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Chapter four: Glossary

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Preface

The majority of this glossary is classified as REFERENCE. The section 4.1 Action-Verb Structure is NORMATIVE. This glossary is provided as guidance for preparing and interpreting HL7 Electronic Health Record System functional profile specifications and conformance statements. The goal is to promote clarity and consistency when interpreting and applying the text of the HL7 Electronic Health Record System Functional Model (EHR-S FM).

This Glossary is intended to be international in application. However, each realm may want to adjust terms to their own language.

Acknowledgements

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Table 1: Acknowledgements

Chapter 4 Introduction and Overview (Reference)

The Health Level Seven International (HL7) Electronic Health Record System Functional Model (EHR-S FM) Glossary is an HL7 reference document that provides a set of definitions and guidelines in order to ensure clarity and consistency in the terms used throughout the functional model. The Glossary includes the definition of important terms used in the expression of EHR systems' functionalities, and comprises a consensus-based list of Action-Verbs and specific guidelines for constructing conformance criteria (CC).

HL7's EHR Work Group intends to continually unify the glossaries that support both the EHR and Personal Health Records (PHR) System Functional Models, since both models overlap in health care information coverage and system functionalities, and since readers are often the same people. It is expected that Functional Profiles (FP) created within the context of the EHR-S FM will align with and respect this Glossary. However, this Glossary will not provide definitions for all the terms used in Functional Profiles. FPs will typically use context-specific, realm-specific, or specialized terms associated with their area of focus, and will need to incorporate a complementary glossary for these special terms.

In the case where FPs are merged, care should be exercised to ensure that the same Action-Verbs are used with the same meaning, and that identical meanings are conveyed with the same Action-Verb. It is recommended that existing FPs be re-examined and updated to better align with this Glossary.

Action-Verbs play a critical role in phrasing conformance criteria (CC). Extensive efforts were made to categorize and normalize Action-Verbs and to develop guidelines for creating clear and consistent CCs throughout the EHR-S FM. Continuity with previous EHR-S FM versions is provided by including Glossary terms that have been deprecated, accompanied by suggestions for preferred replacement terms. Vigorous efforts were deployed to reduce the ambiguities inherent in the use of human language; care was used to respect the fundamental meaning of words and to avoid domain specific usage of terms.

Some common terms and Action-Verbs have not been included in this Glossary. For example, terms like 'computer', 'keyboard', 'archive' and 'compact' are considered general computer field terms that do not need to be defined here. Some other terms reflect functionalities inherent in any computer system and are not defined here, e.g. compute. Readers who desire definitions of terms not covered in the Glossary are invited to consult trusted dictionaries or encyclopedias. Where definitions of terms are taken from recognized sources, specific references are included.

For historical purpose, an Appendix is provided that describes the previous hierarchies of Action-Verbs used in the EHR-S FM and the PHR-S FM, and the overall logic that guided the Glossary team in arriving at the current model.

4.1.1 Known Issues

The following are known issues with this version of the glossary:

- This Glossary has been revised for Action-Verbs only. The Glossary Team (GT) intends to re-examine the other glossary terms in the future.
- Care has been taken to align definitions with trusted dictionaries. The two (2) main dictionary sources have been:
  - http://dictionary.reference.com/index.html, and
  - The Canadian Oxford Dictionary.
- Where definitions have been obtained from other trusted sources, the source is noted in the Reference column of the table. Invitations are extended to interested parties to complete the Reference column where applicable.
- Definitions provided are not expected to align with the various definitions included in other standards, jurisdictional laws and regulations or in domain specific glossaries. This glossary aims at being health care domain independent and universal.

4.1 The Action-Verb Structure (Normative)

The Action-Verbs to be used for writing conformance criteria (CC) in the EHR-S FM and the PHR-S FM are organized in three (3) categories, each with its own set of Action-Verbs:

- A system access category;

- A data management category; and
- An auditing category.

Each category consists of Action-Verbs that collectively represent a logical set of actions distinct from the other two (2) categories. All Action-Verbs at all levels are defined in the glossary section of this document (section four (4)), and illustrative examples are provided.

4.1.1 Secure (System) Category

The Secure System Category provides Action-Verbs for controlling access (authenticating and authorizing users), tracking activities (logging and auditing), and sustaining operations. This category has one parent, Secure (System), and three (3) intermediate children: Control Access, Track, and Sustain (Operations).

Secure (System)				
Control Access		Track		Sustain (Operations)
Authenticate	Authorize	Log	Audit	

- Track (govern; control; administrate; oversee; inspect; examine; assess; observe; monitor; police; enforce; check)
- Sustain (Operations) Keep the system running correctly (e.g., sustain operations; quality; integrity; throughput; mirror; reliability; failover; failsafe; versioned; virus-free; leak-free; up-to-date; safeguard)

4.1.2 Data Management Category

The data management Category provides Action-Verbs for the complete range of data handling actions by a system. The category has one parent, Manage (Data), and five (5) children with subsets: Capture, Maintain, Render, Determine, and Manage-Data-Visibility.

Manage (Data)									
Capture	**Maintain**			**Render**			**Exchange**	**Determine**		**Manage-Data-Visibility**
Auto-Populate Enter Import Receive	Store Archive Backup Decrypt Encrypt Recover Restore Save	Update Annotate Attest Edit Harmonize Integrate Link Tag	Remove Delete Purge	Extract	Present	Transmit	Export Import Receive Transmit	Analyze	Decide	De-Identify Hide Mask Re-Identify Unhide Unmask

The first three subsets cover the capture, maintenance and rendering of data as follows:

- Capture: Auto populate fields of data based on partially filled information, Enter data manually, Import data from an external source (which may be a device), and Receive data from another system (which may be in a device).
- Maintain: Store, Update and Remove data:
- Store: Save data on local media, Backup data on backup storage media, and Encrypt data for security and privacy purposes;
- Update: Edit data by modifying it, Annotate data with notes, Tag data with labels, Harmonize data with other sources, Integrate data together, and Link data to other data;
- Remove: Delete data from the index or directory, and Purge data from the storage media.
- Render: Extract data based on certain criteria, Present data on an attached device, and Transmit data to external systems or devices.

The next subset provides verbs for the determination of actions in processing data:

- Determine: Analyze data using rules and analytical steps and then Decide appropriate actions as a result of that analysis.

The final subset allows the construct of statements restricting the visibility of data and reversing those actions:

- Manage-Data-Visibility: De-Identify data as to prevent associating the data to a specific person, Hide data so that only authorized users can see that the data exist, and Mask data so that users can see that the data exist but only authorized users can actually view the actual data.
- To reverse these actions: Re-Identify, Unhide, and Unmask.

4.1.3 How Action-Verbs are defined

In this Glossary, Action-Verbs are defined in the following manner:

For an Action-Verb that has a parent, the Action-Verb's definition will start with the immediate parent verb and then a restatement of the meaning of the Action-Verb, followed by at least one (1) example labeled as such. Examples will use the Action-Verb being defined with explanatory descriptions where relevant. An illustrative example follows:

- PRESENT (Action-Verb): To RENDER (the parent Action-Verb) data by delivering the data to local users in a meaningful and appropriate way. For example, the system may PRESENT an alert automatically when a newly-arriving lab value is received that is out of normal range.

For a top level Action-Verb, the definition will include the next immediate level of children, followed by at least one (1) example labeled as such. Examples will use the Action-Verb being defined with explanatory descriptions were relevant. An illustrative example follows:

- MANAGE (DATA) (Action-Verb): To handle data by capturing, maintaining, and rendering data, determining actions about data, and managing data visibility. For example, the system shall provide the ability for a user to MANAGE patient and family preferences as they pertain to current treatment plans.

4.1.4 Deprecated Verbs

The Glossary includes deprecated Action-Verbs, with suggestions on how to phrase their meaning using the standardized list of Action-Verbs and qualifiers as explained in section 3.2.

In this Glossary, the term deprecated is used to qualify Action-Verbs that were previously used in conformance criteria and are not part of the updated hierarchy of Action-Verbs; therefore, deprecated Action-Verbs should not be used. These deprecated Action-Verbs have been labeled as such. Examples of deprecated Action-Verbs include ALERT, QUERY, and SEARCH.

4.2 Guidelines for Use (Reference)

Contributors to the contents of the EHR-S FM must be thoroughly familiar with this 'Guidelines For Use' section. It is critical to the integrity of the EHR-S FM that key terms have a consistent meaning throughout the EHR-S FM specification.

4.2.1 General Guidance

Throughout the EHR-S FM, terms used for stating Conformance Criteria (CC) must respect meanings as conveyed in the definitions provided in this Glossary. Using the Action-Verbs rigorously will result in clearly written Conformance Criteria (CC) and help ensure consistent communication of functional requirements. Furthermore, combining various functional models and functional profiles is facilitated when a controlled set of terms is used consistently. Therefore, use of synonyms or local jargon should be avoided.

In the EHR-S FM, Statements and Descriptions should be written in 'business-like language', defining in business and user terms system capabilities that support user needs. CC should be written from the system's perspective, with rigor and consistency across functional areas, using Action-Verbs and the guidelines; CC should not be duplicates of the Statements and Descriptions. However, scope wise, both Statement/Description and the corresponding CC must address the same functionalities.

CC represents a fundamental component of the EHR-S FM by defining its functionalities in precise terms. Significant efforts were invested in developing a set of Action-Verbs with precise definitions that must be used in the construction of CC. The next section provides specific guidance on how CC should be composed.

Since various realms may require the use of certain terms (for example, a term that is embedded in national law), this EHR-S FM Glossary maintains a realm-independent perspective. The long term intent is to construct CC that are computable and easy to validate as to their grammar and contents when it is relevant (e.g., use of list of approved Action-Verbs).

4.2.2 Constructing Rigorous Conformance Criteria

Rigor, clarity and consistency in crafting CCs are of paramount importance. The following rules are to be followed whenever possible:

- It is generally preferable to use separate CCs instead of trying to include multiple actions in a single criteria, unless such a combination provides for an economy of statements and is unambiguous.
- Where an action can be performed both automatically by the system and manually upon initiation by the user, separate CCs must be composed.

Selected verbs in conformance criteria should be at the proper level of granularity. If a parent verb in a hierarchy is used, then it means that the actions of all the children verbs under it are pertinent and apply.

