HL7 EHR Work Group

Personal Health Record System Functional Model, Release 1 Draft Standard for Trial Use July 2008

Reader's Guide

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Welcome! Welcome to HL7's Electronic Health Record Work Group's (EHR WG) Draft Standard for Trial Use (DSTU) of the Personal Health Record System Functional Model (PHR-S FM). This version of the PHR-S FM reflects substantive changes, content updates and edit revisions made to the PHR-S FM based on comments received from the model's November, 2007 and May, 2008 DSTU balloting.

This brief Reader's Guide will give you a guided tour of the PHR-S FM package , and point you to some background materials that will answer most of your questions.

What is the Background of the PHR-S FM?

The HL7 PHR-S FM has been in development since November 2004. A broad constituency – including intensive outreach to industry, care providers, the international community and healthcare organizations – has worked to develop the initial PHR-S FM. A PHR-S must be able to help the consumer to collect and manage their health information within a framework of an ever-changing healthcare environment. This model focuses on the consumer knowledge and interaction in managing his/her healthcare along with the healthcare providers and systems. The privacy and security of consumers' information, the consumer's rights to authorize use and disclosure of their own information, and the varied sources of consumer health information make the content of this model very different from the EHR-System Functional Model (EHR-S FM). However, the structure of the EHR-S FM and the PHR-S FM are identical. Both models include function ID's, Name, Statements, Descriptions, Examples, and Conformance Criteria.

What are conformance criteria?

Conformance criteria are specific statements that help indicate whether functional requirements have been met by a given PHR system. The *Conformance Clause* (Chapter Two) documents and identifies how PHR systems achieve conformance to the PHR-S FM. Before crafting conformance criteria for PHR-S functions, the PHR Working Group sought consensus on a set of best-practice guidelines for developing statements of conformity. Reading the *Conformance Clause* will help you understand how PHR system conformance may be claimed.

What does SHALL, SHOULD, and MAY mean in the conformance criteria?

In order to claim conformance for a given function, a system must meet one or more of the function's conformance criteria (see the *Conformance Clause* for details). However, since different PHR system models (see the Overview Chapter) can have different functional requirements, conformance criteria can be designated as mandatory ("SHALL"), recommended ("SHOULD"), or optional ("MAY"). Conformance criteria that are clearly essential to a given function are indicated with a SHALL clause. However, in most cases functions are multifaceted and are indicated using the optional SHOULD or MAY clauses.

The conformance criteria in this document are not intended to be particular to a given level of functionality/ interoperability or any international location. Conformance criteria in this document, at the Functional Model level, should only have a SHALL clause if a criterion is expected to be mandatory at all levels of functionality/interoperability and internationally, and a SHOULD clause if it is recommended for the function at many levels of functionality/interoperability and most international locations

What is the "Manage Hierarchy" chart and what does it mean to consistently use selected verbs in conformance criteria?

Within the PHR Work Group, there was an intentional effort to create language consistency in the conformance criteria. The "Manage Hierarchy" diagram below was used to create semantic harmony within the conformance criteria so that, for example, if the Personal Health Chapter has a conformance criteria using the term "nullify", that term had the same meaning as used in the Supportive Chapter's conformance criteria.

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The levels in the hierarchy are granular and have a parent-child relationship. For example, the diagram below depicts that managing the "Capture" of information comes from an External Source or from an Internal Source. Similarly, under the "Maintain" section of the diagram, the term "Store" could invoke all five verbs listed below it (i.e., Save, Backup, Compact, Encrypt, or Archive). If the parent term is not used, then the respective verbs in the child will be cited individually in the criterion. If the term "Manage" is used, all of the applicable verbs included in the table are encompassed in that criterion. Authors are responsible for determining whether one or more of the sub verbs are not appropriate for a given function and must write conformance criteria that constrain the use of the verb hierarchy according to the intent of the profile being created.

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

The hierarchical principle above was applied during the development of the PHR-S FM. Additional terms used in the model are found in the model's Glossary. It is important to be consistent in the terminology used in the PHR-S FM conformance criteria so there is consistent interpretation of the conformance criteria's intent in defining the functionality.

The PHR-S FM Glossary

The PHR-S FM Glossary contains a list of words that are peculiar to the PHR-S FM, is complemented by the EHR-S FM Glossary and, as such, extends the EHR-S FM Glossary. Furthermore, the verbs of the Manage Hierarchy chart (mentioned above) are defined in the PHR-S FM Glossary. The PHR-S FM Glossary is a Reference document (that is, it is not Normative) and will continue to be updated and improved, as an ongoing process during the DSTU time period (i.e., during the next twelve to sixteen months).

Why are there references to other functions in various conformance criteria?

Some functions have dependencies on other functions or criteria. These dependent functions may mandate or recommend that other functions or criteria be implemented. These dependencies are documented with the use of function links in the conformance criterion. For example, if your system performs an Interoperability function, shouldn't it also support a Standard Vocabulary function?

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What documents are in the DSTU package:

The documents in the PHR-S FM DSTU package include the following:

PHR-S Functional Model Documents & File Names	Content
Reader's Guide PHR-FM_ReadersGuide_R1_D3_2008MAY.pdf	• Appendix A: How to Fill Out and Submit A Ballot
Chapter One: Overview PHR-FM_Overview_R1_D3_2008MAY.pdf	• Background • Purpose & Scope • Overview and Definition of the Functional Model
Chapter Two: Conformance Clause PHR-FM_ConformanceClause_R1_D3_2008MAY.pdf	• The conformance clause for PHR-S Functional Model
Chapter Three: Personal Health Functions PHR-FM_PH_R1_D3_2008MAY.pdf	• Function name, statement and conformance criteria for Personal Health Care functions
Chapter Four: Supportive Functions PHR-FM_SP_R1_D3_2008MAY.pdf	• Function name, statement and conformance criteria for Supportive functions
Chapter Five: Information Infrastructure Functions PHR-FM_IN_R1_D3_2008MAY.pdf	• Function name, statement and conformance criteria for Information Infrastructure functions
PHR-S FM Glossary PHR-FM_Glossary_R1_D3_2008MAY.pdf	• Glossary • Manage Hierarchy chart
PHR-S Functional Profile_Health Authority-Based DRAFT	• Reference document • Work-in-process example of a profile
PHR-S Functional Profile_Payer-Linked DRAFT	• Reference document • Work-in-process example of a profile

Conclusion

Industry participation and input from a broad cross section of stakeholders was instrumental in the development of the PHR-S FM. We believe that this is an important milestone for personal health records systems. Please don't hesitate to contact the PHR WG if you have questions. And if you would like to join, we would welcome your participation in the PHR WG.

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