Slide 1	Networking and Health Information Exchange Unit 6b EHR Functional Model Standards	
Slide 2		
	Includes the data storage and supporting applications that provide value Includes the functionalities that enable HIT for patient care Promotes and defines criteria for implementation of the EHR Makes the EHR the beginning, not the end of the journey Path Path	
Slide 3	Some History • Secretary of HHS in 2003 requested existing IOM committee for data standards to define, quickly, a set of requirements for EHR functionalities • Requested HL7 to follow-up to create a standard for EHR functional model (FM).	

- HL7 EHR-S FM created as draft standard for trial use in 2004
- Became ANSI standard in 2007

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EHR-FM

- Provides a reference list of functions that shall, should or may be present in an EHR_S
- Enables common understanding of functions sought or available in any given setting.
- Includes functions considered essential in at least one care setting

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Slide 5

Functional Granularity

- Describes the level of abstraction at which functionality is expressed
- Balance between usability and need for detail
- Functions for different workflows defined in different sections

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Slide 6

Intent of Standard

- Is technology neutral
- Is implementation neutral
- Does not endorse any specific technologies, although examples may mention a specific technology
- Is not an EHR specification nor a conformance specification
- Is not a definition of an EHR

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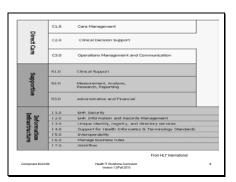
Composition

- Functional outline divided into three sections
 - Direct care
 - Supportive functionality
 - Information infrastructure
- Does not include every conceivable functionality
- Includes over 240 individual functions contained in 13 subsections

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Slide 8



Slide 9

Direct care

- DC.1 Care management
- DC.2 Clinical decision support
- DC.3 Operations management and communication

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Direct Care Functions

- Enable hands-on delivery of healthcare and provide clinical decision support
- Example: Child presents with cold symptoms
 - Enable doctor to record that event
 - Alert provider that a vaccination is due and offer contraindication alerts regarding children who have symptoms of a cold
- Users (actors)

 - Authorized healthcare providers
 Subject of care will access certain functions to view and even make corrections to their EHR

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Slide 11

Supportive

- S.1 Clinical support
- S.2 Measurement, analysis, research, and reports
- S.3 Administrative and financial

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Slide 12

Supportive Functions

- Assist with the administrative and financial requirements
- Assist with the administrative and financial requirements
 Provide input to systems that perform medical research, promote public health, and improve the quality of care
 Example: Child is being scheduled for an appointment
 Electronically verily insurance eligibility
 Electronically query local immunization registries to insure child is currently registered.

 Determine child's immunization status
 Report and immunization to an immunization registry
 Provide any encounter data required by financial and administrative systems

 Users (actors)

- Users (actors)
 - Support staff
 Providers who perform certain administrative functions

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Information Infrastructure

- IN.1 Security
- IN.2 Health Record Information and Management
- IN.3 Registry and Directory Services
- IN.4 Standard Terminologies & Terminology Services
- IN.5 Standards-based Interoperability
- IN.6 Business Rules Management
- IN.7 Workflow Management

Component 9/Unit 6

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Slide 14

Information Infrastructure Functions

- Provide a framework for the proper operation of the direct care and supportive functions
- Offer EHR-S technical capabilities that are essential, yet transparent to the user
- Example: Secure transmission, backup and archive
 - Provide a secure electronic environment for the immunization registration query
 Report the child's immunization event in a secure fashion
 - Report the child's immunization event in a secure tashion
 Transparently archive and backup the child's record and provide an audit trail of all accesses to the child's record
- Users (actors)
 - Functions are performed transparently by EHR-S applications on behalf of EHR-S end users

Component 9/Unit 6b

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Slide 15

Use of EHR-S FM

- Describe end-user benefits such as patient safety, quality outcomes and cost efficiencies in terms of standard EHR-S functions
- Provide desired functionality for developers and vendors to include in their products
- Provide framework from which you can select functionalities to implement

Component 9/Unit 6b

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Slide 16	Details of Functional Model Function ID Function type Function name Function statement Description Conformance criteria	- - - -	
Slide 17	Uses of EHR-S FM • Most important use – certification • Help in selecting product and understanding what you want to implement • Supports comparison of systems • Aids in understanding commonality • Permits identification of real and settings differences	- - - -	
Slide 18	Functional Profiles	_	
	 Used to constrain the larger, superset of functions to an intended use Can be defined for a particular site or a particular clinical or disease focus May be registered with HL7 and shared with other organizations 	_	

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Functional Profiles

- Functions Direct care functions
 - Supportive functionsInfrastructure functions
- Care Settings
- Hospital inpatient acute
 Ambulatory small clinic practice
 Long term care nursing home
 Care in the community skilled home care

 Priorities
 Encential ***
- Essential now, essential future, optional, not applicable

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Slide 20

Emergency Care Functional Profile

- First registered clinical profile derived from EHR FM standard
- Standard for the development, refinement, and evaluation of information systems employed in the Emergency Department.
- Becomes a standard for possible use in certification process
- · Includes addressing natural disasters

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Slide 21

Registered Profiles

- Behavioral Health
- Child Health
- Long Term Care
- Legal EHR
- Regulated Clinical Research (Clinical Trials)
- · Vital statistics reporting

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Summary

- In this unit, we have learned about a standard that defines the superset of functional requirements for an EHR-S.
- We also learned how this superset can be tailored to fit any site or circumstance, including your local setting.
- Just reading this set of functions is very educational in what can be accomplished in the use of HIT.

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