



Standard Practice for An Object-Oriented Model for Registration, Admitting, Discharge, and Transfer (RADT) Functions in Computer- Based Patient Record Systems¹

This standard is issued under the fixed designation E1715; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice is intended to amplify Practice E1239 and to complement Practice E1384 by detailing the objects that make up the reservation, registration, admitting, discharge, and transfer (RADT) functional domain of the computer-based record of care (CPR). As identified in Practice E1239, this domain is seminal to all patient record and ancillary system functions, including messaging functions used in telecommunications. For example, it is applicable to clinical laboratory information management systems, pharmacy information management systems, and radiology, or other image management, information management systems. The object model terminology is used to be compatible with other national and international standards for healthcare data and information systems engineering or telecommunications standards applied to healthcare data or systems. This practice is intended for those familiar with modeling concepts, system design, and implementation. It is not intended for the general computer user or as an initial introduction to the concepts.

2. Referenced Documents

2.1 ASTM Standards:²

E1238 Specification for Transferring Clinical Observations Between Independent Computer Systems (Withdrawn 2002)³

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)

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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 The last approved version of this historical standard is referenced on www.astm.org.

E1633 Specification for Coded Values Used in the Electronic Health Record

E1639 Guide for Functional Requirements of Clinical Laboratory Information Management Systems (Withdrawn 2002)³

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

F1629 Guide for Establishing Operating Emergency Medical Services and Management Information Systems, or Both

2.2 ANSI Standard:

ANSI X3.172 Dictionary of Information Systems⁴

2.3 IEEE Standard:

IEEE 1157.1 Trial Use Standard for Healthcare Information Interchange—Information Modelling (6 June 1994)⁵

2.4 Other Document:

HL-7 v2.4 Data Communication Standard⁶

3. Terminology

3.1 *Definitions*—General terms are defined in accordance with ANSI X3.172.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *functional domain, n*—that area of activity that encompasses a given function. (HL-7, v2.4)

3.2.2 *healthcare domain, n*—that functional domain encompassing all aspects of the delivery of health care, both preventive and corrective, to patients, and the management of resources enabling that care to be delivered. (HL-7, v2.4)

4. Background

4.1 *Object Representation of RADT Processes*—Practice E1239 provides the experiential background of the functions in RADT. These functions are common to all systems that deal with patient data. The minimal essential data elements for

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

⁵ Available from Institute of Electrical and Electronics Engineers, Inc. (IEEE), 445 Hoes Ln., P.O. Box 1331, Piscataway, NJ 08854-1331, http://www.ieee.org.

⁶ Available from Health Level Seven, 900 Victors Way, Suite 122, Ann Arbor, MI 48108.

RADT were identified and characterized partly in Practice E1239. Table 1 of that guide identifies a logical data structure for the data elements, but it does not relate these elements to constituent “entities” or “objects” in the sense that they are now used in analysis. Entity-relationship modeling is one major technique used (1)⁷ to establish the conceptual “things” and their relationships involved in this overall functional domain. “Objects” (2, 3) is another term for these things, and the object concept involves very specific characteristics associated with a defined object such as encapsulation and inheritance. Common ground exists between entity and object representations of models. However, the object terminology is still evolving into a clearly established dictionary associated with object modeling at the analysis (2), design (3), and implementation (3) levels of information systems engineering.

4.1.1 At the analysis level, which is most relevant to implementation-independent standards creation, the static level is first in importance since it identifies the involved objects and their static characteristics, such as definitions, relationships, and inheritance. Subsequently, the service/messages communication properties constitute the second level of importance, because they specify the dynamics of system behavior. However, messages are more difficult to define since system behavior patterns are more complex. This secondary domain also involves the telecommunications aspects that are the focus of other standards bodies. Because of the distributed and networked architectures of the newest systems, telecommunications may be of prime importance in qualifying the definitions of system behavior identified in Practice E1239. For all of these reasons, it is of special importance to initially establish an object-oriented static model for the RADT functional domain that can be the basis for definitions of healthcare data management and standards setting and serve as a foundation for modeling telecommunications standards.

4.1.2 While this practice was being developed, a joint working group (JWG) on data modeling of the then American National Standards Institute (ANSI) Healthcare Informatics Standards Planning Panel (HISPP), now Health Informatics Standards Board (HISB), began work on a common data model (CDM) for the healthcare information domain. A JWG data modeling convention document (IEEE 1157.1) guides the conventions to be used, and this practice reflects those conventions as they are currently known. It is intended that this practice contribute to establishing the RADT core of the CDM. The exact boundaries of the RADT functional domain have not

yet been agreed on formally. The objects included here are those that involve data generally associated with administrative and demographic functions in patient care but that may also be linked with other functional domains involved with health care.

4.2 *Inclusion of Emergency Medical Systems Functions*—This practice also takes note of the recent work of the emergency medical systems (EMS) standards ASTM Subcommittee F30.03.03 on Data Management Systems in defining the pre-hospital and associated emergency room data (Guide F1629) required for emergency medical service system management. The hospital and emergency room data are a subset of that identified in Practice E1384 and is consistent with the statement of Steen and Dick (4) that EMS data are part of the primary record of care. This concept has already been recognized in several state statutes that are part of the implementation of an injury control plan by the Centers for Disease Control (see Practice E1744). This RADT object model practice extends those data elements already defined in Practice E1384 by associating them with common RADT objects, as defined here, that form the basis for a predictable system behavior for trauma data. The behavior of clinical data will be defined subsequently in following standards.

4.3 *Relationships to Other Systems*—This practice also identifies those objects in the RADT functional domain that are required by clinical laboratory information management systems (CLIMS) (Guide E1639), radiology information systems (RIS), and other ancillary systems. This model also forms the core for a basic ambulatory record system, and specialized variants, in support of clinical specialties in medicine and dentistry. The object models for these ancillary and specialized electronic health record (EHR) systems are defined in other standards that constitute the “family of models” that extend the RADT function.

5. Significance and Use

5.1 *RADT Object Model as a Basis for Communication*—The RADT object model is the first model used to create a common library of consistent entities (objects) and their attributes in the terminology of object analytical models as applied to the healthcare domain. These object models can be used to construct and refine standards relating to health care information and its management. Since the RADT object model underpins the design and implementation of specific systems, it provides the framework for establishing the systematics of managing observations made during health care. The observations recorded during health care not only become the basis for managing an individual’s health care by practitioners but are also used for research and resource management. They define the common language for abstracting and codifying observations. The inconsistency and incompleteness of the data recorded in paper records is well known and has been noted by the Institute of Medicine’s study (4). The ability to build the recommended EHR begins with RADT, as noted in Practice E1239. A more detailed specification of the RADT process and its specific functional domain shall begin with a formal model. Furthermore, following agreement on the initial model, that model shall evolve as knowledge accumulates and the initial view of the healthcare domain extends to other social

⁷ The boldface numbers in parentheses refer to the list of references at the end of the standard.

TABLE 1 Data Element Datatypes

Type	Standard Tag/ Mnemonic
Name	Name
Number	Num
Code	Code
Datetime	Dtm
Signature	Sig
Text	Text
Quantity	Qty

and psychologic processes that link healthcare with other functional domains of society. The management of lifelong cases of care, such as those of birth defects in newborns, will involve interactions with social work and educational functional domains of experience. It has been recognized for some time (5) that a “healthcare team,” in the broader sense, is involved in dealing with these complex cases. The RADT model is the core to linking these functional domains together in a transparent way. For that reason, the object terminology is used to enable the most global view and vernacular that will facilitate communication among technical specialties that participate in managing some aspect of health care or that build systems to manage the required information.

5.2 Common Terminology as a Basis for Education—The use of models and their associated terminology implies that education of the healthcare practitioners shall incorporate this view to a significant extent. While a detailed specification of systems requires extensive lexicons of carefully defined terms, a more understandable terminology shall evolve for the process of educating practitioners during their formal education as well as continuing to educate current practitioners concerning how this new technology can be integrated with their existing practices. This challenge has yet to be met, but the objects and modeling concepts presented here are intended to be named with the most intuitive titles in order to promote clear understanding during their use in instruction. Nevertheless, relating these objects and their properties to everyday practice remains a significant challenge, for both the implementors of systems and educators. The perspectives cataloged here can be used in the creation of system documentation and curricula represented in a variety of media.

6. Graphic Representation

6.1 The graphic representation in Figs. 1-4 of the relationships among the objects depicts the static inheritance properties of the constituent objects. These properties and others, such as definitions, are given in tabular form in Section 7. Graphic depiction provides a more comprehensive overview of the global structure of this functional domain, thus enabling the reader to appreciate all of the parts of the model at a glance. This depiction also aids the reader when probing the specific attributes and other properties of the objects given in the tabular section. There are five object groups/subject areas (2), or subaggregates of objects with certain common characteristics. These relationships are more easily understood graphically. The notation is from Coad and Yourdon (2). Two main concepts are involved. The first, represented by separate lines and arrowheads, is the “is a component of” relationship, which implies the parts of a whole. The second concept, represented

by a branching tree, is the “is a special case of” relationship, which implies encapsulation of the special attributes that differentiate the individual characteristics of a more general object. The combination of these two relationships permits all of the complexities in the static interrelationships of the constituent objects comprising the RADT model to be represented. Instance connections are a weaker form of relationship that have not been included in the basic framework for this model. Instance connections show references to master system tables of context-insensitive entities. These same terms appear in the tabular representation. The sequential application of these relationships, visually from the top down in Figs. 1-4, depict the inheritance properties since the objects later in the sequence of the relationships inherit the attributes from those earlier in the sequence. These concepts are all explained by Coad and Yourdon (2).

