

Glossary of terms

ACC American College of Cardiology

Accession Number A user-friendly identifier created by the Departmental System, which identifies an instance of a filler order or imaging service request. It may group one or more requested procedures.

Accountability The property that ensures that the actions of an entity may be traced uniquely to the entity.

Actor An entity within a use case diagram that can perform an action within a use case diagram. Possible actions are creation or consumption of a message.

ADT Admit, Discharge & Transfer.

Aliquoter An automated device which aliquots a parent specimen into one or more child specimen.

AM Automation Manager.

Analyzer An actor which is an automated device which fulfills clinical tests on biologic specimen. An Analyzer performs analyzing for a specimen according to AWOS, and return the result to the AM.

ASE American Society of Echocardiography.

Assertion A piece of data produced by a SAML authority regarding either an act of authentication performed on a subject, attribute information about the subject, or authorization data applying to the subject with respect to a specified resource. This Assertion is used in access control and audit trails.

Attestation Attestation is a personal assertion of the truth of the statement to which you are attesting.

AWOS Analytical Work Order Step: A WOS performed by an Analyzer actor.

Battery A set of one or more observations identified as by a single name and code, treated as a shorthand unit for ordering or retrieving results of the constituent observations. A battery can be a single observation, but also a superset of batteries.

BIR British Institute of Radiology.

Care Delivery Organization/Enterprise An organization that provides medical services at one or more physical locations.

CCOW ANSI certified technology neutral specification for the Health Level Seven Context Management Architecture (CMA). This architecture enables multiple applications to be automatically coordinated and synchronized in clinically meaningful ways at the point of use. The architecture specified in this document establishes the basis for bringing interoperability among healthcare applications to point-of-use devices, such as a personal computer that serves as a clinical desktop.

CDA Clinical Document Architecture (specified by HL7).

Centrifuge An automated device which takes off the cap of the specimen container.

Clinical Affinity Domain A group of healthcare enterprises that have agreed to work together using a common set of policies and which share a common infrastructure of repositories and a registry.

CLSI Clinical and Laboratory Standards Institute organization.

COCI European Coordination Committee of the Radiological Electromedical and Medical Informatics Indus.

Code set A code set is any set of codes used for encoding data elements, such as tables of terms, medical concepts, medical diagnosis codes, or medical procedure codes. An example of international code set is LOINCTM (Logical Observation Identifier Names and Codes).

Context Management Registry An HTTP technology specific service defined by the HL7 Context Management CCOW Standard to locate an instance of a context manager servicing a specific desktop.

Context Session A collection of participant applications that are sharing context on one or more subjects.

Conveyor An automated device which transports specimen to the appropriate devices.

CT Consistent Time Integration Profile.

Decaper An automated device which takes off the cap of the specimen container.

Digital Signature A legally useful electronic equivalent to facsimile signature, including signatures generated for a variety of entities including human and machine sources. Based on digital certificates attributable to well-known healthcare oriented certificate authorities; incorporating cryptographically secure techniques for signature generation and validation.

Dilution System An automated device which dilutes a specimen by mixing a diluent.

Directory A book containing the names and residences of the inhabitants of any place, or of classes of them; an address book; as, a business directory.

Disposition The manner in which the referenced instances are to be disposed of, their intended use.

DML Device Message Layer defined by the standard POCT1-A.

DMZ De-Militarized Zone. A computer or small sub-network that sits between a trusted internal network, such as a corporate private LAN, and an un-trusted external network, such as the public Internet. Typically, the DMZ contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.

DRG Deutsche Roentgenengesellschaft.

EAR European Association of Radiology.

ECG Electrocardiogram.

ECR European Congress of Radiology.

EHR-CR An EHR-CR or Care-delivery Record abstracts the patient information managed by the IT system or set of systems of a Care Delivery Organization, which may support a broad variety of healthcare facilities: private practice, nursing home, ambulatory clinic, acute care in-patient facility, etc.

EHR-LR The documents shared by the EHR-CR and tracked by the Registry form a Longitudinal Record for the patients that received care among the EHR-CRs of the Clinical Affinity Domain. This is known as the EHR-LR.

eMPI Enterprise Master Patient Index.

Encounter An interaction between a patient and care provider(s) for the purpose of providing healthcare-related service(s). Healthcare services include health assessment. Examples: outpatient visit to multiple departments, home health support (including physical therapy), inpatient hospital stay, emergency room visit, field visit (e.g., traffic accident), office visit, occupational therapy, telephone call.

ESC European Society of Cardiology.

EUA Enterprise User Authentication Integration Profile.