- For example, instead of saying MAINTAIN clinical data which would imply storage, update and deletion of data, one would say STORE and UPDATE data if deletion of data was not allowed.
- For example, if a given CC expects EDIT and TAG to be reasonable application of the function, but that ANNOTATE, HARMONIZE, INTEGRATE, LINK are unreasonable, then the word MAINTAIN should be avoided in lieu of the more precise “EDIT and TAG”.
- An example of multiple Action-Verbs: The system SHALL provide the ability to CAPTURE, STORE, EDIT, and TAG-as-deprecated the entries in the registry or directory so that it is current.

The general grammar to use in developing rigorous CCs has the following structure:

The system [SHALL | SHOULD | MAY] [provide the ability to] [Action-Verb] [object(s)] [participant(s)] [qualifier(s)] [“according to scope of practice, organizational policy, and/or jurisdictional law”].

- The system is the subject of all the Conformance Criteria. Therefore [subject(s)] is not a parameter and has been replaced by ‘the system’.
- [SHALL | SHOULD | MAY]: mandatory. One – and only one – of these three auxiliary verbs must be used. Meanings are defined in EHR-S FM Conformance Clause document and are repeated here for convenience:
    - SHALL – to indicate a mandatory requirement to be followed (implemented) in order to conform. Synonymous with ‘is required to’.
    - SHOULD – to indicate an optional recommended action, one that is particularly suitable, without mentioning or excluding others. Synonymous with ‘is permitted and recommended’.
    - MAY – to indicate an optional, permissible action. Synonymous with ‘is permitted’.
- [provide the ability to]: this is optional and is used when the action will depend on a user intervention;
- [Action-Verb]: mandatory. The Action-Verb must come from the standardized list presented in this Glossary and respect the definitions provided. When another verb would appear preferable, it is suggested to look for that verb in the Glossary definition section where it may be listed with suggestions for a replacement verb and composition. This guide provides numerous examples.
- [object(s)]: mandatory. Identifies the object(s) of the action.
- [participant(s)]: optional. Covers users (or external systems) that participate or are affected by the specified action.
- [qualifier(s)]: optional. This might relate to time, interval, condition(s). Can include (for example): “automatically”, “manually”, “in real time”, “according to the business rules”
- [“according to scope of practice, organizational policy, and/or jurisdictional law”]: optional, when the action could be governed by relevant practices, policies and/or laws.

Note that “…provide the ability to…” is a key phrase that means “manual intervention is expected”. Note also that “The system SHALL…” means that the system is required to perform the relevant function when all factors and specified conditions are met.

Some examples of rigorous CCs follow:

- The system SHALL provide the ability to PRESENT the list of scheduled patients according to selected criteria such as provider name, dates, time of day, nature of visit, etc. using language of choice.

- IF a provider attempts to prescribe a drug using the system, THEN the system SHALL DETERMINE whether interactions exist between the newly prescribed drugs and the medications on the patient's current medication list, and RENDER an appropriate response to the provider, according to scope of practice, organizational policy, and/or jurisdictional law.

The verb 'Conform' is used with a special meaning in the FM and is not part of the Action-Verb model. It is a special instruction for including the functional requirements of one function in another function.

- For example: The system SHALL conform to function IN.1.1 (Entity Authentication).

4.2.3 Examples of Rewording Conformance Criteria using the Proper Action-Verbs

Examples are taken from the EHR S FM R1.1 version. These examples are provided as illustrations of improving the composition of CC, and do not imply that the CC will remain the same in later releases of the EHR-S FM.

- The system SHOULD provide the ability to ~~access~~ PRESENT summarized information through customized views based on prioritization of chronology, problem, or other pertinent clinical parameters.
- The system SHALL provide the ability to ~~finalize~~ TAG a document or note as finalized.
- The system SHOULD provide the ability to ~~derive order sets from care plans~~ DETERMINE and PRESENT the appropriate order sets, based on an analysis of care plans.
- IF the system is used to ~~enter, modify or exchange~~ CAPTURE, UPDATE or RENDER data, THEN the system SHALL conform to function IN.1.5 (Non-Repudiation), to provide the traceability necessary so that the sources and receivers of data cannot deny that they entered/sent/received the data.
- The system SHOULD provide the ability to ~~communicate~~ TRANSMIT the order to the correct recipient(s) for order fulfillment.
- The system SHALL provide the ability to ~~deactivate~~ TAG a problem as deactivated.
- The system SHALL provide the ability to ~~group tests done on the same day~~ ANALYZE and PRESENT tests in such a manner that those done on the same day are grouped together.
- The system MAY provide the ability to ~~create~~ CAPTURE a terminology map.
- The system MAY ~~notify~~ RENDER a notification to the clinician when specific doses are due.

Other examples of older verbs or phrases that were reviewed in context, and then re-written using the newest Action-Verb set include:

Release 1.1	Release 2
Create	MAINTAIN and RENDER
Add, input	CAPTURE
Define, Tailor, Specify, Set	CAPTURE and MAINTAIN
Generate	RENDER
Cite, Include	CAPTURE and RENDER
Export	EXTRACT and TRANSMIT
Find, Identify	EXTRACT the information needed to…
Specify	TAG
Prompt	RENDER a notification

4.2.4 Clarification of Terms

"Distinctions"; "Important Distinctions"; "Nuanced Terms"; "Special Notes"; "Troublesome Terms"

4.4.2.1 "Medication Order" versus "Prescription Order"

Motivation:

The EHR_S FM contains functionality that supports the management of orders for medications, devices, therapies, etc. The Work Group discovered a need to clarify the distinction between “medication orders” and “prescription orders”.

Details of differences:

A Prescription Medication is a licensed medicine that is regulated by legislation and requires an order from an authorized practitioner before the medication may be obtained. The term is used to distinguish it from over-the-counter drugs which can be obtained without a prescription. Different jurisdictions have different definitions of what constitutes a prescription drug. [Adapted from Wikipedia: “Prescription Medication”]

A “Medication Order” is an instruction from an authorized practitioner (or prescriber) (e.g., physician, physician’s assistant, dentist, or nurse practitioner) for the dispensing of prescription or non-prescription drugs. That act is documented in the EHR system. A “Prescription” is a document that is transmitted (for example to a pharmacy) in response to the creation of a Medication Order.

Guidance:

“Prescription” should be used when referring only to those instances that a law requires.

“Medication order” is the preferred term in the EHR-S Functional Model

4.3 Glossary of Terms for EHR-S FM (Reference)

Term	Definition	Reference
Accept DEPRECATED VERB	Instead, use ''PRESENT or RENDER a message of acceptance, based on the determination (ANALYZE and DECIDE) that the data is valid". Adjust to the context.	
Access DEPRECATED VERB	Instead, use CONTROL-ACCESS if the context is one of controlling access to the system. Use RENDER or PRESENT or another relevant Action-Verb when the context is one of accessing data.	
Access control	A means of ensuring that the resources of a data processing system can be accessed only by authorized entities in authorized ways.	(ISO/IEC 2382-8, 1998)
Accountability	The property that ensures that the actions of an entity may be traced uniquely to that entity.	(ISO/IEC 2382-8, 1998) cited in ISO TS 18308
Active order	Active – In a state of action. Order – Request for a certain procedure to be performed.	America Heritage Dictionary, Second College Edition, Houghton Mifflin Company, Boston, 1991.
Activity	See health care activity	
Actor (in the healthcare system)	Health professional, healthcare employee, patient/consumer, sponsored healthcare provider, healthcare organization, device or application that acts in a health related communication or service.	(ISO/TS 17090, 2001 – modified) cited in ISO TS 18308
Administrative-acceleration of registration	A delayed patient-registration workflow technique. Very useful for providing care in urgent situations, where life-saving activities supersedes patient-registration requirements.	
Advanced Directive	Advance directives are legal documents that allow an individual to convey his/her desires regarding end-of-life care including the use of antibiotics, tube feedings, and resuscitation. This document is not a healthcare power of attorney or a living will.	
Affirm DEPRECATED VERB	Instead, use TAG (with an appropriate qualifier). Affirm, Assert, Declare, Indicate, and State are synonyms.	
Aggregate-level data	Within the context of the Population Health arena, the term "aggregate-level data" refers to data that is collected (and analyzed) regarding a specified group (a "population") of patients. For example, "Left-handed patients were ten percent more likely to receive flu immunizations than right-handed people at the Main Street Clinic last year". (Note: aggregate-level data is often de-identified within the Population Health context.) Compare with "patient-level data".	John Ritter
Alert DEPRECATED VERB	Instead, use "RENDER or PRESENT or TRANSMIT an alert to a person or another system (including a device)". Alerting is typically done after analyzing some data and arriving at a decision that someone must be alerted. See DETERMINE for some examples.	
Amend	Instead, use EDIT.	

Term	Definition	Reference
DEPRECATED VERB		
Analyze	To DETERMINE actions in the flow of processing data by comparing, correlating, or weighting certain data and by applying clinical or business rules, hence leading to a decision (see DECIDE). For example, the system may ANALYZE patient information using a drug-interaction database and a set of clinical rules. Another example is that the system may ANALYZE various protocols relative to a patient's condition. Another example is that a person may ANALYZE a proposed update to a patient's home address and DECIDE to reject the proposed update.	
Annotate	To UPDATE data by attaching comments or notes to the data without editing the data. For example, an Attending physician may ANNOTATE the information entered by the Resident physician before signing the report.	
Append DEPRECATED VERB	Instead, use the term EDIT. This means editing data by adding new data to existing data.	
Appropriate	A suitable, proper, or dependent context-sensitive identification, designation, or qualification. The term "appropriate" is used in this document to codify the need for flexibility to cover conditions that may be best resolved dynamically. The meaning of the term "appropriate" is clarified in this document by corresponding examples.	
Architecture	The structure of components, their inter-relationships, and the principles and guidelines governing their design and evolution over time	ISO 18308
Archive (verb)	To STORE data by moving the data to long-term storage media and deleting or purging data on the original online storage, according to scope of practice, organizational policy, and/or jurisdictional law. For example, the system at the Oak Street Hospital automatically ARCHIVES patient-related data that is older than eight years by encrypting and compressing it, moving it to long-term storage, purging it, identifying the data by month and year, and creating a pointer to the archived data. Another example is that a system may automatically ARCHIVE outpatient clinic schedules that are being replaced.	
Archive (noun)	The process of moving one or more EHR extracts to off-line storage in a way that ensures the possibility of restoring them to on-line storage when needed without loss of meaning. Wherever possible, archived data should be technology-independent so that future users do not have dependencies on obsolete technology from the past.	ISO TS 18308
Attest	To UPDATE information by ATTESTing that an EHR record (or part of an EHR record) is genuine. For example, a resident physician may ATTEST that the information contained in an EHR record was created by her. Another example is that an attending physician may annotate a resident's version of the record and then ATTEST to those changes. Note: Attestations may be applied, affixed or bound to an EHR record, for example, via a digital signature, certification, or other verifying mark.	
Attestation	The process of certifying and recording legal responsibility for a particular unit of information.	ISO TS 18308
Assert DEPRECATED VERB	Instead, use TAG (with an appropriate qualifier). Affirm, Assert, Declare, Indicate, and State are synonyms.	
Audit	To TRACK system-initiated or user-initiated activities by analyzing logs based on policies or rules. For example,	

