptions of an individual's health history and family health history; decision rationale; descriptions of procedures performed; findings; therapeutic interventions; medications prescribed; descriptions of responses to treatment; prognostic statements; and descriptions of socio-economic factors and environmental factors related to a patient's health. [E1869]

CLINICAL INVESTIGATION



Laboratory, physiological, radiological, or other healthcare examination that leads to the production of one or more results. Source 3

### CLINICAL LABORATORY INFORMATION MANAGEMENT SYSTEM

Information system that manages clinical laboratory data to support laboratory management, laboratory data collection and processing, PATIENT care and medical decision making. Note: It may be part of a HOSPITAL INFORMATION SYSTEM, or it may be independent.

Source 2

### CLINICAL OBSERVATION

Clinical information excluding information about treatment and intervention.

Source 3

#### CLINICAL ORDER

Request for a certain procedure to be performed.

Source 2

### **CLINICAL PRIVILEGES**

Permission to provide medical, dental, and other patient care services in the granting institution, within defined limits, based upon the individual's education, professional license, experience, competence, ability, health, and judgment.

Source 6

#### **CLINICAL STATUS**

Description of an individual PATIENT by means of results for a specified set of measurable quantities. The results of the measurements are the coordinates of a sample point of the quality vector in quantity space.

Source 2

#### CLINICIAN

A physician or dentist practitioner normally having admitting privileges and primary responsibility for care of inpatients. Intern and resident physicians and dentists are considered to be clinicians.

Source 6

### CODE MEANING

Element within a coded set. [ISO 2382/4]

Source 2

# iTeh Standards

#### CODING

Activity of using a coding scheme to map from one set of elements to another set of elements. (The products of classification and coding are often used for similar purposes, and sometimes they are considered as the same thing. However, coding and classification are distinct concepts.)

Source 3

### CODE VALUE

Result of applying a coding scheme to a code meaning. [ISO 2382/4]

Source 2

### CODED SET

Set of elements which is mapped onto another set according to a coding scheme. [ISO 2382-4]

Source 2/standards, iteh ai/catalog/standards/sist/8a28fa99-7b06-4a95-accd-52557bc929b4/astm-e2457-07

### CODING

Activity of using a coding scheme to map from one set of elements to another set of elements. (The products of classification and coding are often used for similar purposes, and sometimes they are considered as the same thing. However, coding and classification are distinct concepts.)

Source 3

### CODING SCHEME

Collection of rules that maps the elements of one set onto the elements of another set. [ISO 2382/4]

Source 2

### COMORBIDITY

Preexisting condition on admission that will, because of its presence with a specific diagnosis, prolong the length of stay by at least one day in 75% of the patients.

Source 6

### COMPLICATION

Condition that arises after the beginning of hospital observation and treatment and alters the course of the patient's illness or the medical care required. Source 6

### COMPONENT

Definable part of a system. A "Chunk" of software responsible for performing a set of tasks within a facet of a system's architecture. [Andover Working Group Glossarv]

Source 5

### COMPONENT CONCEPT

Base concept or specifying concept. [PT003 (1993)]

Source 1

### COMPOSITE CONCEPT

Concept with its characteristics. [PT003 (1993)]

Source 1



### COMPUTER ASSISTED DIAGNOSIS

Use of information technology for assisting healthcare professionals. Note: This usually involves a dialogue between a computer system and a clinician. The systems are generally regarded as support systems for clinicians, the final responsibility for decision making resides with the clinician. Source 2

### COMPUTER BASED PATIENT RECORD

HEALTH CARE RECORD stored in electronic format. Note: This framework representing the main healthcare subsystems, their connections, rules, etc. is the basis for the development of information and communication systems.

Source 10

### COMPUTER-ASSISTED INFORMATION SYSTEM

Computerized information system partially based on automatic data processing methods. [Finnish]

Source 2

### COMPUTER-BASED INFORMATION SYSTEM

Computerized information system totally based on automatic data processing methods. [Finnish]

Source 2

#### COMPUTERISED INFORMATION SYSTEM

Information system based on automatic data processing methods. [Finnish]

Source 2

#### CONCEPT MODEL

Statement of vision. It describes a concept's purpose, dimensions, and minimum characteristics. It depicts the boundaries of the concept and intersections with other concepts.