7. Tabular Representation

7.1 Tables 1 and 2 and Annex A1 provide the detailed attributes of the objects and should be compared with Table 1 of Practice E1239 and Annex A1 of Practice E1384, which show the integrated logical structure of the computer-based primary record of care. The latest revision of Practice E1384 associates each data element with an index that uniquely identifies its segment location in Annex A1 and provides a definition and references its representation. Certain data elements with coded values have their value sets, which are also identified in that specification by its specific index contained in Practice E1384 and point to Specification E1633. The definitions, mnemonics, and associated attributes of the objects in the RADT object model are given in Table A1.1 of Annex A1 of this practice. The object mnemonics that are used in the construction of standardized short names for the data elements indexed and characterized in Practice E1384 are given as attributes in this practice. A standardized short name begins with the object mnemonic and ends with a datatype substring given in Table 1. The object mnemonics are given in Table 2. Each substring begins with a sequence of uppercase letters followed by a sequence of lowercase letters. The beginning object mnemonic and ending datatype substrings are required. These characterizations provide the static properties of the RADT object model. The operational global implications of the dynamic properties of the RADT functional domain will be detailed in future versions of Practice E1239, while the specific attributes comprising messages involving RADT objects will be specified in other standards, such as Specification E1238, HL-7 v2.4, IEEE 1157.1, and others. The interrelationship of the objects defined here to other objects in ancillary or