Term	Definition	Reference
	the system may automatically AUDIT the daily log for multiple-failed-logon-attempts. Another example is that an administrator may AUDIT the excessive use of extraordinary (i.e., "break-the-glass") access to certain patient information in the Emergency Department.	
Augment DEPRECATED VERB	Instead, use EDIT, ANNOTATE, or LINK with the appropriate qualifiers. Augmentation is the addition of information to existing healthcare data.	
Authenticate	To CONTROL ACCESS to a system by validating the identity of a user, another system or a device before authorizing access. For example, the system may AUTHENTICATE Dr. Jones by validating his identity using a UserID and a biometric device. Another example is that the system rejects Sara Smith's attempt to AUTHENTICATE to the system after three failed password entries.	
Authority	Body that has legal powers and rights.	(ISO/IEC 2382-8, 1998) as cited in ISO TS 18308
Authorize	To CONTROL ACCESS to a system by applying permissions to use certain functionality or to view certain data. For example, the system may AUTHORIZE Dr. Jones, an Emergency Department physician, to view Emergency Department patient records (note: We assume that the administrator has entered a set of permissions for all Emergency Department physicians). Another example is that the system does not AUTHORIZE deletion by Sara Smith of a patient record that has already been signed.	
Automatically	A qualifier used to indicate that the action will be done by the system, independently of any user intervention. For example, the system shall automatically determine that the user has the appropriate rights to use the requested functionality.	
Auto-populate	To CAPTURE data by inputting it automatically using previously-existing data, providing a default value, or deriving it from other data, or by following various data-entry business rules. For example, the system may AUTO-POPULATE the city, state/province, and country fields when a user enters a zip-code. Another example is that the system may AUTO-POPULATE a newborn's home address with the mother's home address.	
Background process	Background processes, are processes running behind the scene without human interaction or intervention. Sometimes employed to perform certain maintenance activities or to deal with abnormal conditions arising in the lifetime of the instance.	http://www.dbasupport.com/oracle/ora9i/background_process01.shtml
Backup (verb)	To STORE data by placing a copy of the data onto an electronically-accessible device for preservation in case the original is lost, corrupted, or destroyed. For example, a system may BACK UP the incremental changes made to a patient's record by storing it locally on a daily basis. Another example is that an administrator may BACK UP a complete copy of certain data by storing it at an offsite facility.	
Backup (noun)	A copy of data for the specific intent of ensuring its preservation and possible restoration in case the original is lost, corrupted, or destroyed	
Behavioral healthcare	Continuum of services for individuals at risk of, or suffering from mental, addictive, or other behavioral health disorders.	www.mentalhealth.samhsa.gov/publications/allpubs/MC98-70/default.asp
Best practice	Best Practices are practices that incorporate the best objective information currently available regarding effectiveness and acceptability.	www.samhsa.gov/grants/2005/nofa/sm65011_jail_appenAtol.pdf
Bind	To ensure a persistent relationship between two (or more) pieces of information. For example, one may bind an	John Ritter and Gary Dickinson

Term	Definition	Reference
	author's (digital) signature to the corresponding health record content created by that author. Another example is that one may bind certain metadata to an electronic document. Another example is that one may bind a certain laboratory result (report) to a corresponding laboratory order.	
Boundaries	Something that indicates a border or limit. The border or limit so indicated.	http://dictionary.reference.com/search?q=boundaries&r=66
Calculate DEPRECATED VERB	Instead, use "DETERMINE and STORE" or "DETERMINE and PRESENT", as appropriate in the context.	
Capture	To MANAGE data by auto-populating, entering, importing, or receiving the data, either through human intervention or automated means. For example, a system may CAPTURE patient's data entered by a physician through the keyboard or sent by the physician using a mobile device. Another example is that the system may CAPTURE laboratory results by automatically receiving laboratory data or by keyboard entry for locally performed tests.	
Care Plan	A care plan is an ordered assembly of expected or planned activities, including observations, goals, services, appointments and procedures, usually organized in phases or sessions, which have the objective of organizing and managing health care activity for the patient, often focused upon one or more of the patient's health care problems. Care plans may include order sets as actionable elements, usually supporting a single session or phase. Also known as Treatment Plan.	HL7 Clinical Decision Support team, Jim McClay, SAGE guideline consortium, University of Nebraska Medical Center
Care Plan (alt)	A personalized statement of planned health care activities relating to one or more specified health issues.	ISO 18308, [EN 13940-1:2007, modified]
Cascade (noun)	Something arranged or occurring in a series or in a succession of stages so that each stage derives from or acts upon the product of the preceding.	http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=cascade
Chain-of-Trust Agreement	A requirement certain administrative procedures may be implemented that guard the integrity, confidentiality and availability of sensitive data. A Chain-of-Trust Agreement is such a procedure. It is essentially a Non-Disclosure Agreement that governs the transmission of data through an electronic medium. The sender and recipient agree to protect the data electronically transmitted between them.	http://www.hipaadvisory.com/action/legalqa/advisor/HIPAAdvisor5.htm
Change history	A record of changes that have occurred over time, as to a document or other change controlled item. The log can serve as an audit record for activity in a file system.	http://en.wikipedia.org/wiki/File_change_log
Change log	A record of changes that have occurred over time, as to a document or other change controlled item. The log can serve as an audit record for activity in a file system.	http://en.wikipedia.org/wiki/File_change_log
Clinical Data / Information	Data/information related to the health and health care of an individual collected from or about an individual receiving health care services. It includes a caregiver's objective measurement or subjective evaluation of a patient's physical or mental state of health; descriptions of an individual's health history and family health history; diagnostic studies; decision rationale; descriptions of procedures performed; findings; therapeutic interventions; medications prescribed; description of responses to treatment; prognostic statements; and descriptions of socio-economic and environmental factors related to the patient's health.	CPRI, 1996b; ASTM 1769
Clinical decision support	Clinical Decision Support (CDS) refers broadly to providing clinicians or patients with clinical knowledge and patient-related information, intelligently filtered or presented at appropriate times, to enhance patient care.	http://www.himss.org/ASP/topics_clinicalDecision.asp

Term	Definition	Reference
	Clinical knowledge of interest could range from simple facts and relationships to best practices for managing patients with specific disease states, new medical knowledge from clinical research and other types of information.	
Clinical documents	Documents created surrounding the process of providing health care and used in support of clinical decisions. See Also: Clinical Information.	
Clinical information	Information about a patient, relevant to the health or treatment of that patient, which is recorded by or on behalf of a healthcare professional. NOTE: Clinical information about a patient may include information about the patient's environment or about related people or animals where this is relevant.	
Clinical process	The set of interrelated or interacting health care activities performed by one or more health care professionals	ISO 18308
Clinician	Health professional who delivers health services directly to a patient/client	ISO/TR 12773-1
Clinical tasks	Tasks whose results are recorded in clinical documents.	
Code set(s)	Under HIPAA, this is any set of codes used to encode data elements, such as tables of terms, medical concepts, medical diagnostic codes, or medical procedure codes. This includes both the codes and their descriptions. HIPAA requires every provider who does business electronically to use the same health care transactions, code sets, and identifiers. Code sets are the codes used to identify specific diagnosis and clinical procedures on claims and encounter forms.	http://aspe.hhs.gov/admnsimp/faqcode.htm www.cms.hhs.gov/TransactionCodeSetsStands/
Coding system	Combination of a set of code meanings and a set of code values, based on a coding scheme. NOTE Code meanings are typically represented by terms or rubrics, but they can have other representations. Code values are typically numeric or alphanumeric	ISO 18308, [EN 1068:2005]
Coding Scheme	A collection of rules that maps the elements of one set on to the elements of a second set NOTE: The two sets considered here are (1) a set of 'code meanings' (or 'coded set'), and (2) a set of 'code values' (or 'code set'). Those sets are not, per se, part of the coding scheme.	ISO 18308, [ISO/IEC 2382-4:1999] [EN 1068:2005]
Coded	References a vocabulary, code set, or database, such as SNOMED, MEDCIN, etc.	
Communication with medical devices	Interfacing and integration ranging from the device to the database level in support of creation of clinical documents. Examples include automatic importation of blood pressure readings and viewing of ECGs.	
Compute DEPRECATED VERB	Instead, use "DETERMINE and STORE" or "DETERMINE and PRESENT" as appropriate in the context.	
Concept	A unit of knowledge created by a unique combination of characteristics	ISO 18308, [ISO 1087-1:2000]
Confirmation service (BAA)	A service that provides identification, control, accounting, and documentation of all changes that take place to system hardware, software, firmware, supporting documentation, and test results throughout the life span of the system.	All In One CISSP Certification Exam Guide, Shon Harris, CISSP, MCSE, CCNA, 2002, McGraw Hill, Osborne,

Term	Definition	Reference
		Berkley, CA.
Confidentiality	(The/A) property that information is not made available or disclosed to unauthorized individuals, entities or processes	[ISO TS / EN 13606-4: 2007, modified]
Configure	Instead, use "MANAGE configuration parameters for …". For example, the user may desire to STORE configuration parameters regarding the preferred type of human language. Another example is that an administrator may UPDATE configuration parameters that control external access to the system by restricting access during the weekends.	
Conform	To comply. Note: The verb 'Conform' is used with a special meaning in the FM and is not part of the Action-Verb model. It is a special instruction for including the functional requirements of one function in another function. For example: "The system SHALL conform to function IN.1.1 (Entity Authentication)".	
Conformance	The fulfillment of specified requirements by a product, process, or service.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Conformance criteria	Statements of requirement indicating the behavior, action, capability that constitutes implementation of the function.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Conformance clause	A section of a specification that defines the requirements, criteria, or conditions to be satisfied in order to claim conformance.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Conformance statement	A statement associated with a specific implementation of a profile of the EHR-S Functional Model.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Consent (noun)	An agreement, approval, or permission as to some act or purpose given voluntarily by a competent person.	ISO 18308, [Black's Law Dictionary, 2008]
Consumer (in relation to healthcare services)	An individual who may become a subject of care.	ISO/TR 12773-1
Control Access	To AUTHENTICATE users and/or systems and AUTHORIZE access to functionality and/or data. For example, the system may CONTROL ACCESS to the patient's data by authenticating Dr. Jones' identity and authorizing him to update his patient's records. Another example is the system may CONTROL ACCESS to the system by refusing a hospital visitor the ability to authenticate to the system. NOTE: the set of CONTROL ACCESS Action-Verbs requires data specifying permissions. This permission data is managed via the MANAGE data Action-Verbs set.	
Correct DEPRECATED VERB	Instead, use EDIT.	
Create DEPRECATED VERB	Instead, use "DETERMINE and STORE" or "DETERMINE and RENDER" or "DETERMINE and PRESENT" as appropriate to the context.	

