BRIEFING
FROM THE BELTWAY

eHealth Standards: Action Agenda

February 21, 2013

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Reminder

This call is being recorded.

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Reminder

Please press mute when not speaking

(6 to mute, *7 to unmute)*

Agenda

- **4:00 – 4:10 PM** Welcome and Introductions
- **4:10 – 4:25 PM** Rita Scichilone, Senior Advisor, Global Standards, AHIMA
- **4:25 – 4:40 PM** John Quinn, CTO, HL7
- **4:40 – 4:50 PM** Discussion
- **4:50 – 5:00 PM** Announcements
- **5:00 PM** Adjourn

Rita Scichilone

AHIMA

eHealth Standards – Action Agenda

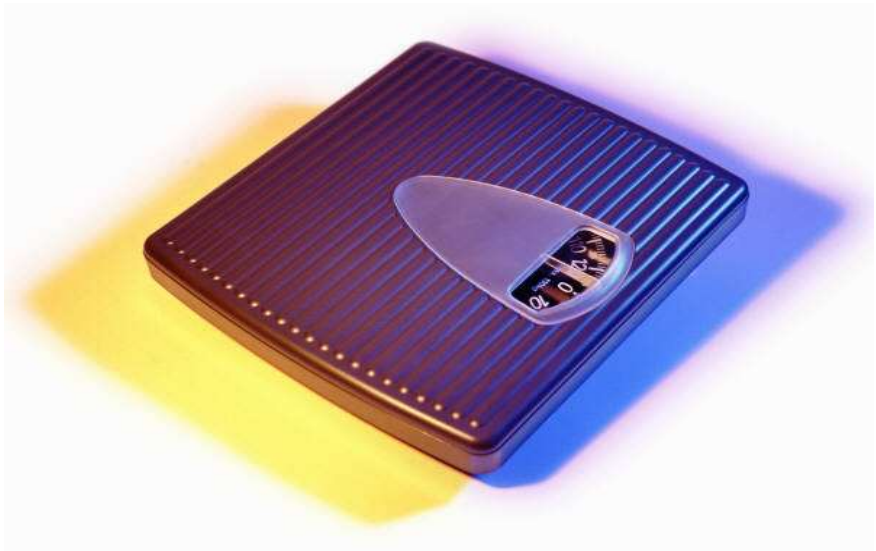
Rita A Scichilone

Senior Advisor, Global Standards

American Health Information Management Association

"Standards exist, but there is no nationwide coordination process to ensure that they are useful in everyday transactions"

W. Ed Hammond in Health Affairs Volume 24, Number 5 (2005)



AHIMA

“AHIMA leads the health informatics and information community to advance professional practice and standards”

- ANSI designated Secretary and US TAG Administrator for ISO/TC 215 Health Informatics
- Health Level Seven
- International Health Terminology Standard Development Organisation (SNOMED CT)
- World Health Organization Family of International Classifications (ICD, ICF, and more)
- Currently working towards standardization of data and information governance

AHIMA Mission Statement : www.ahima.org/about/mission.aspx

10 Compelling Reasons for Action

Standards

- Enable exchange and facilitate trading of goods and services (including health data)
- Ensure equal opportunities for technology uptake in developing countries
- Make the world a safer place to live
- Guide and certify business quality
- Create a healthy environment and environment for health

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10 Compelling Reasons for Action

Standards

- Provide care for the customer
- Foster the sharing of technology breakthroughs and Innovation
- Assist in managing cultural and linguistic diversity
- Spread knowledge and play a big part in enabling interoperability on all levels of information technology

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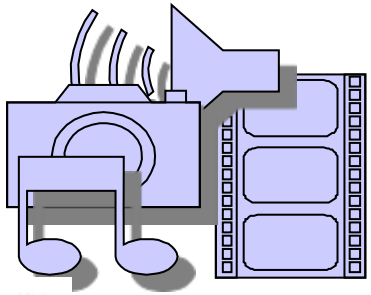
10 Compelling Reasons for Action

Standards

- Make information retrievable!