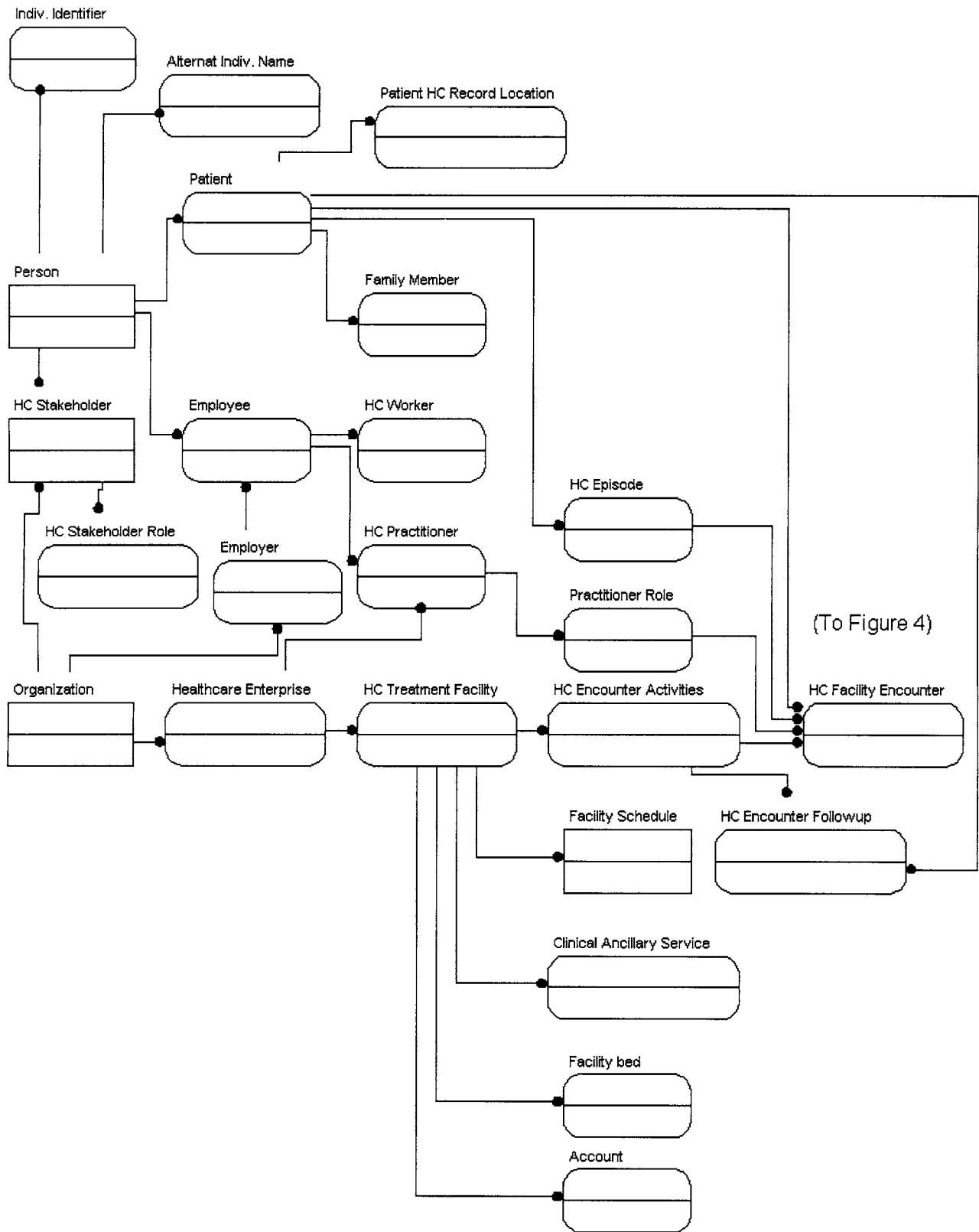


FIG. 1 RADT Object Relationships

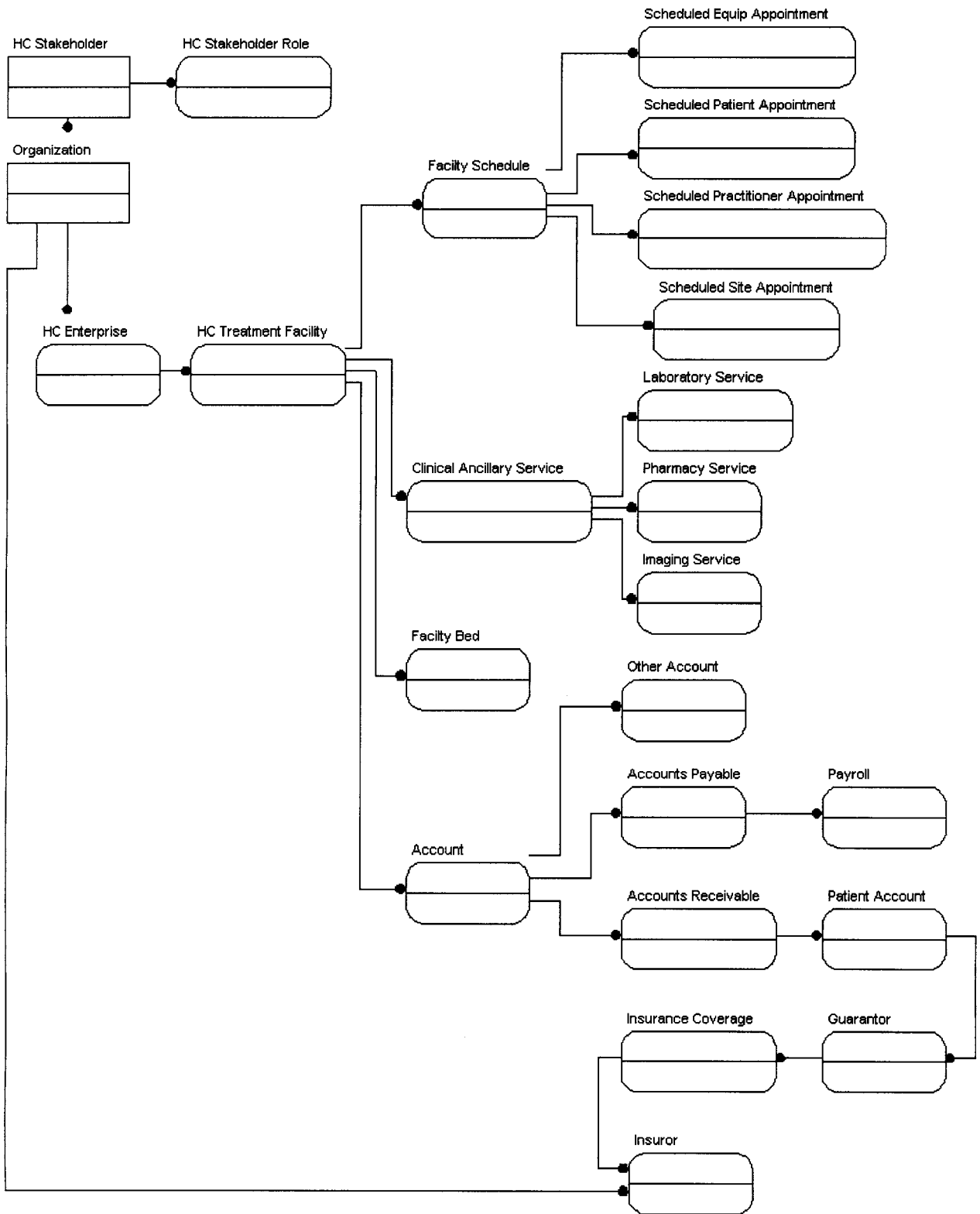


FIG. 2 Fiscal and Facilities Relationships

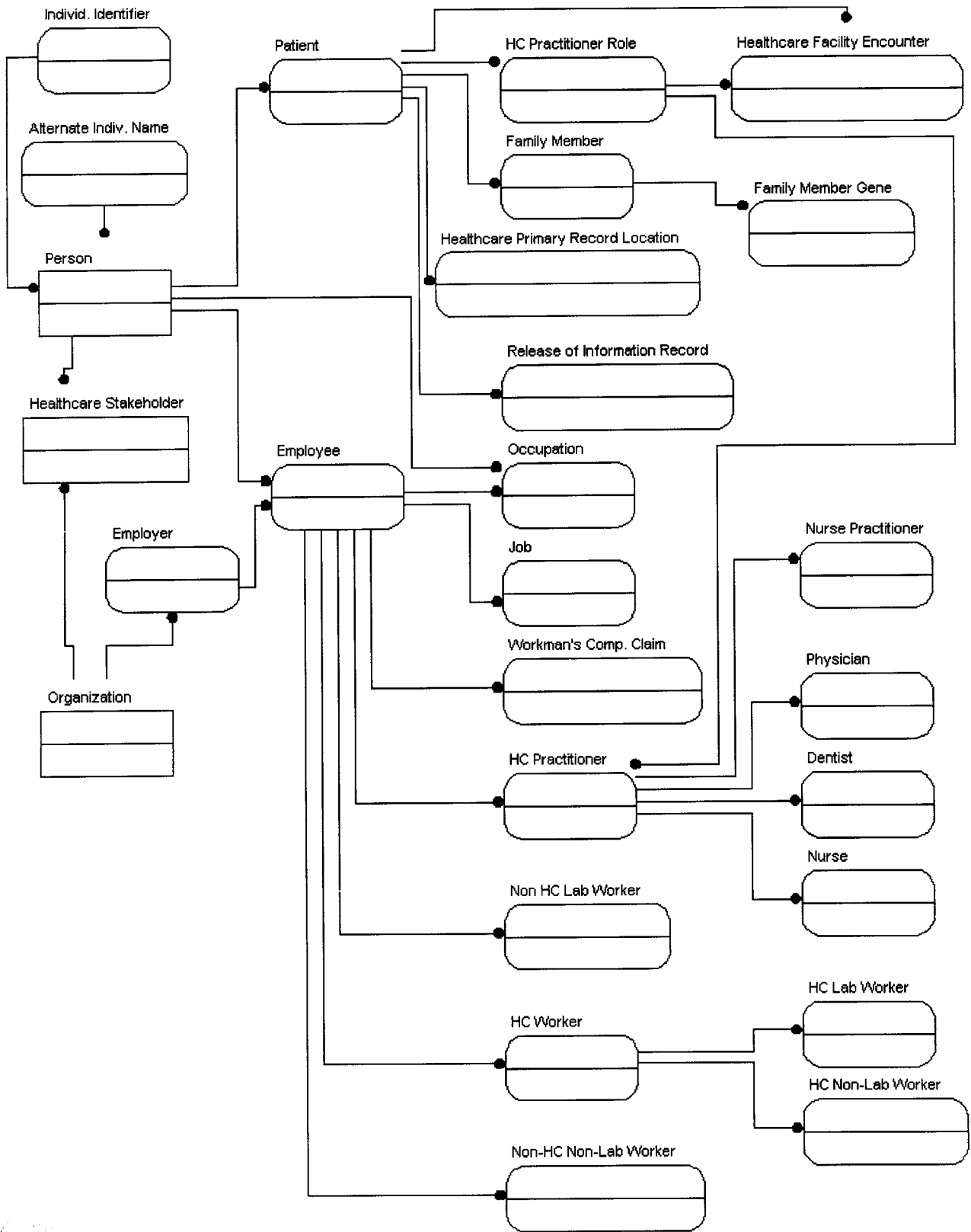


FIG. 3 People and Organization Relationships

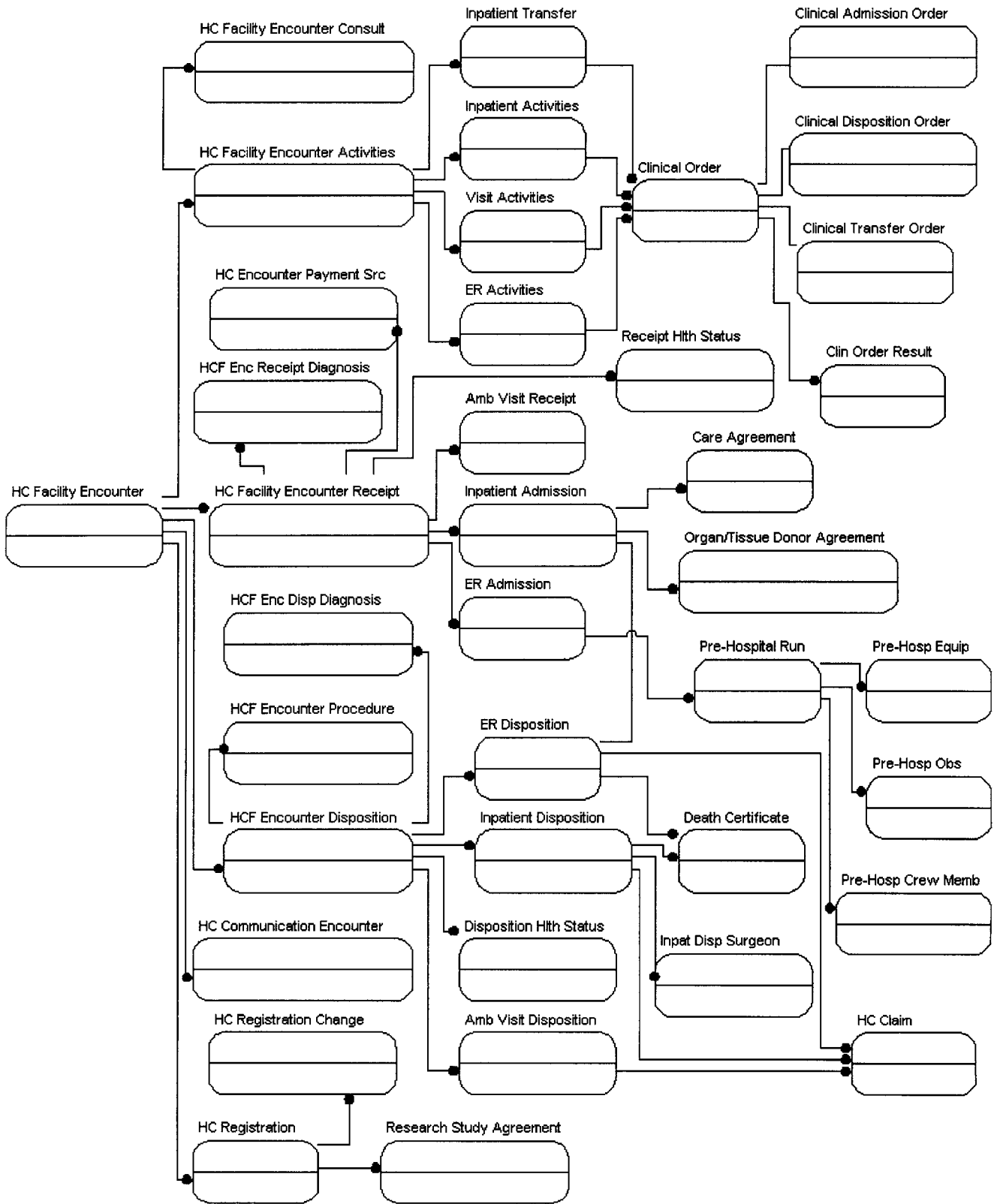


FIG. 4 Clinical Activity and Encounter Relationships

specialized EHR systems will be found in the standards focused on those specialty systems, such as Guide E1639.

TABLE 2 Names of Objects Contained in the RADT Model

Object Name	Tag/Mnemonic
Clinical Activities	
Care agreement	Cagrmnt
Clinical order/service request	Cord
Clinical order result	Cordres
Clinical admission order	CADOrd
Clinical disposition order	CDOrd
Clinical transfer order	CTOrd
Death certificate	Dcert
Emergency room admission	ERAdm
Emergency room activities	ERAct
Emergency room disposition	ERDisp
Facility schedule	FACSch
Healthcare ambulatory visit receipt	HCAVRec
Healthcare ambulatory visit activities	HCAVAct
Healthcare ambulatory visit disposition	HCAVDisp
Healthcare communication encounter	HCCEnc
Healthcare encounter activities	HCEAct
Healthcare encounter followup	HCEFup
Healthcare episode	HCEpi
Healthcare facility encounter	HCFEnc
Healthcare facility encounter activities	HCFEAct
Healthcare facility encounter consult	HCFECon
Healthcare facility encounter disposition	HCFEDisp
Healthcare facility encounter disposition diagnosis	HCFEDispdiag
Healthcare facility encounter disposition health status	HCFEDispthst
Healthcare facility encounter receipt	HCFERec
Healthcare facility encounter receipt diagnosis	HCFERecdiag
Healthcare facility encounter receipt health status	HCFERechthst
Healthcare facility encounter payment source	HCFEPaysrc
Healthcare facility encounter procedure	HCFEProc
Healthcare encounter followup	HCFoll
Healthcare primary record location	HCPriRecLoc
Healthcare registration	HCREg
Healthcare Registration Change	HCREgCh
Healthcare visit	HCVis
Inpatient activities	Iact
Inpatient admission	IAdm
Inpatient transfer	Itrns
Inpatient disposition	Idis
Inpatient disposition surgeon	Idissurg
Organ/tissue donor agreement	Urg
Pre-hospital run	PREHosp
Pre-hospital run crew action	PREHosptract
Pre-hospital run equipment	PREHospeq
Pre-hospital run observation	PREHospobs
Research Study agreement	RSCHAgr
Scheduled patient appointment	SCHPIAppt
Scheduled equipment appointment	SCHSEQAppt
Scheduled practitioner appointment	SCHPRAppt
Scheduled site appointment	SCHSITAppt
Facilities	
Healthcare treatment facility	HCTFac
Facility bed	FACBed
Clin/ancillary service	CANSvc
Laboratory organizational service	CLAB
Pharmacy ancillary service	PHARANSvc
Imaging ancillary service	IMANSvc
Fiscal	
Account	Acc
Account payable	ACCPay
Account receivable	ACCREc
Patient account	ACCPt
Other account	ACCOth
Guarantor	Guar
Healthcare claim	HCClm
Insurer	Insr
Insurance coverage	INSCov
Workman's compensation claim	WCClm
Organization	
Organization	Orgn
Employer/company	Emplr

TABLE 2 Continued

Object Name	Tag/Mnemonic
Healthcare enterprise	HCPrv
Healthcare stakeholder	HCStkh
Healthcare stakeholder role	HCStkhRol
People	
Alternate Individual Name	ALTINam
Person	Pers
Employee/worker	Emply
Family member	FAMMbr
Patient	Pt
Release of information record	REINRcd
Healthcare practitioner	HCPract
Healthcare practitioner role	HCPractRole
Healthcare practitioner, physician	HCPPhy
Healthcare practitioner, dentist	HCPDent
Healthcare practitioner, nurse	HCPNur
Healthcare practitioner, nurse practitioner	HCPNPr
Individual Identifier	IndIdentifier
Job	Job
Occupation	Occ
Professional specialty	ProfSpec
Worker, healthcare	WkrHC
Worker, healthcare, nonlab	WkrHCNonLab
Worker, healthcare, lab	WkrHCLab
Worker, nonhealthcare, lab	WkrNonHCLab
Worker, nonhealthcare, nonlab	WkrNonHCNonLab

8. Explanation of Subject Areas

8.1 *People Subject Area*—This group of objects characterizes the properties of individuals in the RADT functional domain. The top level in this hierarchy is the person object. The generic attributes of all persons are contained in that object. The employee/worker object is included because it encapsulates attributes of the employee properties of not only patients but also those of workers in health care, including those generally skilled in addition to those skilled in ancillary as well as practitioner skills, in order to deal with the occupational illness and injury of these workers in an entirely consistent fashion. The guarantor status of each recipient is thus dealt with in a consistent manner, whether or not the individual works for the healthcare organization. The employee/worker object also inherits from the “organization” subject area because he/she works for an “employer.” The “occupation” object is a component multiple attribute of person objects because it is context insensitive, but “job” objects relate to the “employee/worker” object since their attributes are a function of the work environment, tasks, and potential hazards.