Term	Definition	Reference
Dashboard	A dashboard is a data representation tool which polls information from a system(s) and presents it to the user to allow them to make decisions and take actions, and which reflects the impact of these actions in a timely fashion so as to facilitate the user in dynamically continuing to alter their behaviors.	
Data aggregation	A process by which information is collected, manipulated and expressed in summary form. Data aggregation is primarily performed for reporting purposes, policy development, health service management, research, statistical analysis, and population health studies.	ISO TS 18308
Data validation	A process used to determine if data are accurate, complete, or meet specified criteria. NOTE – Data validation may include format checks, completeness checks, check key tests, reasonableness checks, and limit checks.	(ISO/IEC 2382-8, 1998) as cited in ISO TS 18308
Decide	To DETERMINE actions in the processing of data by choosing a certain alternative based on an analysis, and acting accordingly. For example, the system may DECIDE to render a notification to off-duty nurses to report for duty based on clinic rules and the receipt of a tornado alert. Another example is that the system may DECIDE to RENDER an alert to a clinician that a prescribed drug is contraindicated with the patient's listed allergies, based on the analysis conducted.	
Decision support prompts	Any computer based support of medical, managerial, administrative and financial decisions in health using knowledge bases and/or reference material. [In this sense the term is essentially synonymous with Knowledge-Based Systems, and some users use the term this way in preference to the terms Expert System or Knowledge-Based System, e.g., a system that uses statistical look-up to provide users with decision support may be regarded as a Decision Support System, therefore care should be taken in making this identification between the terms].	http://www.centc251.org/Ginfo/Glossary/tcglosd.htm
Decision support system	Any computer based support of medical, managerial, administrative, and financial decisions in health using some processing logic with knowledge bases and/or reference materials.	
Declare DEPRECATED VERB	Instead, use TAG (with an appropriate qualifier). Affirm, Assert, Declare, Indicate, and State are synonyms.	
Decrypt	To STORE data by converting encrypted data back into its original form, so it can be understood. For example, the system may DECRYPT clinical data received from an authenticated external laboratory system.	
Decryption	Decryption is the process of converting encrypted data back into its original form, so it can be understood.	http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci212062,00.html
De-identification	The process of removing the association between a set of identifying data and the data subject.	ISO 18308, [ISO/TS 25237:2008]
De-identify	To MANAGE-DATA-VISIBILITY by removing identifiers from data in such a way that the risk of identifying an individual is very small under the circumstances, as specified by scope of practice, organizational policy, and/or jurisdictional law. For example, a system may DE-IDENTIFY data for a researcher who wants to perform an analysis of drug effectiveness on diabetic patients. Another example is where a hospital may DE-IDENTIFY data for a set of patients to transmit to a university professor looking for illustrative cases for educational work.	
Delete	To REMOVE data by making it inaccessible to the application. For example, a user may DELETE an existing patient-appointment at the request of the patient. Note: In the case where the data becomes invalid but needs to remain in the system, the word "TAG" is preferred over the word "DELETE" or the word "Nullify". This type of action is considered a data "Tagging"	

Term	Definition	Reference
	process and not a data deletion process. For example, a health information management professional may desire to TAG a certain clinical term as obsolete, but the term needs to remain in the system for backward compatibility purposes.	
Deprecate	Instead, use TAG with an appropriate qualifier. Deprecation of certain information may be required when that data becomes invalid, but needs to remain in the system. For example, a health information management professional may desire to TAG a certain clinical term as deprecated, but the term is retained in the system for backward compatibility purposes.	
Deprecated-Verb	IIn this Glossary, the term "deprecated" is used to qualify Action-Verbs that were previously used in conformance criteria and are not part of the current set of hierarchy of Action-Verbs; therefore, deprecated Action-Verbs should not be used. These deprecated Action-Verbs have been labeled as such. Examples of deprecated Action-Verbs include ALERT, QUERY, and SEARCH.	
Derived profile	A profile that is created from an existing profile.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Determine	To MANAGE data by analyzing it and making a decision based on the analysis. For example, the system may DETERMINE the possible severity of a patient's allergic reaction to a proposed drug by analyzing the patient's profile against a drug database and deciding whether the clinician should be presented with an alert or not. Another example is that a system may DETERMINE the next steps in a workflow based on an analysis of a patient's lab results, the patient's profile and the clinical rules of the clinic, this analysis leading to a decision as to the appropriate next steps in the clinical process.	
Digital signature	Digital signature (or public-key digital signature) is a type of method for authenticating digital information analogous to ordinary physical signatures on paper, but implemented using techniques from the field of public-key cryptography. A digital signature method generally defines two complementary algorithms, one for signing and the other for verification, and the output of the signing process is also called a digital signature.	http://en.wikipedia.org/wiki/Digital_signature
Digital signature (alt)	Any representation of a signature in digital form, including an image of a handwritten signature. The Authentication of a computer entry in a health record made by the individual making the entry.	AHIMA, Health Information Management and Technology: Pocket Glossary. Page 74. 2006
Directive	Instruction how to proceed or act.	ISO 18308, [Oxford English Dictionary, 2008]
Directory	In computing, a directory, catalog, or folder, is an entity in a file system which contains a group of files and other directories. A typical file system contains thousands of files, and directories help organize them by keeping related files together.	http://en.wikipedia.org/wiki/Directory
Disable-Access DEPRECATED VERB	Instead, use "CONTROL ACCESS by removing permissions to use specific functionality and/or manage specific data".	
Disclose DEPRECATED VERB	Instead, use "RENDER and TAG" with a label that identifies the data's purpose as "for disclosure use only".	
Disease	A broad approach to appropriate coordination of the entire disease treatment process that often involves	http://cancerweb.ncl.ac.uk/cgi-bin/omd?disease+management

Term	Definition	Reference
management	shifting away from more expensive inpatient and acute care to areas such as preventive medicine, patient counseling and education, and outpatient care. This concept includes implications of appropriate versus inappropriate therapy on the overall cost and clinical outcome of a particular disease.	
Discrete capture	Capture of an individual item of data.	http://www.m-w.com/dictionary/capture
Display (verb) DEPRECATED VERB	Instead, use PRESENT.	
Document (noun)	(noun form): See "Clinical Document." (noun form) – a writing conveying information.	http://www.m-w.com/dictionary/document
Document (verb) DEPRECATED VERB	Instead, use ENTER, or "TAG with" appropriate references, or "LINK to" sources.	
Documentation	All "notes" are "documentation," but not all "documentation" are "notes". Therefore, the broader term "documentation" should be used, unless the use of "notes" as a subset is specifically intended. See "Notes."	
Edit (verb)	To UPDATE data by correcting, amending, appending, or augmenting the data. For example, the physician may EDIT the patient's home address by correcting the civic number from 368 to 638 Oak Street. Another example is that a physician may EDIT existing notes about an injury by appending an x-ray picture of a broken bone.	
EHR	An Electronic Health Record (EHR) is a comprehensive, structured set of clinical, demographic, environmental, social, and financial data and information in electronic form, documenting the health care given to a single individual.	(ASTM E1769, 1995)
Electronic Health Record	Information relevant to the wellness, health and health care of an individual, in computer-processable form and represented according to a standardized information model.	ISO 18308
Electronic Health Record Architecture	A formal description of a system of components and services for recording, retrieving and handling information in electronic health records.	ISO 18308
Electronic Health Record System	A system for recording, retrieving and handling information in electronic health records.	ISO 18308, [ISO/EN 13606-1:2008]
Electronic messaging systems	Messages with a definite originator and one or more recipients, viewable on a computer or other electronic device. Common examples include cellular phone text messages and electronic mail.	
Eliminate DEPRECATED VERB	Instead, use DELETE or PURGE as applicable.	
Encounter (noun)	Encounter serves as a focal point linking clinical, administrative, and financial information. Encounters occur in many different settings – ambulatory care, inpatient care, emergency care, home health care, field and virtual (telemedicine).	http://www.ncvhs.hhs.gov/040127p1.htm
Encrypt	To STORE data by transforming the data into a form that is difficult to understand by unauthorized people or systems. For example, the system may ENCRYPT sensitive information such as the patient's financial information.	
Encryption	Encryption is the conversion of data into a form, called a ciphertext, that cannot be easily understood by	http://searchsecurity.techtarget.com/sDefinition/0,,sid14_gci212062,00.html

Term	Definition	Reference
	unauthorized people.	
Enter	To CAPTURE data by inputting it manually (for example, via a keyboard) or through other input devices. For example, the user may manually ENTER the patient's street address via the keyboard. Another example is that the user may ENTER the patient's body weight via an electronic weight scale.	
Enterprise	A generic term describing an extremely large network. It is usually used as a definition of 500 stations or greater.	http://www.csgnetwork.com/glossarye.html#enterprise
Entity	Something that has separate and distinct existence and objective or conceptual reality. Something that exists as a particular and discrete unit. An organization (as a business or governmental unit) that has an identity separate from those of its members.	http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=entity
Entity (alt)	A concrete or abstract thing of interest, including associations among things.	ISO 18308, [ISO/IEC 2382]
Entry	Documentation of a discrete item of health information NOTE: an entry may for example represent the documentation of a clinical observation, an inference, an intention, a plan or an action.	ISO 18308
Evidence based resources	Evidence-based practice is a "conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research".	http://www.fhs.mcmaster.ca/rehab/research/ebr.html
Exchange		
Explicit consent	Permission that is freely and directly given, expressed either viva voce or in writing.	ISO 18308
Export DEPRECATED VERB	Use RENDER instead.	
Extract	To RENDER data by locating, retrieving and possibly assembling data based on certain criteria and for certain purposes. For example, a system may EXTRACT for a clinician all the x-ray reports regarding the patient's chest. Another example is that the system may automatically EXTRACT allergy history when the physician enters a prescription. Another example is that a system may EXTRACT for a researcher the number of pneumonia-like cases treated at the Emergency Department within a specific time period. Another example is that a system may EXTRACT and aggregate information using a cohort of patients who have pneumococcal disease and categorize that cohort by specific age-ranges.	
Fast Track	An accelerated patient-registration workflow technique. Very useful for rendering care in an emergency situation and quickly discharging acute care patients.	
Filterable	The ability to programmatically separate and constrain data into specific value sets.	
Flag DEPRECATED VERB	Instead, use "RENDER an alert", or "PRESENT an alert", or "TRANSMIT a notice", if the intent is to signal a situation (i.e. flag a situation).	
Flow sheets	A tabular summary of information that is arranged to display the values of variables as they change over time.	http://www.centc251.org/Ginfo/Glossary/tcglosf.htm
Formulary	A preferred list of drug products that typically limits the number of drugs available within a therapeutic class for purposes of drug purchasing, dispensing and/or reimbursement. A government body, third-party insurer or health plan, or an institution may compile a formulary. Some institutions or health plans develop closed (ie	http://www.hrsa.gov/opa/glossary.htm