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http://www.infoterm.info/pdf/about_us/10_good_reasons.pdf (ISO/TC 37)

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WHO Forum on Health Data Standardization and Interoperability

Share

As the specialized United Nations agency for health, WHO organized a Forum on Health Data Standardization and Interoperability at WHO Headquarters in Geneva 3-4 December 2012. Participants of the Forum included representatives from health data Standards Development Organizations (SDOs), WHO Member States, academic and research institutions, implementing partners, the donor community, and subject matter experts concerned with development, adoption and implementation of health data standards at national and sub-national level in addition to WHO technical programmes and regional offices. For more information on this Forum and future programmes, please send email enquiries to whofhdsi@who.int.

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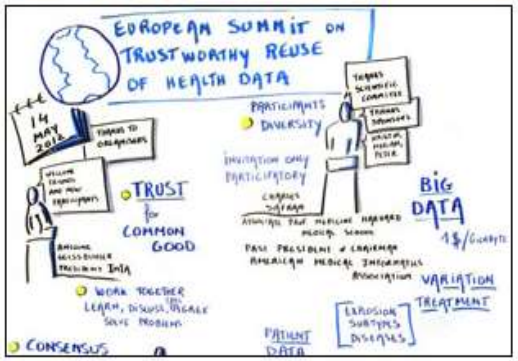
WHO and IMIA Industry Stakeholder Consultation on Health Data Reuse



WHO and the International Medical Informatics Association (IMIA) a Non-Governmental Organization in Official Relations with WHO, will hold an Industry Stakeholder Consultation on 27 February 2013, at WHO headquarters in Geneva. This Consultation is part of the Transnational Health Data Reuse Initiative leading up to the 2013 European Summit on the Trustworthy Reuse of Health Data to be held on 3-4 June 2013 in Brussels.

Participation details

eHealth | WHO and IMIA Industry Stakeholder Consultation on Health Data Reuse | Call for innovative health technologies | WHO Forum on Health Data Standardization and Interoperability | National eHealth strategies

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eHealth at WHO

eHealth is the use of information and communication technologies (ICT) for health. The eHealth unit works with partners at the global, regional and country level to promote and strengthen the use of information and communication technologies in health development, from applications in the field to global governance. The unit is based in the department of Knowledge Management and Sharing in the cluster of Health Systems and Innovation.

Programmes and projects

Selected events 2013

- WHO and IMIA Industry Stakeholders Consultation on Health Data Reuse
  Geneva, 27 February 2013
- eHealth Week 2013
  Dublin, 13-15 May 2013
- 2013 European Summit on Trustworthy Reuse of Health Data
  Brussels, 3-4 June 2013
- Medinfo 2013
  Copenhagen, 20-23 August 2013
- Medicine2.0'13
  London, 23-24 September 2013
- World Telecom 2013
  Bangkok, 18-21 November 2013

Bulletin of the World Health Organization

Volume 90, Number 5, May 2012, 321-400
Special issue on eHealth

Contact information

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Action Agenda – What now?

- Adoption of healthcare standards is accelerated by tools
  - Vocabulary registries
  - Implementation guidance easy to access and understand, and specific (avoiding optionality which inhibits interoperability)
  - Value set libraries as a uniform and trusted source (NLM)
- Cooperation and consensus building

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Action Agenda – What now?

- Standardization and Interoperability are critical for 21st century healthcare for all health related operations
- The lack of a seamless exchange of data within and between health information systems hinders care and leads to fragmentation of information systems

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Action Agenda – What now?

- Implement data standards to enable countries and the scientific community to evaluate population health to confirm evidence based medicine and best practices for health intervention
- Increase trust in use of technology to ensure public confidence in protection of privacy and personal identity controls

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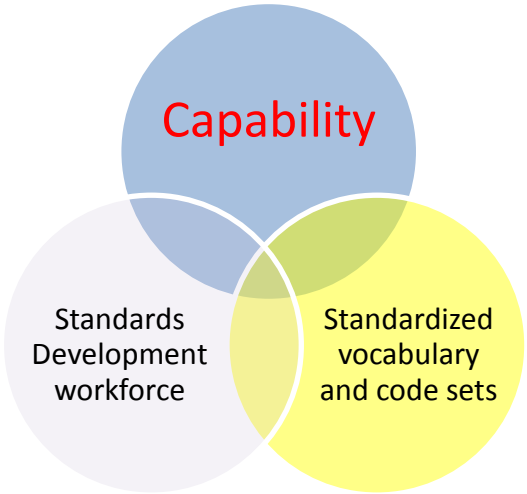
Action Agenda – What now?