8.2 *Fiscal Subject Area*—This subject area characterizes the most basic properties of the claims and benefits properties. It is included to contain those data needed by the practitioners in devising treatment plans that are within the means of the individual as well as those data that characterize the resources allocated to the staff. It is an initial framework for understanding the management of resources within health care.

8.3 *Organization Subject Area*—The objects in this subject area characterize the general properties of organizations and the responsibilities they have for the individuals they employ, including the elected or mandated benefits and workplace health and safety responsibilities. These properties are inherent in healthcare-providing organizations (Healthcare Enterprises), in addition to their clients to whom they provide services. The “organization” object encapsulates the most general attributes of an organization without employees, while the employer

function is represented by the employer object. A healthcare enterprise in the facilities subject area characterizes the highest level business functions of a healthcare organization while Healthcare T is at the facility level treatment facilities.

8.4 *Facilities Subject Area*—This subject area is intended to characterize the properties of each facility and healthcare worksite, both from the contribution to resource management as well as support of care to individual patients at the time of clinical encounters. The inheritance of these attributes into the primary record of care still requires study. The common designation of specialty and subspecialty subunits of a healthcare provider (“clinical service”) is dependent on a yet-to-be-agreed-on naming rules convention that would define the special cases and their attendant unique attributes. Some commonality in these designations would aid health service and outcomes research that identify the best recommended services for identified populations and problems.

8.5 *Clinical Activities Subject Area*—This subject area is the important core to all aspects of the primary record of care and the supporting ancillary services. The healthcare facility encounter, and the immediate hierarchy of objects under it that characterize the properties of the range of healthcare settings outlined in Practice E1384, provides the partitioning of attributes that enable the characterization of all situations of encounter and settings of care. They encapsulate the attributes of such situations and settings that we enumerate currently but do not restrict any further partitioning or identification of new attributes. All encounters have been recognized to have three major phases, with registration review an implicit fourth component and communication situations still assigned provisionally in the hierarchy.

9. Keywords

9.1 electronic health record (EHR); object modeling; registration, admitting, discharge, and transfer (RADT) ; reservation

ANNEX

(Mandatory Information)

A1. PROPERTIES OF RADT OBJECTS

A1.1 The definitions, mnemonics, and associated attributes of the objects in the RADT object model are given in [Table A1.1](#).

TABLE A1.1 Properties of RADT Objects

General Subject/Object Group: Clinical Activities	
Care Agreement	<p>Object and Class</p> <p>Relationships:</p> <p>Is a component of: inpatient admission</p> <p>Inherits from:</p> <p>Inpatient admission</p> <p>Healthcare facility encounter</p> <p>Healthcare facility encounter receipt</p> <p>Patient</p> <p>Person</p> <p>Healthcare facility encounter</p> <p>Healthcare enterprise</p> <p>Organization</p> <p>Healthcare stakeholder</p> <p>A legal document detailing the conditions that the patient consents to care during residency in this facility.</p> <p>Attributes:</p>

02001	consent signed/admit agreement
02005	patient rights acknowledgment
02010	authority for autopsy
02015	release of body to morgue
02020	consent for videotp/observ
02030	directive to physician
02040	organ donor type
02045	court-ordered care
Clinical Admission Order	<p>Object and Class</p> <p>Relationships: Is a special case of: clinical order/service request Inherits from: Clinical order/service request Healthcare facil encounter Healthcare facil encounter activities Person Patient Healthcare stakeholder Healthcare treatment facility Healthcare enterprise Organization This object characterizes the special properties of the action to induct a patient into a resident status in a healthcare treatment facility.</p> <p>Attributes:</p>
Clinical Disposition Order	<p>Object and Class</p> <p>Relationships: Is a special case of: clinical order/service request Inherits from: Clinical order/service request Person Patient Healthcare facility encounter Healthcare facility encounter activities Healthcare encounter activity Inpatient activities Organization Healthcare provider Healthcare treatment facility Healthcare stakeholder This object characterizes the special properties of the action to release a resident patient from the responsibility of a healthcare treatment facility.</p> <p>Attributes:</p>
Clinical Order Result	<p>Object and Class</p> <p>Relationships: Is a result of: Clinical order/service request Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter activities Clinical order/service request Recorded observation or action that is the direct result of a clinical order/service request</p> <p>Attributes: CLIN order result acknowl datetime CLIN order result shiftcare plan date CLIN order result return flag CLIN order result return status CLIN order result return datetime CLIN order result return acknl by CLIN order result return comment</p>
10001.120	CLIN order result acknowl datetime
10001.120.01	CLIN order result shiftcare plan date
10001.120.02	CLIN order result return flag
10001.120.03	CLIN order result return status
10001.120.04	CLIN order result return datetime
10001.120.05	CLIN order result return acknl by
10001.120.06	CLIN order result return comment
Clinical Order/Service Request	<p>Class</p> <p>Relationships: Is a component of: emergency room activities Is a component of: healthcare ambulatory visit activities Is a component of: inpatient activities Inherits from: Person Patient Healthcare encounter activity Healthcare treatment facility Healthcare enterprise Organization Healthcare facility encounter Healthcare facility encounter activities Inpatient activities</p>

This object encompasses the general properties of a clinical action message, or “clinical order.” It characterizes the properties common to all types of clinical orders by identifying the addressee, subject, circumstances, and control properties of the action ordered. It does not include those special properties of the addressee specialty.

Attributes:

10001	CLIN order ID number
10001.002	CLIN order patient status
10001.009	CLIN order date-time of order
10001.010	CLIN order type
10001.013	CLIN order action
10001.015	CLIN order priority
10001.017	CLIN order pre-admit status
10001.019	CLIN order origin
10001.021	CLIN order parent order
10001.022	CLIN order multiple seq status
10001.023	CLIN order related orders
10001.025	CLIN order user
10001.027	CLIN order user sig
10001.029	CLIN order nurse ID
10001.031	CLIN order nurse sig
10001.033	CLIN order ordering practitioner name
10001.035	CLIN order ordering practitioner sig
10001.037	CLIN order countersigning practitioner name
10001.039	CLIN order countersigning practitioner sig
10001.041	CLIN order nurse sig needed status
10001.043	CLIN order nurse sig needed datetime
10001.045	CLIN order practitioner sig needed status
10001.047	CLIN order practitioner sig needed datetime
10001.049	CLIN order countersig needed status
10001.051	CLIN order countersig needed by datetime
10001.052	CLIN order discontinued by practitioner name
10001.053	CLIN order discontinued practitioner sig
10001.055	CLIN order confirmation recd datetime
10001.057	CLIN order active/pending flag
10001.059	CLIN order active status
10001.061	CLIN order pending status
10001.063	CLIN order inactive status flag
10001.065	CLIN order start status
10001.067	CLIN order execution frequency
10001.069	CLIN order duration of service
10001.071	CLIN order latest status chg datetime
10001.073	CLIN order reactivation datetime
10001.075	CLIN order req fm ancillary
10001.077	CLIN order ancillary activ datetime
10001.079	CLIN order result expectation datetime
10001.081	CLIN order telephone result flag
10001.083	CLIN order telephone to request destination
10001.085	CLIN order request scheduled flag
10001.087	CLIN order requested appt time
10001.089	CLIN order appt type
10001.091	CLIN order appt transport status
10001.093	CLIN order appt status
10001.095	CLIN order assigned appt time
10001.097	CLIN order health service ordered
10001.099	CLIN order principal problem
10001.100	CLIN order full text
10001.102	CLIN order location of service
10001.104	CLIN order freq ordered SVC
10001.106	CLIN order modify status
10001.108	CLIN order modification reason
10001.110	CLIN order non-modify flag
10001.112	CLIN order instructions
10001.114	CLIN order secondary orders
10001.116	CLIN order message
10001.118	CLIN order date-time completed
10001.123	CLIN order date-time order completed
10001.140	CLIN order Q-A warning datetime
10001.140.1	CLIN order Q-A warning text
10001.140.2	CLIN order Q-A warning disposition
10001.140.3	CLIN order Q-A warn override practitioner
10001.140.4	CLIN order Q-A warn authorized by practitioner
10001.140.5	CLIN order Q-A warning override justification
10001.160	CLIN order Q-A review date
10001.160.01	CLIN order Q-A review event type

Clinical Transfer Order

Object and Class

Relationships:

Is a special case of: clinical order/service request

	<p>Inherits from: Person Patient Healthcare stakeholder Healthcare treatment facility Healthcare enterprise Organization Healthcare facility encounter Healthcare facility encounter activities Inpatient activities Clinical order/service request This object characterizes the special properties of the action to move a resident patient from the responsibility of one organizational component of a healthcare treatment facility to another such component. Attributes:</p>
Death Certificate	<p>Object and Class</p> <p>Relationships: Is a component of: inpatient disposition Is a component of: emergency room disposition Inherits from: Patient Person Healthcare stakeholder The official record of the patient's death. Attributes: date-time of death place of death autopsy done recorder of death date death recorded death certificate no. state death certif recorded cause of death patient's mortuary pref</p>
01220 01225 01227 01230 01235 01240 01245 01250 01255	
Emergency Room Activities	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare facility encounter activities. Inherits from: Healthcare facility encounter activities Patient Person Healthcare facility encounter Healthcare treatment facility Healthcare provider Organization This object contains data that document the events occurring between admission to the emergency department and disposition therefrom. Attributes: clinical order ID no.</p>
10001	
Emergency Room Admission	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare facility encounter receipt Inherits from: Healthcare stakeholder Healthcare episode Patient Person Healthcare facility encounter Healthcare facility encounter receipt Healthcare treatment facility Healthcare provider Organization This object characterizes the formal acceptance of responsibility for emergency care of the patient by the emergency department. Its attributes are the special aspects of a healthcare facility encounter receipt that are the special emergency department properties of this acceptance phase. Attributes: date of injury encounter nature of injury encounter mode of injury encounter loc where injured injury circumstances injury sev score E-R/admitting physician time of triage condition at triage date-time trauma surgeon arrived date-time neurosurgeon arrived</p>
14001.A027 14001.A030 14001.A033 14001.A036 14001.A043 14001.A046 14001.A123 14001.B015 14001.B016 14001.B00061. 14001.B00062.	

