



HL7 PHR System Functional Model and Standard (DSTU)

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Agenda

- PHR vs. PHR Systems (PHR-S)
- Differences bet. the EHR & the PHR
- Developing the PHR-S FM: Background & Current Status
- Overview of PHR System Functional Model
- Walk through of PHR-S FM
- Conformance Clause and Profiles
- Next Steps



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Executive Summary

- HL7 builds on its solid foundation of international healthcare information technology standards by offering the Personal Health Record System Functional Model as a draft reference standard for Personal Health Record System functionality



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Executive Summary (con't)

The PHR-S FM:

- Is consumer-oriented
- Lists the functions that PHR systems are required to, should, or may, do
- Provides a certification framework
- Serves as an anchor point for system interoperability



PHR vs. PHR-S

■ PHR

- The underlying single, logical patient record
- The data elements comprising the record

■ PHR-S: Software that provides functionality to

- Manage and maintain the record
- Accomplish the various purposes of the record
 - Consumers & caregivers make health decisions
 - Administrative: provider, financial management
 - Health education, wellness, research, public health

PHR - EHR: What Are the Differences?

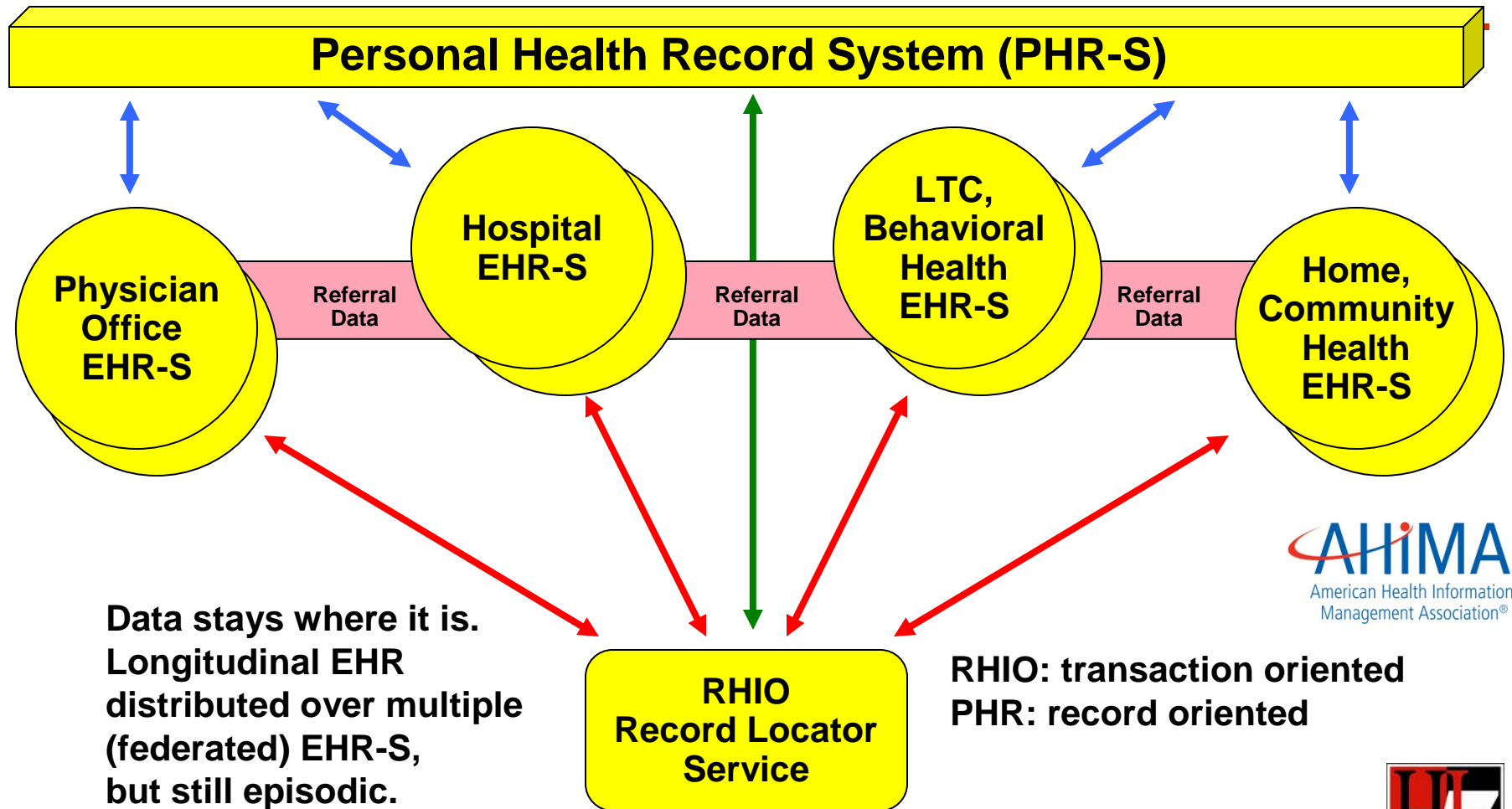
■ EHR

- Clinician-centered functionality
- Is a legal record
- Primarily episodic; could be longitudinal
- Administrative, financial, clinical data

■ PHR

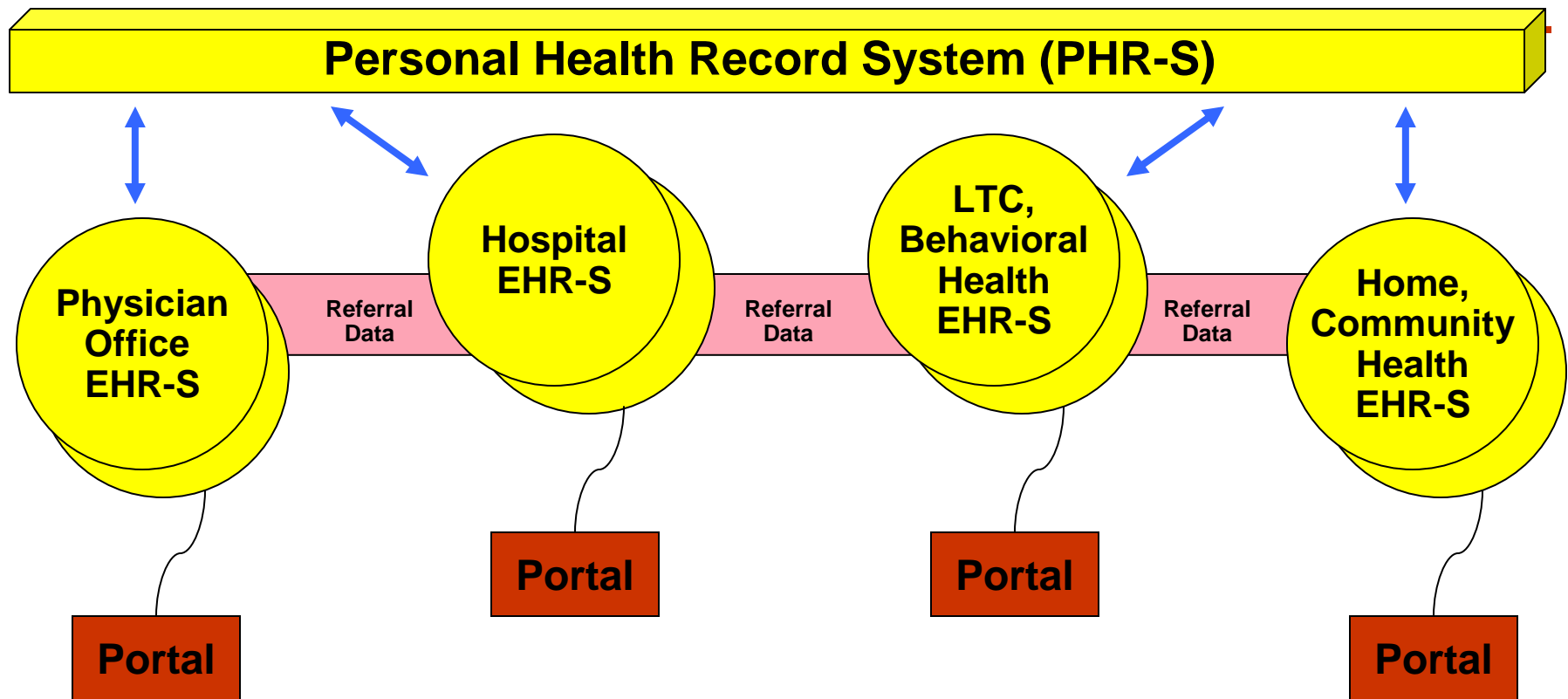
- Citizen-centered functionality
- Is not a legal record
- Could be cradle-to-grave
- How much clinical data to store?

