Content Profiles

IHE Educational Workshop 2007

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A content profile is…

- A sharable information component that can be exchanged…
  - within an HIE or RHIO (XDS)
  - via Media or USB Device (XDM)
  - via Reliable Messages (XDR)
- Document content using standards
  - CDA Release 2.0
  - HL7 Care Record Summary
  - ASTM/HL7 Continuity of Care Document
- Library of Reusable Parts

IHE Content Profiles
Standards and Profiles

- CDA Release 2.0
- Logical Observation Identifier Names and Codes (LOINC)
- HL7 Care Record Summary
- ASTM/HL7 Continuity of Care Document
- XDS/XDR/XDM
- Notification of Document Availability
- Document Digital Signature
- XHTML 1.0
- XSLT 1.0

IHE Content Profiles
Key Technical Properties

- Human Readable
- Machine processable
- Digital Signature Enabled
- Can be shared multiple ways
  - RHIO or HIE (XDS)
  - CD or USB Media (XDM)
  - Point to Point (XDR)

PCC Profiles

Content

Basic Patient Privacy Consent

Medical Summaries

Functional Status Assessments

Preprocedure History and Physical

Emergency Department Encounter Record

Antepartum Care Summary

ED Referral

Exchanging PHR Content

Lab Report

Integration

Query for Existing Data

2005-06
2006-07
2007-08

- Among 30 Consensus Standards Recommended by HITSP and accepted by HHS Secretary Leavitt.

Medical Summaries
Abstract

- **Define a medical summary format for clinical documents containing:**
  - **Patient Demographics**
  - **Problems**
  - **Allergies**
  - **Medications**
  - **Pointers to other material**

C2 2:00-3:00

Medical Summaries
Value Proposition

- **Leverages Clinical Documents and Ontology**
  - A common mechanism for transfer of encoded clinical data embedded in documents (CDA)
- **Enhances Clinical Documents criteria for key use cases:**
  - Inpatient to Primary Care Provider
  - Primary Care Provider to Specialist
- **Migration to ASTM/HL7 CCD in 2007**

C2 2:00-3:00

ED Referral
Abstract

- Define a referral format for "heads-up" call
  - Supports Medical Summary Content
  - Special Needs of Emergency Department
    - Expected Time of Arrival
    - Mode of Arrival
    - Disposition/Orders

C2 3:45-4:15

Exchange of PHR Content

Abstract

- Manage the interchange of documents between a PHR System and an EHR System to enable interoperability.
- Supports a variety of transmission mechanisms.
- Addresses PHR Update Issues

C2 2:00-3:00

Exchange of PHR Content
Value Proposition

- **Supports interchange of PHR Information**
  - Demographics
  - Insurance Information
  - Medications, Problems, Allergies
  - Health History
  - Other Information
- **Supports information described in**
  - AHIMA PHR Common Data Elements
  - HL7 PHR Functional Model
- **ASTM/HL7 CCD Compatible in 2007!**

C2 2:00-3:00

Antepartum Summary

Scope

- **Capability to electronically communicate pertinent patient history, treatment, lab and imaging information collected over the course of a pregnancy to care providers and institutions (ambulatory, hospital, specialist, etc.) via perinatal, ambulatory and inpatient EHR systems**

C2 3:15-3:45

Antepartum Summary

Value Proposition

- Over 4 million live births per year in US
- Obstetric patients must have a complete summary of antepartum care available for all care providers and at admission for labor and delivery.
- Incomplete information can be a danger to the mother and child and result in injury, inadequate treatment or undesirable outcome.

C2 3:15-3:45

Functional Status Assessment

Scope

- **The Institute of Medicine has determined that a high risk for errors occurs during the transfer of care.**
- **The Functional Status Assessment Profile (FSA) supports the handoff of assessment information between practitioners during transfers of care, cross-enterprise or intra-enterprise.**
- **Physician documentation provides medical assessment, diagnosis and treatment information.**
- **Nursing documentation provides assessment and treatment of human response (psychosocial, physiologic, emotional and spiritual) of patient/family to changing conditions.**

C2 4:15-5:00

Functional Status Assessment
Value Proposition

- Early intervention by practitioners viewing EHR minimizes complications and reduces length of stay.
- Ensure pertinent data is available at the time of transfer without concern about lost data.
- Complete information about patient's clinical or home status promotes safety, adequate after-care, improved outcomes and patient satisfaction.
- Admitting nurse can plan for appropriate staffing resources based on patient acuity. (Resource maximization)
- Continuity of interdisciplinary plan of care promotes early discharge and increased patient satisfaction.