Emergency Room Disposition	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare facility encounter disposition</p> <p>Inherits from: Healthcare facility encounter disposition Patient Person Healthcare stakeholder Healthcare facility encounter Healthcare facility encounter disposition Healthcare treatment facility Healthcare enterprise Organization</p> <p>This object characterizes the data that document the outcome of care in the emergency department. The destination and followup of the patient care subsequent to release from the responsibility of the emergency department. If subsequent care is to be regular inpatient care within the facility, the attributes documenting this transfer of responsibility must be consistent with the attributes documenting the inpatient admission object.</p> <p>Attributes:</p>
Facility Schedule	<p>Class</p> <p>Relationships: Is a component of: healthcare treatment facility</p> <p>Inherits from: Healthcare stakeholder Organization Healthcare treatment facility Healthcare enterprise</p> <p>This object characterizes the properties of any healthcare event that will bring together a patient, a practitioner, and a site/equipment for the purposes of a healthcare activity.</p> <p>Attributes:</p>
Healthcare Ambulatory Visit Activities	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare facility encounter activities</p> <p>Inherits from: Healthcare facility encounter Healthcare facility encounter activities Healthcare stakeholder Healthcare treatment facility Patient Person Healthcare provider Organization</p> <p>This object characterizes the activities surrounding a healthcare facility encounter and healthcare ambulatory visit, including the observations made, procedures conducted, treatments planned, and orders entered.</p> <p>Attributes: CLIN order ID no.</p>
10001. Healthcare Ambulatory Visit Disposition	<p>Object and Class</p> <p>Relationships: Is a component of: healthcare facility encounter disposition</p> <p>Inherits from: Healthcare stakeholder Healthcare facility encounter Healthcare facility encounter disposition Healthcare treatment facility Patient Person Healthcare enterprise Organization</p> <p>This object characterizes the concluding actions of a healthcare ambulatory visit by gathering the special properties that summarize the activities or plan the followup actions resulting from the event.</p> <p>Attributes: encounter procedure encounter depart date-time encounter followup action encounter followup status encounter followup target date</p>
14001.F014 14001.F053 14001.F056 14001.F060 14001.F063	
Healthcare Ambulatory Visit Receipt	<p>Object and Class</p> <p>Relationships: Is a component of: healthcare encounter receipt</p> <p>Inherits from: Healthcare stakeholder Healthcare facility encounter Healthcare encounter receipt Healthcare treatment facility</p>

14001.A170 14001.A023 Healthcare Communication Encounter	<p>Patient Person Healthcare provider Organization</p> <p>This object characterizes the circumstances for initiating a healthcare ambulatory visit. Its attributes record the general properties that precipitated the event or surrounded the means by which the patient reached the healthcare facility to receive care.</p> <p>Attributes: encounter/attending physician chief complaint</p>
10001. Healthcare Encounter Activities	<p>Object and Class</p> <p>Relationships: Is a component of: healthcare facility encounter Inherits from: Healthcare stakeholder Patient Person Healthcare facility encounter Healthcare treatment facility Healthcare enterprise Organization</p> <p>This object characterizes a patient encounter by means of any communication medium during which the patient and practitioner are not physically in each other's presence or in which the practitioner directly responsible for care of the patient consults or discusses the patient with another practitioner.</p> <p>Attributes: Communication mode code CLIN order ID no.</p>
Healthcare Encounter Followup	<p>Class</p> <p>Relationships: Is a component of: healthcare treatment facility Inherits from: Healthcare treatment facility Healthcare provider Organization</p> <p>This object contains the attributes that characterize the general properties of healthcare encounters.</p> <p>Attributes:</p>
01001. 14001.F063. 14001.A001. HealthCare Episode	<p>Object and Class</p> <p>Relationships: Is a component of: healthcare encounter activity Inherits from: Healthcare encounter activity Healthcare treatment facility Healthcare provider Organization</p> <p>This object characterizes those attributes general to all healthcare encounter followup activities of all types.</p> <p>Attributes: patient name followup date facility</p>
14001.A0031. Healthcare Facility Encounter	<p>Object and Class</p> <p>Relationships: is an instance of patient Inherits from: Patient Person</p> <p>Is a series of healthcare facility encounters relating to a single healthcare problem.</p> <p>Attributes: episode ID</p>
	<p>Object and Class</p> <p>Relationships: Is a component of: healthcare encounter activity Is a component of: patient Is a component of: healthcare episode Inherits from: Healthcare stakeholder Healthcare treatment facility Patient Person Healthcare enterprise Healthcare episode Organization</p>

This object contains general data concerning every event between a patient and a practitioner in the healthcare domain. It includes all events that result in an observation being made in the primary record of care for any purpose, including telephonic and consultative conversations between practitioners that have any implications for the patient.

Attributes:

14001	date-time encounter/admission
14001.A001	treatment facility name
14001.A002	encounter type
14001.A003	encounter ID
14001.A013	treatment facility type
14001.A010	encounter status
14001.A004	encounter security protection
14001.A016	encounter reason for visit
14001.A040	injury on job
14001.A050	datetime of history/examination
14001.A053	encounter problem
14001.A060	encounter comments
14001.A223	expected source of payment
14001.A0031	episode id
14001.A106	age

Healthcare Facility Encounter Activities

Object and Class

Relationships:

Is a component of: healthcare facility encounter

Inherits from:

Healthcare facility encounter

Healthcare encounter activity

Healthcare treatment facility

Patient

Person

Healthcare provider

Organization

This object characterizes the activities of a healthcare facility encounter occurring during all encounters. It includes those attributes general to all encounters and not special to some.

Attributes:

clinical order ID no.

10001.

Healthcare Facility Consult

Object and Class

Relationships:

Is a component of: healthcare facility encounter activities

Inherits from:

Healthcare stakeholder

Organization

Healthcare enterprise

Healthcare treatment facility

Healthcare facility encounter

Healthcare facility encounter activities

characterization of an encounter consultation

Attributes:

encounter consult service

consult date

consult text

consulting practitioner name

14001.A116

14001.A116.01

14001.A116.02

14001.A116.03

Healthcare Facility Encounter Procedure

Object and Class

Relationships:

Is a component of: healthcare facility encounter disposition

Inherits from:

Healthcare stakeholder

Organization

Healthcare enterprise

Healthcare treatment facility

Healthcare facility encounter

Healthcare facility encounter disposition

characterizes the procedural interventions of the encounter

Attributes:

encounter procedure

admission operative procedure

admission operative procedure date

admission operative procedure type

admission operative procedure surgeon

14001.F014

14001.F013

14001.F013.01

14001.F013.03

14001.F013.02

Healthcare Facility Encounter Disposition

Object and Class

Relationships:

Is a component of: healthcare facility encounter

Inherits from:

Patient

Person

Healthcare facility encounter

Healthcare encounter activity

	Healthcare provider Organization This object characterizes the disposition phase of a healthcare facility encounter. It includes those attributes that characterize dispositions from an encounter in all settings. Attributes: encounter etiology etiology type physician authoriz disposition disposition type dischg./encounter disposition disposition patient instruct. Disposition health status measure name Disposition health status measure total value date-time of disposition note text of note/report
14001.F033 14001.F033.1. 14001.F043 14001.F046 14001.F050 14001.F083 14001.F067 14001.F068 14001.F101 14001.F105	
Healthcare Facility Encounter Disposition Health Status	Object and Class Relationships: is a component/member of: healthcare facility encounter disposition Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter Healthcare facility encounter disposition component of a total measure of health status and encounter disposition Attributes: Patient disposition health status measure element name Patient disposition health status measure element value
14001.F069.01 14001.F069.02	
Healthcare Facility Encounter Disposition Diagnosis	Object and Class Relationships: is a component/member of: healthcare facility encounter disposition Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter Healthcare facility encounter disposition diagnosis established at the completion of the encounter Attributes: Disposition diagnosis Disposition diagnosis type Disposition diagnosis status Disposition diagnosis text
14001.F030 14001.F030.01 14001.F030.02 14001.F030.03	
Healthcare Facility Encounter Payment Source	Object and Class Relationships: is a component/member of: healthcare facility encounter receipt Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter Healthcare encounter activities one source from which payment for this healthcare facility encounter will be sought Attributes: healthcare payment source healthcare payment source type healthcare payment mechanism healthcare payment carrier
14001.A223 14001.A223.01 14001.A223.02 14001.A223.03	
Healthcare Facility Encounter Receipt	Class Relationships: Is a component of: healthcare facility encounter Inherits from: Healthcare encounter activity Healthcare facility encounter Healthcare treatment facility Patient Person Healthcare stakeholder Healthcare enterprise Organization

	This object contains data characterizing the receipt component of a healthcare facility encounter in general. It includes all of the attributes that are general to the receipt phase of any encounter and its transition to the activities phase of the encounter.
	Attributes:
14001.A020	encounter PT arrival cond
14001.A021	mode of arrival
14001.A030	Encounter nature of injury
14001.A033	Encounter mode of injury
14001.A043	Injury circumstances
14001.A0036	Encounter location where injured
14001.A154	Patient receipt health status measure name
14001.A156	Patient receipt health status measure total value
14011.A063	admission type
Healthcare Primary Record of Care Location	Object and Class
	Relationships:
	Is a component of: patient
	Inherits from:
	Patient
	Person
	Healthcare stakeholder
	Is a physical site where data concerning care received by a patient is stored.
	Attributes:
01027.	record holding location ID
01027.1	date of earliest entry
01027.2	date of latest entry
Healthcare Registration	Object and Class
	Relationships:
	Is a component of: healthcare facility encounter
	Is a component of: patient
	Inherits from:
	Healthcare stakeholder
	Healthcare facility encounter
	Healthcare encounter activities
	Healthcare treatment facility
	Patient
	Person
	Healthcare enterprise
	Organization
	This object characterizes the process of recognizing and characterizing the patient to the healthcare system. It includes gathering a demographic data set and other general information, such as permissions for care and resources to support the care that may be planned.
	Attributes:
01197	registration review date
01200	registration informant
01205	registration comment
01210	date record transf to storage
Healthcare Facility Encounter Receipt Diagnosis	Object and Class
	Relationships:
	is a component/member of: healthcare facility encounter receipt
	Inherits from:
	Healthcare stakeholder
	Organization
	Healthcare enterprise
	Healthcare treatment facility
	Healthcare facility encounter
	diagnosis established at the beginning of the encounter
	Attributes:
14001.A170	Receipt diagnosis name
14001.A170.01	Receipt diagnosis type
14001.A170.02	Receipt diagnosis status
14001.A170.03	Receipt diagnosis text
Healthcare Facility Encounter Receipt Health Status	Object and Class
	Relationships:
	is a component/member of: healthcare facility encounter receipt
	Inherits from:
	Healthcare stakeholder
	Organization
	Healthcare enterprise
	Healthcare treatment facility
	Healthcare facility encounter
	Healthcare facility encounter receipt
	characterizes the attributes of health status at the beginning of the encounter
	Attributes
14001.A160	Patient receipt health status measure element name
14001.A160.01	Patient receipt health status measure element value
Healthcare Registration Change	Object and Class