- Establish and support harmonization efforts to achieve reliable health information exchange
- Create workforce development to support new methods of managing health information to achieve reliable data integrity in health records



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Action Agenda – What now?

- Clinical documentation in an electronic environment must be managed differently than paper records
- Systems must meet the business requirements for a provider's record of care
  - Record keeping and evidentiary requirements for EHR's are not well understood by developers and/or users
  - There is a critical need for data integrity

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Action Agenda – What now?

- Implement health information technology standards - for example:
  - HL7 EHR-S Records Management and Evidentiary Support (RM-ES) Functional Profile Standard
  - HL7 EHR- S Functional Model Release 2
- These standards ensure a baseline of functionality is included and are an important inclusion for Meaningful Use Stage 3 requirements

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Action Agenda – What now?

- Consider the right balance in the workforce for successful development and adoption of standards
  - Technology will not solve all data integrity problems
  - Information management demands require a comprehensive view of record uses
  - Health information management professionals play a key role in standardization

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Action Agenda – What now?

- Defining the official record of care - standard
  - Declaring in organizational policy the data and information in the EHR system that constitutes the record of care
  - Since data and information in electronic systems are generally not document-based, patient records must be identified in the system then "locked" to provide a consistent set of information to be used, retained and disclosed

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Action Agenda – What now?

- Defining the official record of care – standard
  - Legal precedence is starting to emerge in which courts are asking a healthcare organization to provide their organizational policy defining their official record in an EHR system
  - Challenges remain to maintain valid, trustworthy records in those systems that have not incorporated basic record-keeping principles

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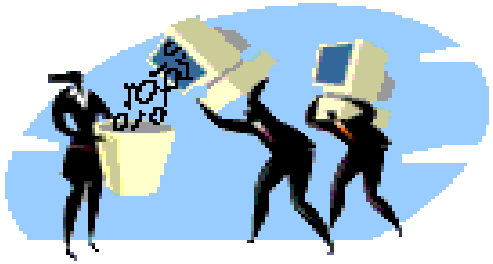
Action Agenda – What now?

- Considerations for the official record of care – data quality and information integrity governance and management are key
  - External factors impact clinical data collection and documentation
  - Health information professionals have identified four practices of concern which must be addressed



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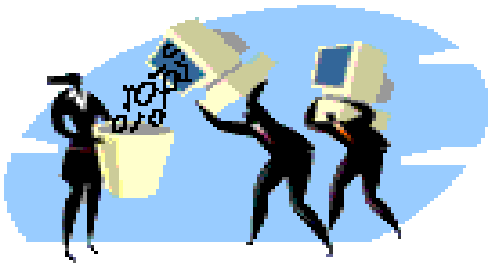
Action Agenda – What now?

1. Systems or databases using “default” values and automated population of fields
2. Poorly designed documentation templates
3. Cloning practices and Copy/Paste temptations
4. Errors from dictation without validation



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Action Agenda – What now? The seismic shift

"In the move towards better functioning, technology enabled medical record systems, some of the fundamental functions and requirements for medical records have been lost"

AHIMA Testimony to the HIT Policy Committee Hearing on Clinical Documentation February 13, 2013

- Focus is moving from adoption to quality and safety assurance
- Disrupted clinical workflows
- Documentation demands increase
- Best practices for electronic capture of data are not yet defined for clinical documentation
- Action alert

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Observations

- Disruptive innovation is required to make our healthcare industry get in shape
- Standards are one of the key health interventions to achieve interoperability and reduce optionality in electronic records implementation
- Our fitness goals are:
  - Greater efficiency in managing information
  - Cost reduction while providing quality care
  - Improved communication with patients

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Resources

- www.ahima.org
- http://www.who.int/topics/ehealth/en/
- http://www.who.int/ehealth/forum2012/en/
- http://www.who.int/ehealth/en/
- AHIMA Testimony to the HIT Policy Committee Hearing on Clinical Documentation February 13, 2013 (Panel 4 Role of Clinical Documentation for Legal Purposes)
- http://www.ahima.org/advocacy/default.aspx
- http://www.iso.org/iso/iso_technical_committee?commid=54960 (ISO/TC 215 Health Informatics)
- Ensuring Data Integrity in Health Information Exchange