Term	Definition	Reference
	restricted) formularies where only those drug products listed can be dispensed in that institution or reimbursed by the health plan.	
Function	A computation which takes some arguments or inputs and yields an output. Any particular input yields the same output every time. More formally, a mapping from each element in the domain to an element in the range. A subroutine which returns a value.	http://www.nist.gov/dads/HTML/function.html
Generate DEPRECATED VERB	Instead, use "DETERMINE and STORE" or "DETERMINE and PRESENT" or "DETERMINE and RENDER" as appropriate to the context.	
Generic orders	General treatment orders.	
Grant-Access DEPRECATED VERB	Instead, use CONTROL ACCESS.	
Guidelines	An indication or outline of policy or conduct.	http://www.merriamwebster.com/dictionary/guideline
Harmonize	To UPDATE data by aligning and reconciling it with other information in the system, or with the data of another system (or systems). For example, the system may HARMONIZE a patient's new home address with the data of systems of other members of the care-team.	
Health care	Activities, services, or supplies related to the health of an individual.	ISO 18308, [EN 13940-1:2007]
Health care activity	Undertakings (assessments, interventions) that comprise a healthcare service.	ISO/TR 12773-1
Health care service	service provided with the intention of directly or indirectly improving the health of the person or populations to whom it is provided.	ISO/TR 12773-1
Health information	Information about a person relevant to his or her health.	ISO 18308
Health issue	Issue related to the health of a subject of care, as identified or stated by a specific health care party.	ISO 18308
Health care party	Organization or person involved in the process of health care.	ISO 18308, [EN 13940-1:2007]
Health Care Professional	See Health Professional.	
Health Care Provider	See Provider.	
Health Condition	aspect of a person or group's health that requires some form of intervention NOTE These interventions could be anticipatory or prospective, such as enhancing wellness, wellness promotion or illness prevention (e.g., immunization). b) symptoms, health problems (not yet diagnosed), diagnoses (known or provisional), e.g., diabetes, or physiological changes that affect the body as a whole or one or more of its parts, e.g., benign positional vertigo, and/or affect the person's well-being, e.g., psychosis, and/or affect the person's usual physiological state, e.g., pregnancy, lactation.	ISO/TR 12773-1
Health Information	For the purposes of this standard, Health Information is information regarding the health of an individual (or group of individuals), or is information regarding the health care provided to an individual individual (or group of individuals). Heath information includes, but is not limited to: an Electronic Health Record (EHR), statement, entry, document, report, note, chart, extract, or metadata. Second-tier health information includes, but is not	

Term	Definition	Reference
	limited to: administrative, financial, workflow, clinical, and quality measurement information.	
Health mandate	Statement authorized by the subject of care, an authorized representative of the subject of care, or by the authority of law, defining the scope and limits of the specific role assigned to one health care party, and delineating its responsibilities towards that subject of care with regard to this role.	ISO 18308, [EN 13940-1:2007]
Health Professional	Person who is authorized by a recognized body to directly provide certain healthcare services.	ISO/TR 12773-1
Hide	To MANAGE-DATA-VISIBILITY by making specific information invisible so that the existence of the information is not expressed except to authorized users; viewers of the patient record receive no indication that the hidden information exists or does not exist. For example, the system may HIDE the existence of a patient's psychiatric record from all viewers except for the patient's psychiatrist.	
Identifier	A piece of information used to claim an identity, before a potential corroboration by a corresponding authenticator	ISO 18308, [ENV 13608-1]
Identify DEPRECATED VERB	Instead, use other Action-Verbs adapted to the context. For example, instead of '…to uniquely identify a patient…', one should say '…to MAINTAIN a unique identifier for a patient…' Another example is: instead of '…to help identify the patient….', use '…help DETERMINE the identity of the patient.'.	
Immunization History	A complete, incomplete, or partially-complete list of immunizations for a given patient. Note: When a given immunization history is conveyed, it is also very important that the immunization history's frame of reference is conveyed. Temporal and organizational scope attributes are required to accurately specify the extent of the history. If that scope is specified, it becomes relatively simple to understand and merge/reconcile immunization data; if that scope is not specified, the meaning of the "history" cannot be determined. For example, receiving a set of immunization records accompanied by a facility identifier and date range would specifically indicate that only records from that facility/entity and for that date range are provided. If the patient had only received immunizations from that facility, or the facility holding the immunization records confirms that they have the complete immunization history on the patient, then the attributes could be elevated to 'all' facilities and 'lifetime' date range. We need to distinguish a 'history of immunizations' from an 'immunization history'. The former connotes/implies a chronological rendering of *known* immunizations and therefore is by-definition, known and complete. The latter implies a complete rendition of the set of all possible immunizations	Wes Knox; John Ritter
Implied Consent	Consent inferred from signs, actions, or facts, or by inaction or silence.	ISO 18308
Import	To CAPTURE data into a local system by proactively accessing data from an external source and then downloading and integrating the data into the local system. For example, the system may IMPORT the latest drug trial data every Friday evening. Another example is that the user may IMPORT various sets of best practices related to juvenile diabetes.	
Indicate DEPRECATED VERB	Instead, use TAG with an appropriate qualifier. Affirm, Assert, Declare, Indicate, and State are synonyms.	

Term	Definition	Reference
Informative functional profile	A functional profile that has successfully completed formal public scrutiny via the HL7 consensus process.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Information Semantics	Information Semantics are defined by an information model and a terminology model. The terminology model may be constrained by standard value sets and/or code sets. For example, terms for vaccinations may be constrained by the federal government. Another example is that a list of drugs may be constrained by a particular formulary.	
Input DEPRECATED VERB	Instead, use CAPTURE, ENTER, RECEIVE, IMPORT or AUTO-POPULATE, depending on the context and scope of actions described.	
Integrate	To UPDATE data by merging other data with the existing data in a controlled manner. For example, a user may INTEGRATE summaries of health care services that were provided in another jurisdiction into the patient's local record. Another example is that an EHR system may INTEGRATE a single-sign-on application with the EHR system's existing user-authentication services. Another example is that an EHR system may INTEGRATE multiple third-party modules to enhance its capabilities.	
Integrity	Assurance that the data being accessed or read has neither been tampered with, nor been altered or damaged through a system error, since the time of the last authorized access. The state of an artifact that has not been deliberately or accidentally altered.	ISO 18308
Interchange standards	Standards by which information, typically electronic data, are exchanged. Examples include the HL7 Clinical Document Architecture.	
Interoperate	To coordinate information, services, and/or functionality among systems.	
Interpretation	To conceive in the light of individual belief, judgment, or circumstance.	http://www.merriamwebster.com/dictionary/interpreting
Intervention	The act or fact of interfering so as to modify. Specifically, any measure whose purpose is to improve health or to alter the course of a disease.	http://www.mercksource.com/pp/us/cns/cns_hl_dorlands.jspzQzpgzEzzSzppdocszSzuszSzcommonzSzdorlandszSzdorlandzSzdmd_i_10zPzhtm#12456410
Input mechanism	An approach, typically utilizing a user interaction device, for data input. Examples include a keyboard and mouse.	
Issue	See Problem.	
Label (verb) DEPRECATED VERB	Instead, use "TAG with a label".	
Legal-Hold	Note: The system cannot legally-hold various facts. Rather, the system may provide the ability to tag certain data that may be under legal review.	
Link (verb)	To UPDATE data by associating one piece of data with another piece of data. For example, the system may LINK a patient's encounter note with the patient's lab results. Another example is that a system may LINK attestable changes to a patient's record to the author's identifying information.	
Log (verb)	To TRACK system-initiated or user-initiated activities (including access to data and/or functionality, attempts to	

Term	Definition	Reference
	access data and/or functionality, actions performed on data and/or functionality, and changes to system characteristics or versions) by storing a chronological trace of these activities. For example, the system may LOG the fact that modifications were made to a patient's record by storing the date, time, and identity of the user who modified the record as well as what changes were made to that record. Another example is that the system may LOG the fact that updates were applied to a drug-interaction database table, by storing the date and time at which it was updated.	
Maintain	To MANAGE data by storing, updating, and/or removing the data within a system. For example, a system may provide the ability for a clinician to MAINTAIN data by keeping or discarding it. Another example is that a system may provide the ability for a clinician to MAINTAIN data by correcting or annotating it.	
Maintenance	The act of maintaining or the state of being maintained. The work of keeping something in proper condition; upkeep.	http://www.bartleby.com/61/56/M0045600.html
Maintenance and versioning (used as a phrase)	The management of multiple revisions of the same unit of information.	http://en.wikipedia.org/wiki/Versioning
Manage (Data)	To handle data by capturing, maintaining, and rendering data, determining actions about data, and managing data visibility. For example, the system may provide the ability for a user to MANAGE patient and family preferences as they pertain to current treatment plans. Another example is that a clinician's system may provide the ability for the clinician to MANAGE patient data by creating a patient's record, updating a clinical note, utilizing clinical decision support tools, and transmitting the patient's billing information.	
Manage-Data-Visibility	To MANAGE data by de-identifying/re-identifying, masking/unmasking or hiding/unhiding that data. For example, the system may provide the ability for an administrator to MANAGE-DATA-VISIBILITY in terms of who is allowed to view what specific patient data.	
Management	The act or art of managing. The conducting or supervising of something.	http://www.merriamwebster.com/dictionary/management
Mask (verb)	To MANAGE-DATA-VISIBILITY by obscuring (masking) specific data elements in order that this information is not available except to authorized users; viewers of the patient record can see that the data exists but cannot see actual contents. For example, the administrator may MASK the pregnancy status of all patients who are below the age of eighteen except for the obstetric unit staff.	
Masking	Data masking is the process of obscuring (masking) specific data elements within data stores. It ensures that sensitive data is replaced with realistic but not real data. The goal is that sensitive customer information is not available outside of the authorized environment. Effective data masking requires data to be altered in a way that the actual values cannot be determined or reengineered, functional appearance is maintained, so effective testing is possible.	Wikipedia:
MAY	Indicates an optional, permissible action. Synonymous with 'is permitted'.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Medical	Relating to the study or practice of medicine; "the medical profession"; "a medical student"; "medical school".	http://wordnet.princeton.edu/perl/webwn?s=medical
Merge	Instead, use INTEGRATE.	