	<p>Relationships: Is a component of: healthcare facility encounter Is a component of: patient Inherits from: Healthcare stakeholder Healthcare registration Healthcare facility encounter Healthcare encounter activities Healthcare treatment facility Patient Person Healthcare enterprise Organization This object characterizes the process of recognizing the attributes the patient registration in the healthcare system. It includes gathering a demographic data set and other general information, such as permissions for care and resources to support the care that may be planned.</p>
<p>01195 01195.02 Inpatient Activities</p>	<p>Attributes: date registr record updated person initiating/updating</p>
	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare facility encounter activities Inherits from: Healthcare stakeholder Healthcare facility encounter activities Healthcare facility encounter Healthcare encounter activities Healthcare treatment facility Patient Person Healthcare enterprise Organization This object encapsulates and characterizes the general properties of the activities relating to resident patient care. It excludes those special activities that are represented in component objects.</p>
<p>14001.A183 14001.A186 14001.A190 14001.A126 14001.A153 14001.A203 14001.A200 14001.A216 14001.A200 14001.A213</p>	<p>Attributes: admission current PT status admission current PT status datetime admission current prognosis patient current location impairment group datetime notified family/NOK notified by whom datetime chaplain notified ministrations administered notified medical examiner</p>
<p>Inpatient Admission</p>	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare facility encounter receipt Inherits from: Healthcare stakeholder Healthcare facility encounter receipt Healthcare facility encounter Healthcare encounter activity Healthcare treatment facility Patient Person Healthcare enterprise Organization This object characterizes the event of accepting a patient for resident status for the purpose of providing healthcare within the healthcare treatment facility. It includes those attributes that identify the purpose and planned activities during the stay and the condition of the patient on arrival, as well as the actions to be taken at the time of arrival. It may also include those attributes established prior to arrival that will be taken at the moment of arrival. Its authority is provided by a clinical order.</p>
<p>14001.A022 14001.A056 14001.A066 14001.A070 14001.A073 14001.A083 14001.A093 14001.A096 14001.A103 14001.A110</p>	<p>Attributes: origin facility ID current living arrangement admission authority referral type referring provider private physician name private physician notified admitting hosp type admission hosp register no. admitting service</p>

14001.A113	origin SVC
14001.A120	ENC/attend. practitioner name
14001.A123	E-R/admitting physician
14001.A130	admitting room/bed
14001.A133	admitting type of accommodation
14001.A136	primary nursing therapeutic unit
14001.A140	admitting floor
14001.A143	warnings
14001.A146	admitting records recd
14001.A150	personal valuables left
14001.A173	indicated surgery
14001.A195	admission custodian of personal effects
14001.A206	police hold
14001.A210	date-time notified police
Inpatient Disposition	Object and Class
	Relationships:
	Is a special case of: healthcare facility encounter disposition
	Inherits from:
	Healthcare facility encounter disposition
	Healthcare facility encounter
	Healthcare encounter activity
	Healthcare treatment facility
	Patient
	Person
	Healthcare enterprise
	Healthcare stakeholder
	Organization
	This object characterizes the conclusion of a resident stay in a healthcare treatment facility. It includes those attributes that summarize the resident event and plan for followup actions to continue the care provided. Its authority results from a clinical order.
	Attributes:
01220	date-time of death
02015	release of body to morgue
14001.F040	discharge datetime
14001.F053	time of dep.
14001.F066	cond. on dischg.
14001.F070	reason for discharge
14001.F073	person accompanying patient from facility
14001.F076	disposition transport type
14001.F080	disposition destination
14001.F086	patient signature
14001.F090	dischg summ dict date-time
14001.F093	total acute care los
14001.F096	length of rehab services
14001.F100	total ICU days
14001.F110	signature/authenticator
14001.F176	discharge total FIM
Inpatient Disposition Surgeon	Object and Class
	Relationships:
	is a component/member of: inpatient disposition
	inherits from:
	Healthcare stakeholder
	Organization
	Healthcare enterprise
	Healthcare treatment facility
	Healthcare facility encounter
	Healthcare facility encounter disposition
	Patient
	Person
	characterization of each surgeon participating in the admission
	Attributes:
14001.F006	admission/encounter surgeon
14001.F006.1	admission/encounter surgeon role
Inpatient Transfer	Object and Class
	Relationships:
	Is a special case of: healthcare facil encounter activity
	Inherits from:
	Healthcare facility encounter activity
	Healthcare facility encounter
	Healthcare encounter activities
	Healthcare treatment facility
	Patient
	Person
	Healthcare enterprise
	Healthcare stakeholder
	Organization

<p>14001.A163 14001.A163.01 14001.A163.02 14001.A163.06 14001.A163.10 14001.A163.13 14001.A163.16</p>	<p>This object characterizes the transfer of responsibility for the care of the patient from one constituent organizational component of a healthcare treatment facility to another such component as a result of a clinical order.</p>
<p>Pre-Hospital Run</p>	<p>Attributes: admission INTRA-FAC XFR date admission INTRA-FAC XFR type admission INTRA-FAC nurs unit admission INTRA-FAC CLIN SVC admission INTRA-FAC RM/BED admission INTRA-FAC diagnosis admission INTRA-FAC provider</p>
<p>14001.B003 14001.B0051 14001.B006 14001.B007 14001.B0071 14001.B004 14001.B005 14001.B0001 14001.B0002 14001.B00031 14001.B0003 14001.B0004 14001.B0006 14001.B0005 14001.B0010 14001.B011 14001.B011.1 14001.B011.2</p>	<p>Object and Class</p> <p>Relationships: Is a component of: emergency room admission Inherits from: Emergency room admission Healthcare facility encounter receipt Healthcare facility encounter Healthcare treatment facility Patient Person Healthcare enterprise Healthcare stakeholder Organization</p> <p>This object contains the attributes characterizing that encounter conductor by emergency service personnel in the field and not within a healthcare treatment facility. It includes all circumstances regarding dispatch of the unit, on-scene activities, transport of the patient, and disposition of the run resulting in transfer of responsibility for care of the patient to the emergency department of the receiving healthcare treatment facility.</p> <p>Attributes: pre-hosp. care narrative incident run number pre-hospital agency ID dispatch number trauma number severity at dispatch severity at arrival on scene pre-hosp datetime call received pre-hosp datetime run dispatched pre-hosp order agency arrived pre-hosp datetime run arrived at scene pre-hosp datetime patient left the scene pre-hosp datetime unit returned to service pre-hosp datetime patient arrived at treatment facility pre-hosp scene description pre-hosp crew ID pre-hosp crew member skill level pre-hosp crew procedure performed</p>
<p>Pre-Hospital Run Equipment</p>	<p>Object and Class</p> <p>Relationships: is a component/member of: Pre-Hospital Run Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter Healthcare facility encounter receipt Emergency room admission Pre-Hospital Run</p> <p>Attributes: pre-hospital equipment/procedures pre-hospital procedure date-time</p>
<p>14001.B001 14001.B001.01</p>	<p>Object and Class</p> <p>Relationships: is a component/member of: Pre-Hospital Run Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter Healthcare facility encounter receipt Emergency room admission Pre-Hospital Run</p> <p>Attributes: pre-hospital observation</p>
<p>Pre-Hospital Run Observation</p>	<p>Object and Class</p> <p>Relationships: is a component/member of: Pre-Hospital Run Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility Healthcare facility encounter Healthcare facility encounter receipt Emergency room admission Pre-Hospital Run</p> <p>Attributes: pre-hospital observation</p>
<p>14001.B012</p>	<p>pre-hospital observation</p>

14001.B012.01	pre-hosp observation value
Research Study Agreement	Object and Class
	Relationships: Is a component of: healthcare registration Inherits from: Healthcare stakeholder Patient Person A written statement acknowledging participation in care events that are still experimental or are related to scientific interest. Attributes: consent to RSCH participation
02025	
Scheduled Patient Appointment	Object and Class
	Relationships: Is a component of: scheduled appointment Inherits from: Healthcare stakeholder Organization Healthcare treatment facility Scheduled appointment Healthcare enterprise This object characterizes the properties of an event planned for a patient. Its attributes characterize the patient aspects of the event and exclude the general attributes for the scheduled appointment. Attributes: scheduled visit date-time scheduled visit treat facility scheduled visit clinic name scheduled visit provider ID scheduled visit purpose scheduled visit remarks
13001	
13001.01	
13001.03	
13001.05	
13001.07	
13001.09	
Scheduled Equipment Appointment	Object and Class
	Relationships: Is a component of: scheduled appointment Inherits from: Healthcare stakeholder Organization Healthcare treatment facility Healthcare enterprise Scheduled appointment This object characterizes the properties of major equipment used in scheduled appointments. Attributes:
Scheduled Practitioner Appointment	Object and Class
	Relationships: Is a component of: scheduled appointment Inherits from: Healthcare stakeholder Organization Healthcare treatment facility Healthcare enterprise Scheduled appointment Healthcare practitioner This object characterizes the properties of the practitioner component of a healthcare event. Attributes: problem/condition procedure
13001.09	
13001.xx	
Scheduled Site Appointment	Object and Class
	Relationships: Is a component of: scheduled appointment Inherits from: Organization Healthcare treatment facility Scheduled appointment This object characterizes the properties of the site component of a healthcare event. It includes equipment and instruments that may be either fixed or portable. The attributes will determine special cases. Attributes:
General Subject/Object Group: Facilities	
CLIN/Ancillary Service	Class
	Relationships: Is a component of: healthcare treatment facility Inherits from: Healthcare stakeholder Organization Healthcare enterprise Healthcare treatment facility

This object characterizes the organizational component that is directed and specialized functions such as direct care specialties or supporting indirect specialties for diagnosis or treatment (called ancillary services). It is an included organizational component of the healthcare treatment facility and sponsoring organization.