Evidence Documents Evidence Documents represent the uninterpreted information that is primarily managed and used inside the imaging department, although distribution outside the imaging department is not precluded. Evidence documents are non-image information and include things such as measurements, CAD results, procedure logs, etc and are to be encoded as DICOM SR documents. represent the uninterpreted information that is primarily managed and used inside the imaging department, although distribution outside the imaging department is not precluded. Evidence documents are non-image information and include things such as measurements, CAD results, procedure logs, etc and are to be encoded as DICOM SR documents.

Evidence Objects All objects generated as a result of performing procedure steps on systems in an imaging department. These objects are used by the reading physician in the process of creating a diagnostic report and are managed inside the imaging Department. Examples of evidence objects include: Images, Presentation States, Key Image Notes and Evidence Documents.

Expected Actions Actions which should occur as the result of a trigger event.

Federated Identity A user's identity is said to be federated

between a set of Providers when there is an agreement between the providers on a set of identifiers and/or attributes to use to refer to the user.

Federation This term is used in two senses in SAML:
• The act of establishing a relationship between two entities
• An association comprising any number of service providers and identity providers.

Foreign Key (FK) A database key that is used as a reference to relate one entity to another entity. It may be a unique value, or used in conjunction with another Foreign Key to create a unique value.

Globally Unique Identifier (GUID) An identifier of an entity, such as persistent document, that has been generated by an algorithm guaranteeing its global uniqueness.

GMSIH Groupement pour la Modernisation du Système d'Information Hospitalier.

GPS Grayscale Softcopy Presentation State.

Hash A value uniquely calculated by using a well-known algorithm to create a digest all of the data constituting an electronic record. An actor uses a private key to generate a digital signature by transforming this value. By recalculating the hash digest value, and using the actor's certificate's public key to transform the electronic signature, it is possible to attest to the actor's signing ceremony and to the integrity of the signed record.

HIMSS Healthcare Information and Management Systems Society.

HIS Hospital Information System.

HL7 Health Level Seven consortium.

ICE Intracardiac Echocardiography.

Identity Provider A type of service provider that creates, maintains, and manages identity information for users and provides user authentication to other service providers within a federation, such as with web browser profiles.

IETF Internet Engineering Task Force.

IHE Integrating the Healthcare Enterprise.

Images Available A transaction or transactions used to determine that images have been stored in an image archive and may be retrieved.

inetOrgPerson The inetOrgPerson [RFC 2798] object class is a general purpose object class that holds attributes about people. The attributes it holds were chosen to accommodate information requirements found in typical Internet and Intranet directory service deployments. The inetOrgPerson object class is designed to be used within directory services based on the LDAP v3 [RFC 2251] and the X.500 family of protocols, and it should be useful in other contexts as well.

Integrity The property of the data has not been altered, or destroyed in an unauthorized manner.

Interaction Diagram A diagram that depicts data flow and sequencing of events.

IOD Information Object Definitions.

IPEM Institute of Physics and Engineering in Medicine.

IT Information Technology.

IVUS Intravascular Ultrasound.

JAHIS Japan Association of Healthcare Information Systems Industry.

JPEG Joint Photographic Experts Group.

KDC Key Distribution Center (the Kerberos server that issues Ticket Granting Tickets and service tickets. See RFC1510).

KITH Kompetansesentret for IT i Helse.

Labeler An automated device which affixes the bar code label to the specimen container.

LAS Laboratory Automation System: A system which handles a set of Laboratory Devices (LD). This system implements the Automation Manager actor.

LCSD Laboratory Code Set Distribution profile.

LD *Laboratory Device*: A category of actors in LDA profile. A LD actor is either an Analyzer actor or a Pre/Post processor actor.

LDA *Laboratory Device Automation profile*.

LDA *Lightweight Directory Access Protocol* is designed to provide access to directories supporting the X.500 models, while not incurring the resource requirements of the X.500 Directory Access Protocol (DAP). This protocol is specifically targeted at management applications and browser applications that provide read/write interactive access to directories. When used with a directory supporting the X.500 protocols, it is intended to be a complement to the X.500 DAP.

LIR *Laboratory Information Reconciliation profile*.

LIS *Laboratory Information System*.

local authentication In the ATNA profile the term local authentication means that the user identification, authentication, and authorization method is chosen by the local system administration and does not necessarily comply with any IHE profile. It may be a local username password system, a secure token system, or any other system that is considered acceptable by the local security administration.

LPOCT *Laboratory Point Of Care Testing profile*.

LSWF *Laboratory Scheduled Work Flow profile*.

LUT *Look Up Table*.

Manifest Document A Manifest Document is an instance of DICOM Key Object Selection SOP Class, which describes and collects a set of DICOM SOP Instances that are intended for sharing.