Differences between PHR and EHR



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Stand-alone vs. "Linked" PHR-S



Pros

- Pre-populated data
- Convenience
- Lower maintenance

Cons

- Episodic, not lifelong
- Which one to use?



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Meeting PHR-S design requirements

- PHRs address a fundamentally different record and system purpose (than EHRs)
- PHRs have some structure and content similarities to EHRs and EHR-Systems
- PHRs have Privacy and security issues
- PHRs have access, use, and control issues
- PHRs must contain longitudinal, yet pertinent data
- PHR Systems must be interoperable with other PHR system models, EHR-Systems, and HIEs
- PHR information must be portable
- There are differing international perspectives

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Developing the PHR-S FM: Background

■ HL7 PHR Work Group

- Originally called EHR-PHR Linkage WG, focused on a standard for the health information exchange between the PHR and the EHR
- Target definition and environmental scan
- Updated 2003 Connecting for Health PHR Functional Model, now has 60+ functions
- PHR glossary terms
- Decided to develop full PHR FM and standard, 2007
- Public comment released August, 2007
- Draft Standard for Trial Use ballot released October, 2007



Current Status: PHR-S as a DSTU

- Approved May, 2008 as a Draft Standard for Trial Use (DSTU)
 - 2 year period to continuously improve DSTU, become an ANSI accredited standard
 - Core, not perfect or exhaustive, functionality
 - Enough to begin using a standard today
 - Enhancement over compatibility with previous versions
 - Ok to leave less essential functions in, but make sure essential functions are not left out



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The Functional Model

Is Not...

- A messaging specification
- An PHR specification
- An implementation specification (not the “how”)
 - Does not prescribe technology, data content
 - Does not dictate how functions must be implemented (e.g., via the user interface, database design)

Is...

- A system specification
- An PHR system specification
- A reference list of functions that may be present in an PHR-S (the “what”)
 - Enables consistent expression of functionality
 - Provides flexibility for innovation and product differentiation
 - Gold standard, sensitive to what can practically be done and future systems



Overview of the Standard

Personal Health	PH.1 Account Holder Profile
	PH.2 Manage Historical Clinical Data And Current State Data
	PH.3 Wellness, Preventive Medicine, and Self Care
	PH.4 Manage Health Education
	PH.5 Account Holder Decision Support
	PH.6 Manage Encounters with Providers
Supportive	S.1 Provider Management
	S.2 Financial Management
	S.3 Administrative Management
	S.4 Other Resource Management
Information Infrastructure	IN.1 Health Record Information Management
	IN.2 Standards Based Interoperability
	IN.3 Security
	IN.4 Auditable Records

Functions are categorized and listed hierarchically. *(The highest level functions are shown.)*

Each function has an ID, Name, Statement, Description, Examples, and Conformance Criteria.



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Structure of the FM

Every function consists of:

- **Function ID**
- **Function Name**
- **Function Statement**
- **Function Description**
- **Examples**
- **“See Also”**
- **Conformance Criteria**



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PH.2.5 Manage Current State Data Set