Term	Definition	Reference
DEPRECATED VERB		
Modify Access DEPRECATED VERB	Instead, use: "MANAGE data regarding permissions"	
Non-repudiation	Assurance that the entry or message came from a particular user. It will be difficult for a party to deny the content of an entry or creating it.	http://www.ahima.org/infocenter/guidelines/ltcs/5.1.asp
Notes	The naming rules in this document only apply to "clinical notes." Within this document we are using the term "clinical note" to have a special meaning. For purposes of this document, a clinical note is a clinical document (as defined by the HL7 CDA Standard) where the document was produced by clinical professionals and trainees either spontaneously (e.g. I write my admitting note) or in response to a request for consultation.. They are to be distinguished from patient reports such as radiology reports, pathology reports, laboratory reports, cardiac catheterization reports, etc., that are generated in response to an order for a specific procedure. Names for most of these later concepts are accommodated well by the clinical LOINC naming structure, and are already well covered by existing terms within the LOINC database.	http://www.regenstrief.org/loinc/discussion/Clinical/ontology.doc
Notification	Information presented or transmitted to an interested party. For example, an alert, reminder, note, or message may convey an announcement, warning, notice, issue, or new condition.	John Ritter
Notify DEPRECATED VERB	Instead, use "RENDER or PRESENT or TRANSMIT a notification to a person or another system (including a device)".	
Nullify DEPRECATED VERB	Instead, use "TAG as nullified".	
Obfuscation	In programming, an often practiced process to make code unclear for someone else to follow. It is an intentional effort to mislead or confuse. The term obfuscation is often used in virus issues.	http://www.csgnetwork.com/glossaryo.html
Obsolete (verb) DEPRECATED VERB	Instead, use "TAG as obsolete".	
On-demand	The manual exercise of certain system functionality. For example, drug-drug interaction checking may automatically occur at the moment that a clinician is ordering a certain drug. However, the clinician may also want to examine the drug interactions that may occur for a drug that was previously ordered by another physician; thus, the clinician would exercise the drug-drug interaction checking functionality "on demand". Another example is that the clinician may want to examine the alerts and notifications that exist for a given set of drugs (without having a specific patient in mind).	
Order (verb) DEPRECATED VERB	Instead, use "ENTER the parameters for an order".	
Order sets	Order sets are prepared in (order) sessions as multi-disciplinary templates, including nursing, medical, pharmacy and allied health action items. The order sets have been reviewed by professional service organizations and are organized into problem oriented care plans wherein each order set serves to organize one session or phase of the overall plan of care. Problem and session encoding of order sets assure that order sets are employed in relevant clinical contexts and care plans, and that order sessions may be merged when multiple guidelines apply to a single patient.	HL7 Clinical Decision Support team, Jim McClay, SAGE guideline consortium, University of Nebraska Medical Center.

Term	Definition	Reference
Organization	Unique framework of authority within which a person or persons act, or are designated to act towards some purpose.	ISO 18308, [ISO 6523-1:1998]
Other system	A separate system that is an affiliated, federated, integrated, or partnering system.	
Patient	One who is suffering from any disease or behavioral disorder and is under treatment for it.	http://216.251.232.159/semdweb/internetsomd/ASP/1549985.asp
Patient and family preferences	Health care treatment choices influenced by but not limited to language, religious, or cultural preferences selected by the patient and family.	
Patient record	A paper or electronic tool for collecting and storing information about the healthcare services provided to a patient.	Health Information Management Technology: An Applied Approach. Merida L. Johns, PhD, RHIA, Editor, AHIMA, Chicago, IL, 2007
Patient representative	Designated to bearing the character or power of the patient; acting for the patient's benefit, e.g. guardian, legal representative, surrogate, or advocate.	http://cancerweb.ncl.ac.uk/cgi-bin/omd?representative
Patient-level data	Within the context of the Population Health arena, the term "patient-level data" refers to data that is collected (and analyzed) regarding a single patient. For example, "Person123 is left-handed". (Note: patient-level data is often de-identified within the Population Health context.) Furthermore, data regarding a single patient can sometimes be aggregated within the scope of that patient's data. For example, Person123 has been pregnant six times. Compare with "aggregate-level data".	John Ritter
Patient-originated data	Patient-provided and/or patient-entered data. For example, an individual patient (or the patient's representative) may provide or enter health information from personal memory and/or by using information that was recorded on a piece of paper. For example, a patient may enter "1970-12-29" into a date-of-birth field.	John Ritter
Permit Access DEPRECATED VERB	Instead, use "AUTHENTICATE a user and AUTHORIZE access based on permissions assigned to that user".	
Persist DEPRECATED VERB	Instead, use "STORE".	
Personal health record	Health record, or part of a health record, for which the subject of care or a legal representative of the subject of care is the data controller	ISO 18308
Policy (privilege management and access control)	A set of legal, political, organizational, functional and technical obligations for communication and cooperation.	ISO 18308, [ISO/TS 22600-1: 2005]
Population Health	Collections of health-related concepts (for example, health outcomes) that pertain to groups, rather than to individuals. Population Health groups are often distinguished based on stakeholder interest, for example, according to geography, employment, socioeconomic sector, age, or ancestry.	John Ritter
Practice guidelines	Systematically developed statements to standardize care and to assist in practitioner and patient decisions about the appropriate health care for specific circumstances. Practice guidelines are usually developed through a process that combines scientific evidence of effectiveness with expert opinion. Practice guidelines are also referred to as clinical criteria, protocols, algorithms, review criteria, and guidelines.	www.mentalhealth.samhsa.gov/publications/allpubs/MC98-70/default.asp

Term	Definition	Reference
Present	To RENDER data by delivering the data to local users in a meaningful and appropriate way. For example, the system may PRESENT to a physician (upon manual request) a list of patients who are scheduled for care today, ordered by time-of-day, with the patient's known diagnosis using the physician's preferred terminology and language of choice. Another example is that the system may PRESENT an alert automatically when a newly-arriving lab value is received that is out of normal range. Another example is that a system may PRESENT to a physician a patient's lung respiration sounds. Another example is that a system may PRESENT patient-instructions using an audio and video system. Note: It is reasonable to assume that any data that is presented ought to be formatted, filtered, translated, transformed, mapped, and/or normalized, etc., as appropriate.	
Prevention	Actions taken to reduce susceptibility or exposure to health problems (primary Prevention), detect and treat disease in early stages (secondary prevention), or alleviate the effects of disease and injury (tertiary prevention).	http://depts.washington.edu/hsic/resource/glossary.html
Principal (adjective)	Highest in rank, authority, character, importance, or degree; most considerable or important; chief; main; as, the principal officers of a Government; the principal men of a state; the principal productions of a country; the principal arguments in a case. E.g. principal diagnosis.	http://cancerweb.ncl.ac.uk/cgi-bin/omd?principal
Principal (noun)	A user, organization, device, application, component, or object. The person primarily or ultimately liable on a legal obligation.	http://www.meriam-webster.com/cgi-bin/dictionary/principal
Principle	An accepted or professed rule of action or conduct, an adopted rule or method for application in action.	Dictionary.com
Print DEPRECATED VERB	Instead, use RENDER, PRESENT, OR TRANSMIT, depending on the context.	
Prioritize DEPRECATED VERB	Instead, use "TAG with a priority level", or "DETERMINE priorities".	
Privacy	Freedom from intrusion into the private life or affairs of an individual when that intrusion results from undue or illegal gathering and use of data about that individual.	ISO 18308, [ISO/IEC 2382-8]
Problem	Entity for which an assessment is made and a plan or intervention is initiated NOTE The term "issue" is often used rather than "problem" by many allied health professions, especially in the more social/psychological disciplines. The term "condition" is also sometimes used to describe pregnancy and other non-disease health states which nevertheless usually involve interaction with a health system.	ISO/TR 12773-1
Problem list	The problem list of a given individual can be described by formal diagnosis coding systems (such as DRGs, NANDA Nursing Diagnosis, ICD9, DSM, etc.) or by other professional descriptions of health care issues affecting an individual. Problems can be short or long term in nature, chronic or acute, and have a status. In a longitudinal record, all problems may be of importance in the overall long term care of an individual, and may undergo changes in status repeatedly. Problems are identified during patient visits, and may span multiple visits, encounters, or episodes of care.	HL7 Version 3.0 Edition 2006 Glossary
Profile	A subset of the Functional Model, in which functions have been designated (sometimes in varying degrees) for certain EHR-S implementations or Healthcare Delivery Settings.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Protocol	A set of instructions that describe the procedure to be followed when investigating a particular set of findings in	http://www.coiera.com/glossary.htm