Master File A common reference file used by one or more application systems. A code set can be considered as a master file.

MLLP *HL7 Minimal Lower Layer Protocol* (see IHE Laboratory Technical Framework).

Movement A Movement is an event describing a change of the situation of the patient in the context of the encounter. This concept encompasses changes such as transfers of patient location, change of patient class, new attending doctor, new consulting doctor, new encounter starting, encounter closing, etc. The concept of Movement is a superset of the concept of "transfer".

MPI *Master Patient Index*.

MPPS *Modality Performed Procedure Step*.

MRN *Medicare Record Number*.

MWL *Modality Worklist*.

NEMA *National Electrical Manufacturers Association*.

NHS *NHS Information Authority*.

NICTIZ *Nationaal ICT Instituut in de Zorg*.

Non-repudiation This service provides proof of the integrity and origin of data which can be verified by any party.

NTP *Network Time Protocol*. This is the standard Internet protocol for synchronizing computer clocks. The web site <http://www.ntp.org> provides extensive background documentation at the introductory and expert level on how to synchronize computers.

Nvvr *Nederlandse Vereniging voor Radiologie*.

Observation A measurement of a single variable or a single value derived logically and/or algebraically from other measured or derived values. A test result is an observation.

OID *Object Identifier*. (See also 'Globally Unique Identifier').

ORI *Observation Reporting Interface* defined by the standard POCT1-A.

PACS *Picture Archive and Communication System*.

PAM *Patient Administration Management Integration Profile* in IT Infrastructure Technical Framework.

Patient (When used in the context of ATNA) RFC-XXXX defines the means of identifying the person who is a patient. The patient information in audit event records corresponds to the information available to identify a patient at the time the audit record was generated, and does not reflect later updates (e.g. patient reconciliation).

PatientID (When used in the context of ATNA) A free text that holds the system-internal patient identifier being unique within that system domain. The patient identifier domain is that assigned to the system that generated the audit event record. The patient information in audit event records corresponds to the information available to identify a patient at the time the audit record was generated, and does not reflect later updates (e.g. patient reconciliation).

Patient Identifier Cross-reference Domain Consists of a set of Patient Identifier Domains known and managed by a Patient Identifier Cross-reference Manager Actor. The Patient Identifier Cross-reference Manager Actor is responsible for providing lists of alias identifiers from different Patient Identifier Domains.

Patient Identifier Domain A single system or a set of interconnected systems that all share a common identifica-

tion scheme for patients. Such a scheme includes: (1) a single identifier-issuing authority, (2) an assignment process of an identifier to a patient, (3) a permanent record of issued patient identifiers with associated traits, and (4) a maintenance process over time. The goal of Patient Identification is to reduce errors.

Patient Mapping Agent The CCOW defined component that provides for the mapping of patient identifiers across disparate patient identity domains.

Patient Subject The PSA defined subject that supports sharing the currently selected patient identifier amongst disparate applications running on the desktop.

PDF *Portable Document Format*.

PDQ *Patient Demographics Query Integration Profile* in IT Infrastructure Technical Framework.

Personnel White Pages Information on human workforce members within the authority of the PWP directory. This information has broad use among many clinical and non-clinical applications across the healthcare enterprise. The information can be used to enhance the clinical workflow (contact information), enhance the user interface (user friendly names and titles), and ensure identity.

PIX *Patient Identifier Cross-referencing Integration Profile*.

PMA *Patient Mapping Agent* component as defined by CCOW.

POCDM *Point Of Care Data Manager actor*.

POCRG *Point Of Care Results Generator actor*.

POCT *Point of care testing*.

Point of Service (POS) Application An application used by physicians to access patient information and perform work. Examples of a POS include EMR, EHR, physician practice system, PACS, etc.

Post-processor An automated device which takes off the cap of the specimen container.

PPS *Performed Procedure Step*.

Pre-fetch The activity of fetching images or other information objects from previously completed procedures to near-term storage for review of those data.

Pre/Post-processor An actor which provides some pre- and post-processes to the specimen. This actor is categorized to two sub categories, one is pre-processor and the other one is post-processor. A Pre/Post-processor processes a specimen according to SWOS, and return the result to the AM.

Pre-processor An automated device which provides some preparation (decapping, aliquoting, centrifugation, transportation,...) of the specimen before the clinical testing.

Private key A key in an asymmetric cryptographic algorithm; the possession of this key is restricted, usually to one entity.

Process Flow Diagram A graphical illustration of the flow of processes and interactions among the actors involved in a particular example.

PSA *Patient-Synchronized Applications Integration Profile*.

Pseudonymize Replace identification with fictitious values.