Attributes:
 clinical/ancillary service identifier
 clinical/ancillary service name

Facility Bed

Object and Class

Relationships:
 Is a component of: healthcare treatment facility
 Inherits from:
 Organization
 Healthcare stakeholder
 Healthcare treatment facility
 Healthcare enterprise

This object characterizes the hostelry properties of a healthcare treatment facility. It includes those attributes that characterize the general residence properties of the patient's stay in the facility.

Attributes:

HealthCare Treatment Facility

Object and Class

Relationships:
 Is a component of: healthcare provider
 Inherits from:
 Healthcare stakeholder
 Organization
 Healthcare enterprise

This object characterizes the properties of a location that is used for any aspect of providing healthcare to patients. It includes those properties that are general to the function of the facility and excludes those properties that characterize the hostelry or residence properties of the facility. It may include those attributes that are used for both resident and nonresident patients.

Attributes:

04001.07
 04001
 04001.05

Treatment facility identifier
 Treatment facility name
 Treatment facility type

Imaging Ancillary Service

Object and Class

Relationships:
 Is a special case of: CLIN/ancillary service
 Inherits from:
 Healthcare stakeholder
 Organization
 Healthcare treatment facility
 Healthcare enterprise
 CLIN/ancillary service

This object characterizes the special clinical service that produces images of patients by means of special techniques such as X-ray, NMR, PET, ultrasound, radioisotopes, or other methods intended to reveal some aspect of body function. It includes those attributes unique to that clinical service and excludes attributes included in the CLIN/ancillary service object.

Attributes:

Laboratory Ancillary Service

Object and Class

Relationships:
 Is a special case of: CLIN/ancillary service
 Inherits from:
 Healthcare stakeholder
 Organization
 Healthcare treatment facility
 Healthcare enterprise
 Clinical/ancillary service

This object characterizes the properties of the clinical laboratory and that clinical service which offers all laboratory-based diagnostic services to the practitioner. It includes only those attributes unique to that function and excludes those general attributes common to all clinical or ancillary services.

Attributes:

Pharmacy Ancillary Service

Object and Class

Relationships:
 Is a special case of: CLIN/ancillary service
 Inherits from:
 Healthcare stakeholder
 Organization
 Healthcare treatment facility
 Healthcare enterprise
 Clinical/ancillary service

This object characterizes the properties of that organizational entity that provides therapeutic medications to patients and services within a healthcare organization. It includes those attributes unique to the various functions involved in procuring, dispensing, and accounting for the use of therapeutic substances and devices within the organization but excludes those attributes common to all or most such clinical or ancillary services.

Attributes:

General Subject/Object Group: Fiscal

Account	<p>Object and Class</p> <p>Relationships:</p> <p>Is a component of: healthcare provider</p> <p>Inherits from:</p> <p>Healthcare stakeholder</p> <p>Organization</p> <p>Healthcare enterprise</p> <p>Healthcare treatment facility</p> <p>Clin/ancillary service</p> <p>This object contains the general identifying data concerning a financial record on an entity in the healthcare domain. Such data are common to all financial records.</p> <p>Attributes:</p> <p>account identifier</p>
Account Payable	<p>Object and Class</p> <p>Relationships:</p> <p>Is a special case of: account</p> <p>Inherits from:</p> <p>Account</p> <p>Organization</p> <p>Healthcare enterprise</p> <p>Healthcare treatment facility</p> <p>Healthcare stakeholder</p> <p>This object characterizes the financial record regarding payments from the laboratory. It excludes properties not specific to the payment process.</p> <p>Attributes:</p>
Account Receivable	<p>Object and Class</p> <p>Relationships:</p> <p>Is a special case of: account</p> <p>Inherits from:</p> <p>Account</p> <p>Organization</p> <p>Healthcare enterprise</p> <p>Healthcare treatment facility</p> <p>Healthcare stakeholder</p> <p>This object characterizes monies to be received in payment for services rendered.</p> <p>Attributes:</p> <p>billing account no.</p>
Guarantor	<p>Object and Class</p> <p>Relationships:</p> <p>Is a component of: patient account</p> <p>Inherits from:</p> <p>Account</p> <p>Account receivable</p> <p>Patient account</p> <p>Organization</p> <p>Healthcare enterprise</p> <p>Healthcare stakeholder</p> <p>This object characterizes those individuals who will guarantee payment for health services rendered to a patient by a healthcare provider as opposed to those guarantees provided by a third-party payor or insurer.</p> <p>Attributes:</p>
Healthcare Claim	<p>Object and Class</p> <p>Relationships:</p> <p>Is a component of: inpatient disposition</p> <p>Is a component of: healthcare visit disposition</p> <p>Is a component of: emergency room disposition</p> <p>Inherits from:</p> <p>Emergency room disposition</p> <p>Inpatient disposition</p> <p>Healthcare visit disposition</p> <p>Healthcare ambulatory visit</p> <p>Healthcare inpatient encounter</p> <p>Healthcare emergency room encounter</p> <p>Healthcare facility encounter</p> <p>Patient</p> <p>Person</p> <p>Healthcare encounter activities</p> <p>Healthcare treatment facility</p>

03005	Healthcare stakeholder
03005.02	Healthcare enterprise
Insurance Coverage	Organization This record of services during a healthcare encounter that is believed to be payable under established insurance coverage. Attributes: insurance claim date insurance claim ID
03010	Object and Class
03010.02	Relationships:
03010.04	Is a component of: insurer
03010.06	Is a component of: guarantor
03010.08	Inherits from:
03010.10	Healthcare stakeholder
03010.12	Organization
Insurer	Insurer Guarantor Patient account Account receivable Account This object characterizes the provisions of the agreement between the insurer and the patient relating to the situations under which the insurer will pay the healthcare charges incurred by the patient. Attributes: insurance type group plan ID primary payment source primary payment class insurance group no. insurance ID no. principal payment sponsor address of princ spun payor priority
03010	Object and Class
03010.02	Relationships:
03010.04	Is a component of: patient account
03010.06	Inherits from:
03010.08	Healthcare Stakeholder
03010.10	Organization
03010.12	This object characterizes the guarantees for payment for health services that are provided by third-party payors as a result of insurance coverage. This object contains the properties of the insuring organization. Attributes:
Other Account	Object and Class
03010	Relationships:
03010.02	Is a special case of: account
03010.04	Inherits from:
03010.06	Healthcare stakeholder
03010.08	Organization
03010.10	Healthcare enterprise
03010.12	Account
Patient Account	Attributes:
03030	Object and Class
03015	Relationships:
03017	Is a special case of: account receivable
03020	Inherits from:
03022	Organization
03025	Healthcare stakeholder
Workman's Compensation Claim	Healthcare enterprise Account Account receivable This object characterizes the properties of a special account that records the charges for healthcare services rendered to an individual patient. It excludes those attributes that characterize all accounts generally. Attributes: billing account no. Medicare no. Medicare to yr Medicare A effective date Medicare B effective date Medicaid no.
03030	Object and Class
03015	Relationships:
03017	Is a component of: employer/company
03020	Inherits from:
03022	Healthcare stakeholder
03025	Organization
Workman's Compensation Claim	Employer/company

		A record of the facts relating to on-the-job injury or illness. Attributes: worker's compensation claim date worker's compensation claim ID
03001 03001.1	General Subject/Object Group: Organization	
Employer/Company	Object and Class	
	Relationships:	
	Is a special case of: organization	
	Inherits from:	Healthcare stakeholder Organization
		This object characterizes those aspects of an organization that involve its responsibilities and benefits deriving from having individuals work formally for the organization for pay.
	Attributes:	present employer name work address work (business) phone
01075 01077 01080		
Organization	Object and Class	
	Relationships:	
	Inherits from:	Healthcare stakeholder
		This object contains general data on any social entity that is organized for any purpose relating to a societal function. It includes those organizations offering services in the healthcare domain and those organizations consuming or supporting such services, such as insurers, suppliers, manufacturers, etc. It excludes those nonbusiness entities that are related solely to individuals and have no implications for the healthcare domain.
	Attributes:	
Healthcare Enterprise	Object and Class	
	Relationships:	
	Is a special case of: organization	
	Inherits from:	Healthcare stakeholder Organization
		This object is a business entity that delivers healthcare services. It may also be a practitioner, which is a separate object containing data on the professional attributes of the provider/practitioner relationship. This object, however, contains only those attributes relating to the business function of a practitioner's practice.
	Attributes:	provider/practitioner name provider address provider type provider ID no. provider ID agency
04001 04001.03 04001.05 04001.07 04001.07.01		
Healthcare stakeholder	Object and Class	
	Relationships:	
	Inherits from:	Healthcare stakeholder
		This object is a business entity that delivers healthcare services. It may also be a practitioner, which is a separate object containing data on the professional attributes of the provider/practitioner relationship. This object, however, contains only those attributes relating to the business function of a practitioner's practice.
	Attributes:	Stakeholder identifier
Healthcare Stakeholder Role	Object and Class	
	Relationships:	is a component/member of: Healthcare stakeholder
	Inherits from:	Healthcare stakeholder
		characterizes the role of the stakeholder in a particular healthcare process
	Attributes:	Healthcare stakeholder role code
	Organization	
		This object is an entity that has a healthcare role. It may be a person or an organization
	Attributes:	Stakeholder role identifier Date stakeholder role began Date stakeholder role ended
	General Subject/Object Group: People	
Alternate Individual Name	Object and Class	
	Relationships:	is a component/member of person
	Inherits from:	Healthcare stakeholder Person
		characterizes additional names for a person
	Attributes:	