Term	Definition	Reference
	a patient, or the method to be followed in the management of a given disease. Please refer to: Algorithm, Care Pathway, Practice Parameter.	
Provide the ability to	The term "…provide the ability to…" conveys the notion that the corresponding system functionality will enable a user to perform a given task, rather than having the system perform the task itself (i.e., without user intervention). Additional consideration: An EHR system may not always be capable of correctly performing a specific action automatically. Consider the difference between the following two criteria: "The system SHALL LINK a record to a single patient" and "The system SHALL provide the ability to LINK a record to a single patient." The first criterion requires the system to perform the task of identifying a patient and linking a certain record to a single patient. In this case, the system may not be able to perform this task to an acceptable level of assurance (for example, when a patient uses two different first names "Liz" and "Elizabeth"). The second criterion requires the system to provide the user with the ability to uniquely identify a patient and to link a certain record to that patient (for example, via a screen that displays a list of potentially-matching patients whereby the user can manually link the record to the correct patient).	
Provide access to DEPRECATED VERB	Instead, use CONTROL ACCESS, or PRESENT, as appropriate to the specific context.	
Provider	Person or organization involved in or associated with the delivery of healthcare to a subject of care, or caring for the well-being of a subject of care.	ISO/TR 12773-1
Purge	To REMOVE data by making it unrecoverable at the storage and/or media-level. For example, the system may PURGE the patient record for John Smith according to a rule that targets all records that are older than seven years. (Note: Destroy and Purge are synonyms; PURGE is the preferred term.)	
Query DEPRECATED VERB	Instead, use ANALYZE or RENDER (or its children Action-Verbs), because queries or searches are implied when rendering or analyzing data.	
Real-time	Since the concept of "real-time" is ambiguous, describe the actual event. For example, instead of "Present the drug-drug interaction notification in real-time"; rather, "Present the drug-drug interaction notification at the time that the drug is being prescribed".	
Receive	To CAPTURE data from an external source by taking in that data without manual / real-time user intervention. For example, the system may RECEIVE various emails for a clinician who will later review them. Another example is that the system may RECEIVE from authenticated and authorized external systems laboratory results for a given patient. Another example is that the system may RECEIVE a facsimile transmission from an external device.	
Reconcile DEPRECATED VERB	Instead, use ANALYZE and DECIDE, or DETERMINE, or HARMONIZE depending on the context and the meaning intended.	
Record (noun)	Information created, received and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business.	ISO/TR 12773-1

Term	Definition	Reference
Record (verb) DEPRECATED VERB	Instead, use STORE (or its children Action-Verbs).	
Recover	To STORE data by rebuilding original data using backups of data. For example, the system may RECOVER last week's data following a hard disk failure, using an offsite backup copy. (See BACKUP.)	
Registry	A written, official or formal record of information, or the place where such records are kept.	http://en.wikipedia.org/wiki/Registry
Re-identify	To MANAGE-DATA-VISIBILITY by combining data in such a way that the patient's identity is re-established according to scope of practice, organizational policy, and/or jurisdictional law. For example, the system may RE-IDENTIFY de-identified data by providing a key that allows authorized users to re-establish the link between a given patient and that patient's de-identified data.	
Reject DEPRECATED VERB	Instead, use ''PRESENT or RENDER a message of rejection" or "TAG as rejected".	
Reminder	A method of reminding oneself or others of an impending required action. In clinical documentation, typically an electronic reminder for follow-up. Distinct from an alert, where immediate action is required or an action is contraindicated (e.g., use of antibiotics).	
Remove	To MAINTAIN data by making the data inaccessible or unrecoverable according to scope of practice, organizational policy, and/or jurisdictional law. For example, a system may, at a physician's request, REMOVE by purging patient information that was received by mistake. Another example is that a system may, upon request by an administrator, REMOVE by deletion the schedule of outpatient clinic opening hours. NOTE 1: The data may be deleted either by removing the data's pointer from the directory or by overwriting the data in such a way that the original data is unrecoverable. NOTE 2: In the case where the data becomes invalid but needs to remain in the system, the word TAG is preferred over the word REMOVE or "Nullify". This type of action is considered a data "Tagging" process and not a data deletion process. For example, a health information management professional may desire to TAG a certain clinical term as obsolete, but the term needs to remain in the system for backward compatibility purposes.	
Render	To MANAGE data by extracting, presenting and transmitting data to users or systems. For example, the system may RENDER a list of patients with a given disease that has been extracted from the clinic's active patient records. For example, the system may RENDER laboratory results by presenting them on a computer screen. Another example is that the system may RENDER data by transmitting a drug prescription to a pharmacy.	
Replace DEPRECATED VERB	Instead, use EDIT, or "DELETE the old and SAVE the new", or "TAG as obsolete and SAVE the new", based on the context.	
Report (noun)	A collection of facts and figures that may be printed, describing in detail an event, situation, or the like, usually as the result of observation, inquiry, etc; i.e. a medical report on the patient that may be printed.	
Report (verb)	Instead, use "RENDER a report", or "PRESENT a report".	

Term	Definition	Reference
DEPRECATED VERB		
Repudiate DEPRECATED VERB	Instead, use "TAG as repudiated or rejected".	
Repudiation	The denial by a user or a system that it was the source of certain information; or the sender or receiver of a message, or the author of an action requested from the system. Note regarding non-repudiation: typically, systems assist in preventing a user from repudiating actions by capturing a digital signature, activating a confirmation service, and time stamping actions.	
Resource utilization	Measurement of the effectiveness of resource usage.	
Restore	To STORE data to the production system by using previously archived data. For example, the system may RESTORE patient-encounter data for a returning patient whose data had been archived due to inactivity. Another example is that the system may RESTORE, for evidentiary support, patient data that had been archived after the patient expired. (See ARCHIVE.)	
Result (noun)	The conclusion or end to which any course or condition of things leads, or which is obtained by any process or operation; an outcome. The act or process of applying general principles or formulae to the explanation of the results obtained in special cases.	
Retain DEPRECATED VERB	Instead, use STORE (with the possible addition of language that includes the notion that retention management may be needed to accommodate scope of practice, organizational policy, or jurisdictional law). For example, the system may provide the ability to STORE personal health information, and DELETE that data only as allowed by the organization's data-retention policies.	
Revoke-Access DEPRECATED VERB	Instead, use "CONTROL ACCESS by eliminating permissions to use system functionality or to manage data".	
Role	Set of competences and/or performances associated with a task	ISO 18308, [ISO/TS 22600-1:2007]
Save	To STORE data by placing it onto an electronically-accessible device for preservation. For example, a clinician may SAVE a given patient's demographic data or a newly-prescribed medication. Another example is that an administrator may SAVE an updated list of physicians that have practice privileges at the local hospital.	
Scope of Practice	A terminology used by licensing boards for various medically-related fields that defines the procedures, actions, and processes that are permitted for the licensed individual.	http://www.answers.com/topic/report
Seamless	Interoperability standards enable an Electronic Health Record System (EHR-S) to operate as a set of applications. This results in a unified view of the system where the reality is that several disparate systems may be coming together. Interoperability standards also enable the sharing of information between EHR systems, including the participation in regional, national, or international information exchanges. Timely and efficient access to information and capture of information is promoted with minimal impact to the user.	
Search (verb) DEPRECATED VERB	Instead, use ANALYZE or RENDER (or its children action-verbs), because queries or searches are implied when rendering or analyzing data.	

Term	Definition	Reference
	For example, instead of saying "The system SHALL provide the ability to search patient records based on previous names", one could say ''The system SHALL provide the ability to PRESENT a list of records with possible patient name matches using previous patient names".	
Secure (System) (verb)	To ensure system reliability and integrity by controlling access to system functionality and/or data, tracking activities, and sustaining system operations. For example, the system may provide the ability for an administrator to SECURE a system by setting configuration parameters for controlling access, tracking, and sustaining system operations. Another example is that the system may SECURE access to a patient's record by controlling access to its content, tracking users who have modified the patient's record, and sustaining the record's availability on a continual basis.	
Severity Level	Warnings, alerts, notifications, and other types of messages may be issued in order to convey differing states of urgency of various conditions.	John Ritter
Select DEPRECATED VERB	Instead, use "ENTER a selection".	
Semantic interoperability	The ability of data shared by systems to be understood at the level of fully defined domain concepts	ISO 18308
SHALL	Indicates a mandatory requirement to be followed (implemented) in order to conform. Synonymous with "is required to".	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
SHOULD	Indicates an optional recommended action, one that is particularly suitable, without mentioning or excluding others. Synonymous with "is permitted and recommended".	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
SIG	(Latin abbreviation for Signetur – "Let it be labeled") Instructions that direct a patient regarding the recommended use of a medication.	
Sign (verb) DEPRECATED VERB	Instead, use "TAG-with-authenticated-signature". For example, a system may TAG a patient note with an authenticated signature when the physician completes the patient's note.	
Signature Type	Also known as Signature Method or Attestation Method. An electronic health information document (or message) often requires one or more signatures that indicate the author(s) of the health information. (Note: Health information can either be authored by a human or a device.) In order for a given signature type to be interpreted correctly by an electronic system, metadata must exist that indicates the method by which the signature may be interpreted; when the correct method is applied to a given signature type, the signature can be correctly rendered and evaluated.	John Ritter
Single logical patient record	The integration of health information and knowledge from different EHR-S sources to create a single, organized and accessible patient health record that can be managed from a single logical point; and will allow referencing of all available health information pertaining to a specific individual maintained throughout an integrated health information network. An indexed system that will provide access to all stored data for a particular patient.	http://www.ercim.org/publication/Ercim_News/enw29/tsiknakis.html "An Integrated Architecture for the Provision of Health Telematic Services in a Regional Network." By Monolis Tsiknakis and Stelios Orphanoudakis, Information Technology in Mediciane and Health Care, ERCIM News, No. 29 –

Term	Definition	Reference
		April 1997.
Situational criterion	Criterion that is required if the circumstances given are applicable.	HL7 EHR-S Functional Model Chapter 2: Conformance Clause
Specialized views	Computer customized view based on encounter specific values, clinical protocols and business rules.	
Standards of practice	An umbrella term that includes key documents which describe the responsibilities and define safe practice. These documents include: professional standards, ethical guidelines, entry-level competencies, provincial regulations, standards of care, and practice guidelines.	http://www.dietitians.ca/career/i5.htm
State (verb) DEPRECATED VERB	Instead, use TAG with an appropriate qualifier. Affirm, Assert, Declare, Indicate, and State are synonyms.	
Store (verb)	To MAINTAIN data by backing up, decrypting, encrypting, restoring and saving that data onto electronically accessible devices. For example, a clinician may STORE a given patient's demographic data or a newly-prescribed medication. Another example is that an administrator may configure a system to STORE progressive copies of certain data on a regularly-scheduled basis for backup purposes. Note: data may be stored as plain text or in encrypted or compressed form.	
Structured data	Structured health record information is divided into discrete fields, and may be enumerated, numeric or codified. Examples of structured health information include: patient address (non-codified, but discrete field) diastolic blood pressure (numeric) coded result observation coded diagnosis patient risk assessment questionnaire with multiple-choice answers Context may determine whether or not data are unstructured, e.g., a progress note might be standardized and structured in some EHR-S (e.g., Subjective/Objective/ Assessment/Plan) but unstructured in others.	
Structured text	Computer functions that return a single value.	
Subject of care	One or more persons scheduled to receive, receiving, or having received healthcare. NOTE The terms "patient" and "client" are synonymous with subject of care in a health record context and are commonly used instead of the more formal term "subject of care".	ISO/TR 12773-1 NOTE 1 Adapted from ISO 13606-1:2008.
Summary list	A shortened version of something that has been said or written, containing only the main points.	http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861716863
Support (verb) DEPRECATED VERB	Instead, use "PRESENT templates to do XYZ", or DETERMINE, or other Action-Verbs depending on the context and functionality to specify.	
Supportive functions	Supportive EHR-S functions are the subset of EHR-S functions that assist with the administrative and financial requirements associated with the delivery of healthcare. Supportive EHR-S functions also provide input to	