Public Key A key in an asymmetric algorithm that is publicly available.

QC *Quality Control* performed by Analyzer actor on a quality control specimen.

RCR *Royal College of Radiologist*.

Recaper An automated device which re-caps a specimen container.

Regional Health Information Network An implementation of an affinity domain serving a number of care delivery organizations in a region.

RID *Retrieve Information for Display Integration Profile*.

Role The actions of an actor in a use case.

RSNA *Radiological Society of North America*.

Scope A brief description of the transaction.

SCP *Service Class Provider*.

SCU *Service Class User*.

secure domain A network, hardware systems, secure nodes, and physical environment for which a single set of security policies is defined and enforced for access to its addressable objects.

secure node A network-addressable system that conforms to a secure domain's access policies and management. A secure node often supports IHE actors.

Security Assertion Markup Language(SAML) The set of specifications describing security assertions that are encoded in XML, profiles for attaching the assertions to various protocols and frameworks, the request/response protocol used to obtain the assertions, and bindings of this protocol to various transfer protocols (for example, SOAP and HTTP).

Security Domain An environment defined by a single set of security policies, including a set of people, equipment, facilities, procedures. A Security Domain may be a single enterprise or a collection of enterprises (e.g. IHE-XDS Affinity Domain).

SFIL *Société Française d'Informatique de Laboratoire*.

SFR *Société Française de Radiologie*.

Signature ceremony An instance of an entity creating a digital signature document.

Signature purpose An indication of the reason an entity signs a document. This may be explicitly included as part of the signed information and can be used when determining accountability for various actions concerning the document. Examples include: author, transcriptionist/recorder, and witness.

Signature time The date and time of a signature ceremony.

SIRM *Società Italiana di Radiologia Medica*.

SINTP *Simple Network Time Protocol*. This is a reduced accuracy version of NTP. The protocol fields are the same, but the data values and algorithms used are greatly reduced accuracy so that it can be implemented on limited capacity systems.

Sorter An automated device which sorts the specimen according to their process type.

Specimen Storage System An automated storage device which saves and manages processed specimen.

SPS *Scheduled Procedure Step*.

SR *Structured Report*.

Submission Set A set of XDS documents registered together to a Document Repository concerning information related to one care event of a single patient, provided by an EHR system.

SUID *The Study Instance UID* from a DICOM SOP instance, or collection of SOP instances.

SWOS *Specimen Work Order Step*: A WOS performed by a Pre/Post Processor actor.

TEE *Transesophageal Echocardiography*.

Test A medical procedure that involves testing a sample of blood, urine, or other substance from the body.

TGT *Ticket Granting Ticket*. The initial credentials that verify that the user has been authenticated. It is used to avoid repeated user authentication events and as a token to request access to services. icket Granting Ticket. The initial credentials that verify that the user has been authenticated. It is used to avoid repeated user authentication events and as a token to request access to services.

Trigger Event An event such as the reception of a message or completion of a process, which causes another action to occur.

TTE *Transthoracic Echocardiography*.

UID *Unique Identifier* (See also Globally Unique Identifier).

Universal ID *Unique identifier over time within the UID type*. Each UID must belong to one of specifically enumerated species. Universal ID must follow syntactic rules of its scheme.

URI *Unique Resource Identifier*.

Use Case A graphical depiction of the actors and operation of a system.

User A natural person who makes use of a system and its resources for any purpose. A more generalized term principal is used in SAML. For the purpose of XUA the SAML use of principal should be considered equal to XUA use of user.

Username A sequence of characters, different from a password, that is used as identification and is required when logging on to a multiuser computer system, LAN, bulletin board system, or online service. Also called user ID, or uid.

User Subject The PSA defined subject that supports sharing the user identity of the currently logged in to the applications on the desktop.

UTC *Universal Coordinated Time*. This is the replacement for GMT. It defines a reference time base that is internationally recognized and supported.

WOS *Work Order Step*: A step of a Work Order performed on one specimen.

XA *X-ray Angiography*.

XDS Document An XDS Document is the smallest unit of information that may be provided to a Document Repository and registered in a Document Registry. An XDS Document may contain simple text, formatted text (e.g. HL7 CDA Release 1), images (e.g. DICOM) or structured and vocabulary coded clinical information (e.g. CDA Release 2, CCR), or may be made up of a mixture of the above types of content.

XDS Folder An XDS Folder allows document sources to group the documents they submit with other related documents. What constitutes a Folder and the vocabulary associated with the specific Folders used by an EHR-CR is decided by an agreement between the care delivery organization members of a Clinical Affinity Domain.

ZVEI *Zentralverband Elektrotechnik- und Elektronikindustrie*.