Source 15

#### CONCEPT SYSTEM

Structured set of concepts established according to relations between them, each concept being determined by its position in the set.

Source 2

#### CONCEPT TYPE

Concept that subsumes a set of concepts for a subject field.

Source 2

### CONCEPT TYPE (ESSENTIAL)

Concept type that is recognized as essential to build a concept system in a given field.

Source 2

### CONFIDENTIALITY

(1) Property that information is not made available or disclosed to unauthorized individuals, entities, or processes. [ISO 982] Note: The prevention of the unauthorized disclosure of information. [ISO/IEC 10118-2] (2) Status accorded to data or information indicating that it is sensitive for some reason, and therefore it needs to be protected against theft, disclosure, or improper use, or both, and must be disseminated only to authorized individuals or organizations with approved need to know. [E1869] Private information which is entrusted to another with the confidence that unauthorized disclosure which would be prejudicial to the individual will not occur. [CPRI]

Source 2 /standards, itch ai/catalog/standards/sist/8a28fa99-7h06-4a95-accd-52557hc929h4/astm-e2457-01

### CONSENT

Relation between a Patient and an Agent by which the first gives the authority to the second to carry some procedure (diagnostics, therapeutics) on himself. [PT0101 (1993)]

Source 2

### CONSULTANT

Expert in a specific medical, dental, or other health services field who provides specialized professional advice or services upon request.

Source 6

### CONSULTATION

A deliberation with a specialist concerning the diagnosis or treatment of a patient. To qualify as a consultation, a written report to the requesting healthcare professional is required.

Source 6

### CONSULTATION SYSTEM

cf: ALERTING SYSTEM, CRITIQUING SYSTEM. [adapted from Shortliffe]

Source 2

### CONTRACT

Accountability where a provider is held responsible to a requester for certain activities. [PT010 (1993)]

Source 2

### CONVERSION (OF THE FORM OF A COMPOSITE CONCEPT)

Change in the form of a composite concept using a synthetic form or a different analytic form of the same concept system. [adapted from ISO 2382-6] Source 2

### COORDINATED UNIVERSAL TIME

Time scale maintained by the Bureau International de Heure (international time bureau) that forms the basis of a coordinated dissemination of standard frequencies and time signals. [ISO 8824] [PT009 (1994)]

Source 2



### CORPORATE SECURITY POLICY

Set of laws, rules, and practices that regulate how assets including sensitive information are managed, protected, and distributed within a user organization. [from European ITSEC]

Source 2

### COST BENEFIT ANALYSIS

Analysis of costs and benefits associated with courses of action that is designed to identify the alternative that yields the maximum net benefit. This method is generally used when it is possible to assign monetary values to all relevant benefits and costs.

Source 3

### COST CONTAINMENT

Process of planning so as to keep costs within certain constraints.

Source 3

### COST EFFECTIVENES ANALYSIS

Analysis of alternative courses of action, the objective of which is to identify whether the alternative that yields the maximum effectiveness achievable for a given amount of spending, or the alternative that minimizes the cost of achieving a stipulated level of effectiveness. The method is generally used when it is not possible to assign monetary values to benefits.

Source 3

#### CRITIQUING SYSTEM

Computer system that evaluates and suggests modification for plans or data analyses already formed by a user, [adapted from Shortliffe] Source 2

### CRYPTOGRAPHIC KEY

Parameter used with an algorithm to validate, authenticate, encrypt or decrypt a message. [from ISO 8732]

Source 2

#### CRYPTOGRAPHIC SYSTEM

Collection of transformations from plain text into ciphertext and vice versa, the particular transformation(s) to be used being selected by keys. The transformations are normally defined by a mathematical algorithm. [from ISO/IEC 9594-8]

Source 1

#### DATA AVAILABILITY

Property of (data) being accessible and usable upon demand by an authorized entity. [from ISO 7498-2]

Source 2

### DATA CONFIDENTIALITY

Property of an information system whereby data are available to authorized entities only.

Source 2

### DATA ELEMENT

Combination of one or more data entities that forms a unit or piece of information, such as the Social Security Number, a diagnosis, and address or a medication. [ASTM PS 107]

Source 13

https://standards.iteh.ai/catalog/standards/sist/8a28fa99-7b06-4a95-accd-52557bc929b4/astm-e2457-07

Discrete form of data such as a number or word.