01010	Individual alternate Name
01010.1	Individual alternate Name end date
01010.2	Individual alternate Name start date
01010.3	Individual alternate Name usage
Employee/Worker	<p>Object and Class</p> <p>Relationships:</p> <ul style="list-style-type: none"> Is a component of: person Is a component of: employer/company Is a component of: laboratory work station <p>Inherits from:</p> <ul style="list-style-type: none"> Healthcare stakeholder Person Employer/company Organization <p>This object characterizes those individuals who formally work for, and are paid for their work by, an organization. Being formally employed confers certain benefits and responsibilities on both the employee and the employer. The properties that characterize those aspects of an individual reside in this object.</p> <p>Attributes:</p>
Family Member	<p>Object and Class</p> <p>Relationships:</p> <ul style="list-style-type: none"> Is a component of: patient <p>Inherits from:</p> <ul style="list-style-type: none"> Healthcare stakeholder Person Patient <p>This object contains those attributes of a patient's family members, including parents and all ancestors and their characteristics, that relate to care of the patient. This includes the ability to render or assist in care and the known causes of death and major health problems of ancestors, and it includes the profile of the known genes possessed by those family members or ancestors. These attributes are not inclusive and may be extended in the future when the need for additional attributes can be justified. The inherited characteristics of family members and ancestors is highly confidential and must be protected from to any but those who have the highest priority need-to-know.</p> <p>Attributes:</p>
01090	family member name
01090.02	family member SSAN
01090.03	family member relationship
01090.05	family member male parent
01090.07	family member female parent
01090.09	family member spouse
01090.11	family member sex
01090.13	family member DOB
01090.15	family member date of death
01090.17	family member head of household status
01090.19	family member primary caregiver status
01090.21	family member location
01090.23	family member occupation
01090.25	family member major diagnosis/cause of death
Family Member Gene	<p>Object and Class</p> <p>Relationships:</p> <ul style="list-style-type: none"> Is a component of: Family Member <p>Inherits from:</p> <ul style="list-style-type: none"> Healthcare stakeholder Person Patient Family Member <p>This object contains those attributes of a patient's family members' genes. The inherited characteristics of family members and ancestors is highly confidential and must be protected from to any but those who have the highest priority need-to-know.</p> <p>Attributes:</p>
01090.27	family member inherited gene ID
01090.27.01	family member gene expression
01090.27.02	family member gene EXP extent
Healthcare Practitioner	<p>Object and Class</p> <p>Relationships:</p> <ul style="list-style-type: none"> Is a special case of: employee/worker Is a component of: healthcare treatment facility <p>Inherits from:</p> <ul style="list-style-type: none"> Healthcare stakeholder Person Organization Employee/worker Healthcare enterprise Healthcare treatment facility

This object contains those attributes of a person that characterize the individual's role in delivering healthcare services, either directly or indirectly, to patients. It includes those individuals having some professional education, competence, and certification, or licensing attesting to competence to engage in such activity. It excludes healthcare workers, who are those individuals not possessing such special competence, but not those practitioners who, at some time, are engaged in a nonpractitioner role. Practitioners are categorized with respect to their level of responsibility and their area of specialty.

Attributes:

- 04001.10 practitioner name
- 04001.12 practitioner SSAN
- 04001.15 practitioner's universal ID no.
- 04001.20 practitioner's profession
- 04001.25 practitioner's address
- 04001.30 practitioner's phone
- 04001.35 practitioner license no.
- 04001.40 practitioner license state
- 04001.50 practitioner specialty
- 04001.60 practitioner signature

Healthcare Practitioner Role

Object and Class

Relationships:

Is a component of: healthcare practitioner

Inherits from:

Healthcare stakeholder

Person

Organization

Employee/worker

Healthcare enterprise

Healthcare practitioner

Patient

This object contains those attributes of a person that characterize the individual's role in delivering healthcare services, either directly or indirectly, to a patient.

Attributes:

- 04001.45 practitioner current role
- 04001.45.01 date practitioner role began
- 04001.45.02 date practitioner role ended

Individual Identifier

Object and Class

Relationships:

is a component/member of: person

Inherits from:

Healthcare stakeholder

Person

surrogate unique token identifying the person

Attributes:

- 01015 individual identifier
- 01015.4 individual identifier end date
- 01015.3 individual identifier start date
- 01015.1 individual identifier issuing organization
- 01015.5 individual identifier status
- 01015.2 individual identifier type

Worker, Healthcare

Object and Class

Relationships:

Is a component of: healthcare enterprise

Is a special case of: employee/worker

Inherits from:

Healthcare stakeholder

Organization

Employee/worker

Healthcare enterprise

Healthcare treatment facility

Person

This object characterizes those individuals who are not practitioners but who work in healthcare settings. These individuals also are employees and inherit properties from the employer.

Attributes:

Worker, Healthcare, Laboratory

Object and Class

Relationships:

is a special case of: worker, healthcare

Inherits from:

Healthcare stakeholder

Organization

Healthcare enterprise

Employee/worker

Person

Healthcare treatment facility

characterizes those workers who work in healthcare laboratories

Attributes:

Healthcare Practitioner, Dentist	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare practitioner Inherits from: Healthcare stakeholder Organization Employee/worker Healthcare enterprise Healthcare treatment facility Person Healthcare practitioner This object is characterized by the attributes concerned with the education, training, and licensing of dentists as special cases of practitioners. Attributes:</p>
Healthcare Practitioner, Nurse	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare practitioner Inherits from: Healthcare stakeholder Organization Employee/worker Healthcare enterprise Healthcare treatment facility Person Healthcare practitioner This object is characterized by the attributes concerned with the education, training, and licensing of nursing personnel at all levels. It includes all aspects of general nursing but excludes those aspects of nursing specialties. Attributes:</p>
Healthcare Practitioner, Nurse Practitioner	<p>Object and Class</p> <p>Relationships: Is a special case of: healthcare practitioner Is a special case of: healthcare practitioner, nurse Inherits from: Healthcare stakeholder Organization Employee/worker Healthcare enterprise Healthcare treatment facility Person Healthcare practitioner This object is characterized by those attributes that concern the special education, training, or licensing of nursing personnel that provide the competence to provide limited primary care. Attributes:</p>
Healthcare Practitioner, Physician	<p>Object and Class</p> <p>Relationships: Healthcare practitioner Inherits from: Healthcare stakeholder Organization Employee/worker Healthcare provider Healthcare treatment facility Person Healthcare practitioner A physician object is characterized by the attributes concerned with the education, training, and licensing of physicians and osteopaths as special cases of practitioners. Attributes:</p>
Worker, Healthcare, Non-laboratory	<p>Object and Class</p> <p>Relationships: is a special case of: worker, healthcare inherits from: Healthcare stakeholder Organization Healthcare enterprise Employee/worker Healthcare treatment facility Person characterizes a person and employee of an organization who works in nonlaboratory parts of a healthcare enterprise Attributes:</p>
Worker, Non-healthcare, Laboratory	<p>Object and Class</p> <p>Relationships: is special case of: Employee/worker Inherits from: Healthcare stakeholder</p>

	<p>Organization Healthcare enterprise Employee/worker Person an individual worker not in healthcare and in the laboratory</p>
Job	<p>Attributes: Object and Class</p> <p>Relationships: Is a component of: employee/worker Inherits from: Healthcare stakeholder Organization Employer/worker This object characterizes the work that an individual does for an employer/ company and an organization. The properties of a job are the general activities and responsibilities of the work assigned.</p> <p>Attributes: job start date job employer job full/parttime status job status job title job code job classification job employee number job process/activity job termination date job comments job work activity job protective equip job stressors exposed to</p>
08070	
08070.01	
08070.03	
08070.05	
08070.07	
08070.09	
08070.11	
08070.13	
08070.15	
08070.17	
08070.19	
08070.21	
08070.23	
08070.25	
Occupation	<p>Object and Class</p> <p>Relationships: Is a component of: employee/worker Inherits from: Healthcare stakeholder Organization Employee/worker Employer/company Person This object characterizes the general nature of a person's work skills, education combined with a generally recognized generic requirement of employers. The properties of an occupation reflect the skills and preparation for a general domain of jobs without necessarily being specific for any one job.</p> <p>Attributes: current work status occupation previous occupations date completed occupation</p>
01062	
01065	
01065.1	
01065.2	
Patient	<p>Object and Class</p> <p>Relationships: Is a component of: person Is a component of: employer/company Inherits from: Healthcare stakeholder Person Employer/company Organization This object characterizes the special properties of an individual that surround the process of seeking healthcare from a practitioner. It excludes the general properties of the individual found in the person object.</p> <p>Attributes: adopted? patient no. universal patient health no. archive data location of chart multiple birth marker birth order religion military SVC/veteran status patient's language current work status number in household family member name emerg. Cont. (rel/fr.) emerg. Cont. relat. patient guardian name</p>
01007	
01015	
01016	
01025	
01030	
01035	
01037	
01047	
01050	
01058	
01062	
01087	
01090	
01110	
01112	
01120	

01125	patient guardian address
01130	patient guardian status
01135	LNOK name
01137	LNOK relationship
01140	LNOK address
01142	LNOK home phone
01145	LNOK business phone
01005	parental marital status
01058	interpreter REQ
01067	current vocational status
01070	previous occupations
01070.01	date completed occupation
01085	usual living arrangement
01115	emerg. CONT. address
01117	emerg. CONT. H. phone
01119	emerg. CONT. B. phone
01150	R/L handed?
01155	color eyes
01160	color hair
01165	blood type
01175	build
01185	patient record activity status
01190	confidentiality protection
01262	clergyman's name
01265	clergyman's address
01267	clergyman's phone
01170	height
01180	weight
Person	Object and Class
	Relationships:
	Inherits from:
	Healthcare stakeholder
	This object contains data common to all human beings identified within the healthcare domain.
	Attributes:
01001	person's name
01002	previously registered name
01010	alias
01020	SSAN
01032	date-time of birth
01033	birthplace
01040	sex
01042	race
01045	ethnic group
01052	marital status
01055	citizenship status
01060	educational level
01065	current occupation
01075	present employer name
01077	work address
01080	work (business) phone
01095	person's permanent address
01097	person's county/CEN tract
01099	foreign residency
01100	home phone
01105	person's temporary address
Professional Specialty	Relationships:
	is a component/member of: Healthcare Practitioner
	Inherits from:
	Healthcare stakeholder
	Organization
	Healthcare enterprise
	Healthcare treatment facility
	Employee/worker
	Person
	Healthcare practitioner
	This object characterizes the specialization of each healthcare practitioner
	Attributes:
	professional specialty identifier
	professional specialty name
	certifying professional society
Release of Information Record	Relationships:
	is a component/member of: Patient
	Inherits from:
	Healthcare stakeholder

Patient
 Person
 This object characterizes the properties of each release of information from the primary record of care.
 Attributes:
 release of info record action datetime
 type of record action
 rel of info type of info
 rel of info person releasing
 rel of info released to
 rel of info purpose
 person authorizing release

02100
 02100.02
 02100.04
 02100.06
 02100.08
 02100.10
 02100.12

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