* Healthcare Outcomes

C2 4:15-5:00

ED Encounter Record

Scope

- **Emergency Department Information Systems (EDIS)**
- **Inpatient EHR Systems**
- **Ambulatory EHR Systems**

C2 3:45-4:15

ED Encounter Record

Value Proposition

- The Centers for Disease Control and Prevention (CDC) estimates that there were over 110 million emergency department visits in 2004
- ED visits account for as much as 40% of hospital admissions
- The ED Chart is the most common medical summary in use today
- This profile supports sharing of the clinical information in the ED chart with inpatient care providers and the patient's primary care physician.

C2 3:45-4:15

Basic Patient Privacy Consents
Abstract

- **Provides mechanisms to:**
  - **Record the patient's privacy consent(s),**
  - **Identify the consent policies under which a document was authorized to be published.**
  - **Enforce the privacy consent appropriate to the use.**

D2 10:45-12:00

Sharing of Lab Reports
Scope

- **The clinical laboratory report is:**
  - **A report of a set of final results (the fulfillment process being completed) to be shared as "historical information".**
  - **Human-readable, shared between care providers of various specialties and patients (e.g. through a PHR)**
  - **May contain machine readable coded entries (decision support, bio-surveillance)**

- **All clinical laboratory specialties in scope, except:**
  - **Blood banks (blood products out of scope, but blood tests in scope)**
  - **Pathology (has its dedicated domain in IHE)**

Sharing of Lab Reports
Use Cases

- **Use case 1: Hospital lab report → RHIO → EHRs**
  At discharge time, a hospital physician selects the most significant laboratory reports produced during patient stay, and issues these reports individually to a health information exchange (e.g. XDS Affinity Domain) shared by a number of healthcare enterprises and primary care providers.
- **Use case 2: Ambulatory lab report → RHIO → PHR**
  A private laboratory having signed a final report for a patient, sends this report in an electronic format to the patient record in the national EHR.
- **Use case 3: Lab report → PHR**
  A physician reviews the results received from a reference laboratory for his patient. The doctor, as requested by the patient, sends this laboratory report in the patient's personal health record in an electronic format.
- **Use case 4: Lab report automatically shared → RHIO**
  A community or hospital laboratory, systematically (with some degree of automatism) shares its final reports with a regional healthcare network.
- **Use case 5: Hospital's EHR Lab report → RHIO**
  At discharge time of an inpatient, a hospital physician selects the most significant lab results, produced by one or more laboratories of the healthcare enterprise during patient stay, and builds a cumulative report sent to an health info exchange shared by a number of healthcare enterprises and primary care providers.

Scanned Documents
Abstract

- A variety of electronic image formats are used to store and exchange textual clinical documents
- These formats are not designed for healthcare documentation
- There is no uniform mechanism to store healthcare metadata associated with the documents, including:
  - patient identifiers,
  - demographics,
  - Encounter/visit identifiers
  - order numbers
- It is necessary to provide a mechanism that allows such source metadata to be stored with the document.

Scanned Documents
Scope

- EHR Systems
- HIS Systems
- Transcription Systems
- Document Imaging Systems

Scanned Documents
Value Proposition

- Over 50% of the medical record resides in dictated or transcribed notes or handwritten documentation
- This information needs to be exchanged for:
  - Care
  - Payment
  - Operations

More information….

- **IHE Wiki: http://wiki.ihe.net**
- **IHE Web site:** http://www.ihe.net
  http://www.himss.org/IHE
  http://www.rsna.org/IHE
  http://www.acc.org/quality/ihe.htm
- **Technical Frameworks**
- **Technical Framework Supplements – Trial Implementation**
- **Non-Technical Brochures :**
  - **Calls for Participation**
  - **IHE Fact Sheet and FAQ**
  - **IHE Integration Profiles: Guidelines for Buyers**
  - **IHE Connect-a-thon Results**
  - **Vendor Products Integration Statements**

Questions?


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