Source 3

### DATA INTEGRITY

Property that information is protected from accidental or malicious alteration.

Source 2

### DATA INTERCHANGE

The ability to exchange application data in a loosely coupled manner between applications that do not have a common architecture, feature set, database, or implementation.

Source 5

### DATA ORIGIN AUTHENTICATION

Corroboration that the source of data is as claimed. [ISO 7498/2]

Source 2

### DATA SECURITY

Property of information consisting of DATA CONFIDENTIALITY and DATA INTEGRITY.

Source 2

### DATABASE SECURITY

Refers to the ability of the system to enforce a security policy governing access, modification, or destruction of information.

Source 17

### DEAD ON ARRIVAL

Patient who expires prior to arrival at a medical treatment facility.

Source 6

### DEATH CERTIFICATE



Official record of individual death, including cause of death certified in accordance with local requirements by a physician and any other data defined by law, filed with the local registrar of vital statistics.

Source 6

### **DECISION SUPPORT SYSTEM**

Any computer-based support of medical, managerial, administrative and financial decisions in health using knowledge bases and/or reference material. (In this sense the term is essentially synonymous with Knowledge-Based Systems, and some users use the term this way in preference the terms Expert System or Knowledge-Based System. For example, a system that uses statistical lookup to provide users with decision support may be regarded as a Decision Support System; therefore, care should be taken in making this identification between the terms.)

Source 3

### **DELIVERY**

Act of giving birth to a liveborn infant or dead fetus or both by manual, instrumental, or surgical means. A delivery may result in a single birth, multiple births, or fetal death (stillbirth)

Source 6

#### DELIVERY ROOM

Special operating room for obstetric delivery and infant resuscitation.

Source 4

#### DEMOGRAPHIC INFORMATION

Information concerning population statistics such as birth date, birth place, sex, residence, etc. Collected and used for healthcare evaluation and planning purposes.

Source 3

#### **DENTAL ASSISTANT**

A person trained to assist a dentist in all phases of dental treatment.

Source 6

### **DENTAL HYGIENIST**

Person who, under the supervision of a dentist, assumes delegated responsibility for providing preventive and therapeutic dental services for patients. Source 6

#### DENTIST

Person qualified by a degree in dental surgery (DDS) or dental medicine (DMD).

Source 6

### **DESIGN VIEW**

Specification of how the Healthcare Enterprise operations are to be performed, that is the actions and processes that are to be performed to achieve the requirements. (derived from [COMOSA]) [PT010 (1993)]

Source 1

### **DIAGNOSIS**

Word or phrase used to identify a disease or problem from which an individual patient suffers or a condition for which the patient needs, seeks, or receives health care. [DOD Glossary of Healthcare Terminology]

### DIAGNOSIS RELATED GROUP

Group of PATIENTS defined using a CASE MIX approach. Note: Originally the approach involved coding with ICD-9-CM and grouping by homogeneous costs and used major diagnosis, length of stay, secondary diagnosis, surgical procedure, age and type of services required. [adapted from CEN/TC-251 directory] Source 2

### DICTIONARY

Structured collection of lexical units with linguistic information about each of them.

Source 3

### DIGITAL SIGNATURE

Data appended to, or a cryptographic transformation of, a data unit that allows a recipient of the data unit to prove the source and integrity of the data unit and protect against forgery, for example, by the recipient. [from ISO 7498-2]

### DIMENSION

Fundamental axis descriptive of a system or its function. A system can be characterized by measuring or evaluating each of its dimensions. Source 15

### DIRECT OBJECT

Essential concept types describing that on which the surgical deed is carried out.

Source 2

### DISCHARGE

(1) Termination of a period of inpatient hospitalization through formal release of the inpatient by the hospital. [E1239] (2) Formal release by a hospital, upon direction of a physician or through the death of the patient, of a patient who no longer requires inpatient care, or of a patient who voluntarily departs the hospital against medical advice. The day of discharge is the day on which the hospital formally terminates hospitalization. [DOD Glossary of Healthcare Terminology] Source 2

### DISCLOSURE

To access, release, transfer, or otherwise divulge health information to any internal or external user or entity other than the individual who is the subject of such information. [E1869]