PH.2.5.3 Manage Test Results

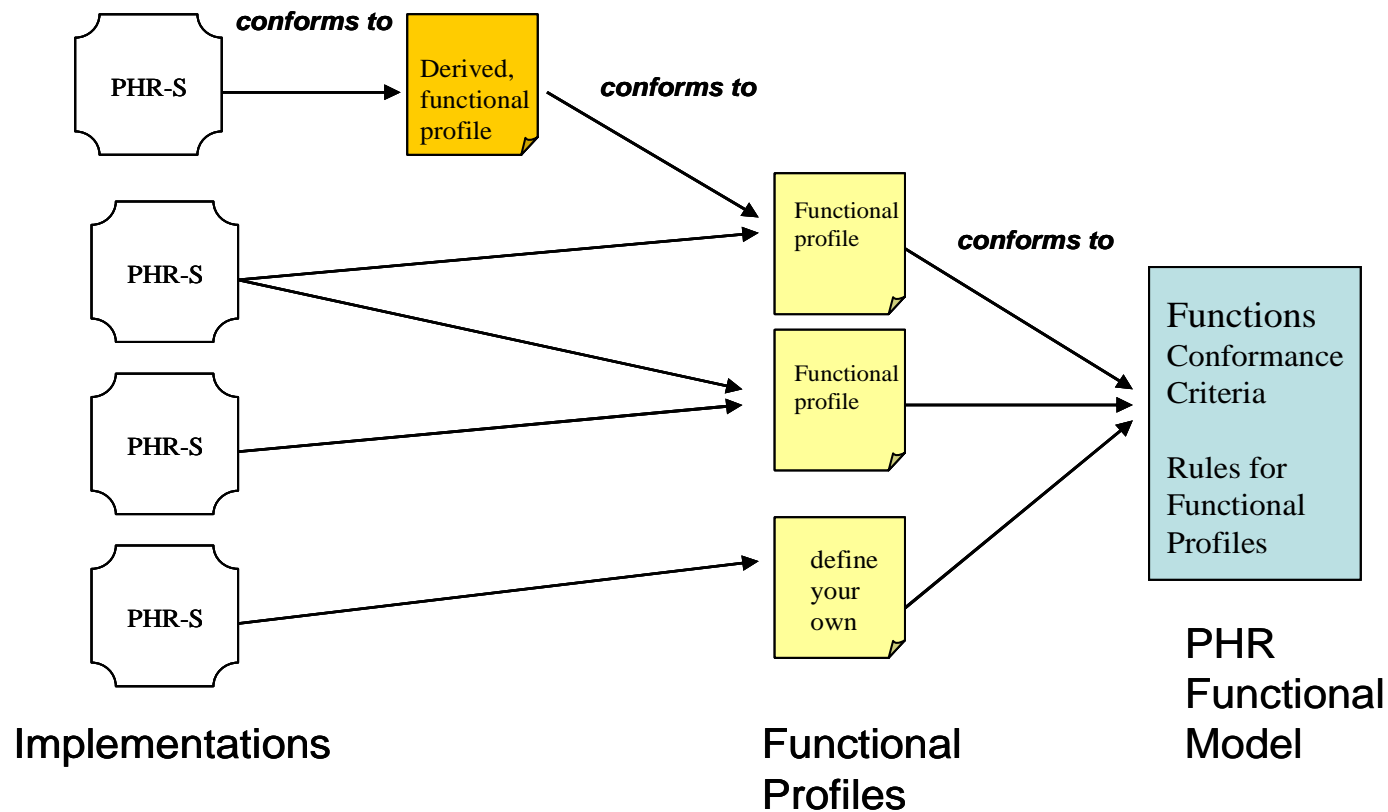
Statement/Description: Capture, maintain and present the results of diagnostic tests including inpatient, ambulatory and home-monitoring tests.

Example: The results reporting list will display when the most recent EKG was done or

1. The system SHALL provide the ability to filter results by factors that supports results management, such as type of test and date range.
2. The system SHOULD indicate normal and abnormal results depending on the data source.
3. The system SHOULD provide the ability to filter lab results by range ...
4. The system SHOULD display numerical results in graphical form and allow
5. The system SHALL provide the ability to group tests done on the same day.
6. The system SHOULD trigger decision support algorithms from the results
7. IF the system contains the electronic order, THEN the results SHOULD be linked to a specific order.



Conformance to Profiles



Beyond DSTU

Profiles being developed:

- Payer-based
- Provider-based
- Hybrid Payer/Provider – based
- Health Authority –based

Profiles being sought:

- Free-standing (e.g., Web-based)
- Employer-based
- Realm-based
- Clinical Research
- Health Platform

Future profiles:

- Clinical Genomics
- Vital Records (ancestry)
- Social Networking (e.g., my diabetes support group)

Next Steps

- EHR-PHR health information exchange
- PHR system's role in RHIOs/HIEs
- Data content, data definitions, data standards
- How the PHR-S FM informs updating of the EHR-S FM
- Full ANSI (normative) accreditation status
- Promote internationally



For More Information

- Visit the HL7 web site and download the model:

www.HL7.org/ehr

- Subscribe to HL7 PHR List server

www.HL7.org/special/committees/list_sub.cfm?list=ehrwgphr

- Contact the co-facilitators:

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Q & A

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