Term	Definition	Reference
	systems that perform medical research, promote public health, and seek to improve the quality of healthcare delivered.	
Suspend-Access DEPRECATED VERB	Instead, use "CONTROL ACCESS by temporarily withholding permissions to use system functionality or to manage data".	
Syntactic interoperability	The capability of two or more systems to communicate and exchange data through specified data formats and communication protocols	ISO 18308
Synthesize DEPRECATED VERB	Instead, use "ANALYZE and STORE" or "ANALYZE and PRESENT".	
Tag (verb)	To UPDATE data by marking it for special use. For example, a nurse may TAG the previous week's records for patients that presented with a severe cough and fever. Another example is that a general practitioner may TAG certain data for review by an oncologist. Another example is that an administrator may TAG an interchange standard version as being deprecated. Note: see "flag" if the meaning is to signal a situation.	
Term	Verbal designation of a general concept in a specific subject field	ISO 18308, [ISO 1087-1: 2000]
Terminological system	Set of concepts structured according to the relations among them, each concept being represented by a sign which denotes it. NOTE: In terminology work, three types of such signs (designations) are distinguished: symbols, appellations, and terms.	ISO 18308, [merging ISO/IEC 11179-1:2004 and ISO 1087-1:2000 definitions]
Terminology Services	Terminology Services (TS) are a set of services that present and apply vocabularies, both controlled and uncontrolled, including their member terms, concepts and relationships. This is done for purposes of searching, browsing, discovery, translation, mapping, semantic reasoning, subject indexing and classification, harvesting, alerting, etc.	
Text	In information technology, text is a human-readable sequence of characters and the words they form that can be encoded into computer-readable formats such as ASCII. Text is usually distinguished from non-character encoded data, such as graphic images in the form of bitmaps and program code, which is sometimes referred to as being in "binary" (but is actually in its own computer-readable format).	http://searchsmb.techtarget.com/sDefinition/0,,sid44_gci213853,00.html
Timestamp (noun)	A timestamp is the current time of an event that is recorded by a computer. Through mechanisms such as the Network Time Protocol (NTP), a computer maintains accurate current time, calibrated to minute fractions of a second.	http://whatis.techtarget.com/wsearch/1,290214,sid9,00.html?query=timestamp
Timestamp (verb) DEPRECATED VERB	Instead, use "TAG with a timestamp".	
Track (verb)	To SECURE a system by logging and auditing system-initiated and/or user-initiated activities. For example, the system may TRACK the amount of time that the system was unavailable last month. Another example is that the system may provide the ability for an administrator to TRACK the number of active users of a newly-installed set of system functionality.	

Term	Definition	Reference
Transact data	The act of processing a logical unit of information. For example, data received from an external system may be committed (or "transacted") to a local database. Note: the transaction of a given logical unit of information may actually involve one or more transmissions or receptions of data between systems. Another example is that a system may transact local data to an offsite, long-term data storage facility.	
Transmit	To RENDER data by delivering the data to devices or other systems in a meaningful and appropriate way. For example, the system may (without human intervention) TRANSMIT an alert to a physician's beeper. Another example is that the system may (upon human intervention) TRANSMIT a given patient's encounter summary to an external facility. Another example is that the system may TRANSMIT data to another facility after mapping local codes to national codes. Note: It is reasonable to assume that any data that is transmitted ought to be formatted, filtered, translated, transformed, mapped, and/or normalized, etc., as appropriate.	
Treatment option	One of many remedies with object of effecting a cure.	The American Heritage Dictionary of the English Language
Treatment plan	See Care Plan.	HL7 Clinical Decision Support team, Jim McClay, SAGE guideline consortium, University of Nebraska Medical Center.
Treatment protocol	A plan to apply remedies with the objective of effecting a cure.	The American Heritage Dictionary of the English Language
Trigger (verb) DEPRECATED VERB	Instead, depending on the context, use "DECIDE on a course of action based on an analysis of certain data and rules", or "DECIDE and RENDER some information (for example, an alert or a notification) based on the analysis of certain data and rules".	
True Allergy	Xxxx Need a definition here. Ask E.D. docs. See "Glossary additions 20110615 john ritter.doc" for input on this topic.	
Trusted Information Exchange environment	A Trusted Information Exchange environment ensures integrity, confidentiality, and availability of sensitive data in the process of information exchange between participating parties. The participating parties agree to protect information exchanged by implementing certain administrative and governance procedures according to scope of practice, organizational policy, and/or jurisdictional laws. (For example, a Trusted Information Exchange environment is known as a "Chain-of-Trust Agreement in the U.S. realm.)	
Unhide	To MANAGE-DATA-VISIBILITY by making visible the existence of previously hidden information (see HIDE). For example, the system may provide the ability for a patient to UNHIDE his psychiatric record, and hence the existence of that part of his record becomes visible to all authorized clinicians.	
Unmask	To MANAGE-DATA-VISIBILITY by making masked information visible. For example, the administrator my desire to UNMASK certain patient financial information for the admission Department. For example, a system may provide the ability for an emergency department physician to UNMASK a patient's pregnancy status that was presented by the system as "******", to reveal a status of "Pregnant".	

Term	Definition	Reference
Uniquely identifying	A method to enable the identification of a single object (e.g. patient, provider or test) that is derived from one or more data elements.	
Unstructured data	Unstructured health record information is information that is not divided into discrete fields AND not represented as numeric, enumerated or codified data. General examples of unstructured health record information include: text; word processing document; image; multimedia. Specific examples include: text message to physician; patient photo; letter from family; scanned image of insurance card; dictated report (voice recording).	
Unstructured text	Text lacking a definite structure or organization; not formally organized or systematized.	http://www.answers.com/library/Dictionary;jsessionid=2nn5846ql7gmh-cid-1992345752-sbid-lc07a
Update (verb)	To MAINTAIN data by annotating, editing, harmonizing, integrating, linking and tagging the data. For example, a clinician may UPDATE a patient's medication dosage. Another example is that the system may UPDATE a patient's record.	
Versioning	The management of multiple revisions of the same unit of information.	http://en.wikipedia.org/wiki/Versioning
View (noun)	Specific information displayed on a computer monitor after it has been filtered by the system. See "Display."	
View (verb) DEPRECATED VERB	Instead, use PRESENT.	ISO 18308, [ISO/EN 13606-1:2008]

Appendix: History of the Action-Verb Hierarchy (Reference)

This Glossary is the result of a sustained effort to increase the rigor, accuracy, and consistency of the set of terms used in the EHR-S FM and the Personal Health Record System Functional Model (PHR-S FM).

Original Trigger

The EHR-S FM began as a set of functions that were based on material that the Institute of Medicine (IOM) offered to the health care industry in 2003. The material did not include a Glossary, but relied on common understanding of the health care –related and information systems terms. Those functions were vetted and expanded by the HL7 EHR Special Interest Group (which eventually became the EHR Work Group). The various functions were developed by individual authoring teams of the Direct Care, Supportive, and Information Infrastructure Chapters. As the number of functions grew, the need to minimize redundancy among functions became more acute. For example, one team created functionality that envisioned "access" to patient demographic data; another group envisioned reading, updating, and writing patient demographic data. Were those two approaches duplicative? If not, what were the differences? The EHR WG eventually launched an effort to clarify the meaning of Action-Verbs.

How the first version of the Glossary was developed

An analysis was performed across all the functions of the EHR-S FM and a rudimentary hierarchy was created that categorized the various Action-Verbs. However, new functionality was being created; other functionality was being merged or re-categorized – resulting in a moving target.

Second version of the Glossary

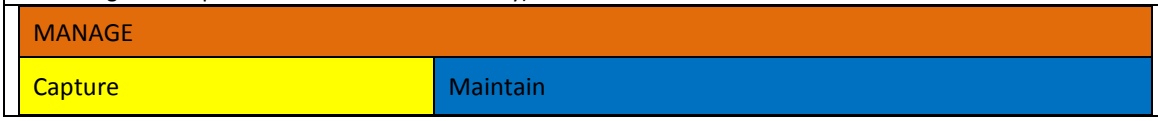
When the PHR-S FM was created, the lessons and advances of the EHR-S FM were applied to create a new, richer set of Action-Verbs on which the PHR-S FM was based. This effort resulted in a need to align the PHR-S FM and the EHR-S FM Glossaries as the second release of the EHR-S FM was being developed.

Current version of the Glossary

Beginning in May 2010, and over period of five months, a small team of volunteers reviewed both Glossaries (see the two corresponding versions of the Action-Verbs hierarchies below), harmonized the various terms, researched existing definitions and other standards, considered how the terms might be used in various international realms and how the terms might be translated into other languages, and generated a more robust set of Action-Verbs (which resulted in the current version of the Glossary).

The following two (2) Action-Verb hierarchies from EHR-S FM and PHR-S FM were the starting point to develop the current version of the Glossary.

EHR-S Functional Model
EHR-S FM Verb Hierarchy : • 21 total terms (including "Manage") • All terms found in EHR-S FM Verb Hierarchy are included in the PHR-S FM Verb Hierarchy (note: "input device" changed to "input" in PHR-S FM Verb Hierarchy)



Input Device (Ext.)	Create (Int.)	Read	Update	Remove Access
		View Report Display Access	Edit Correct Amend Augment	Obsolete Inactivate Destroy Nullify Purge

PHR-S Functional Model

- PHR-S FM Verb Hierarchy:
- 49 total terms (including "Manage")
- "Capture" expanded with specific terms under "Input" and "Create"
- "Render" added as a subcategory with concepts of "read" and "output"
- Concepts of "store" and "Restrict Access" added to "Maintain"

MANAGE							
Capture		Maintain				Render	
Input (External)	Create (Internal)	Store	Update	Restrict Access	Remove Access	Read (Internal)	Output (External)
Receive Accept Download Import	Enter Compute Record	Save Backup Compact Encrypt Archive	Edit Correct Amend Augment Annotate Comment Associate Tag	Hide Mask Filter	Obsolete Inactivate Destroy Nullify Purge	View Report Display Access Present	Send Upload Export Synchronize