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John Quinn

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Healthcare Interoperability Standards

Why we use them, their value and how they can improve care

John Quinn

HL7 CTO

February 21, 2013

HL7 International

- Health Level Seven International is an ANSI accredited Standards Development Organization that was founded in 1987.
- It creates and maintains standards that are used to communicate healthcare related information between IT systems.
- The IT systems may be inside and/or among healthcare provider organizations

HL7 International

- The U.S. is one of about 37 countries that actively participate in HL7.
- There are well over 100 active standards currently written and supported by HL7 today.
- It is likely that every provider IT system that supports the recording and use of clinical data uses HL7 (although the owners/users many not know it).

37 HL7 International Affiliates / Countries

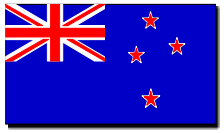

Argentina


Romania


Puerto Rico


Pakistan


Norway


New Zealand


Mexico


Australia


Russia


Austria


Singapore


Bosnia and Herzegovina

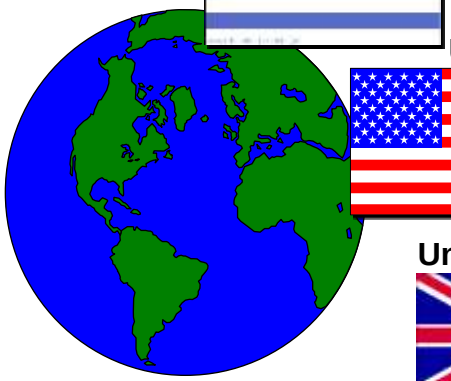

South Korea


Brazil

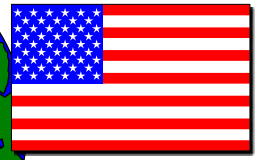

Spain


Canada

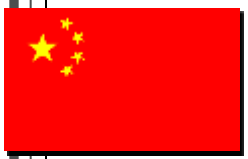

Sweden




Uruguay


United States


United Kingdom


China


Switzerland


Taiwan


The Netherlands

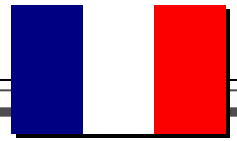

Turkey


Columbia


Croatia


Czech Republic


Finland

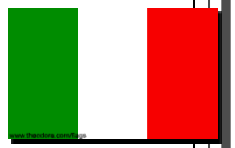

France

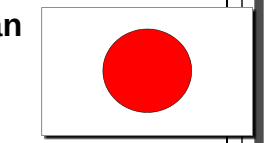

Germany

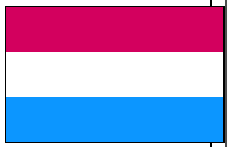

Greece


Hong Kong


India


Italy


Japan


Luxembourg

And growing

HL7 International Products

- HL7 International has a number of major product lines:
  - Version 2.x
  - Version 3 Reference Information Based Products
    - Version 3 Messaging
    - Version 3 Clinical Document Architecture (CDA)
      - CDA Implementation Specifications or IGs (e.g., CCD)
    - Version 3 Services (near-term future)
    - Gello
    - Attachments
    - Structured Product Labeling
  - EHR-S & PHR-S Set of Standards
  - CCOW
  - Arden Syntax

HL7 Subject Domains

- ADT
- Order entry
- Result reporting
- Clinical Guidelines
- Clinical Observations
- Scheduling
- Patient care
- Immunizations
- Discharge summaries
- Mobile Computing
- Adverse event reporting
- Automated waveforms
- Medical transcriptions
- Referrals
- Consultations
- Clinical trials
- Nursing care plans
- Data Warehousing

… And Growing …

HL7 Subject Domains

- SGML, (now XML)
- Vocabulary
- Certification
- Conformance
- Security transactions
- Claims attachment
- Accountability, Quality, Assurance
- Blood Bank
- Personnel Management
- Arden Syntax
- Component Based Messaging (i.e., Java)
- Visual/Context Integration
- Government Projects
- Master Patient Index
- SOA
- Image Management

HL7 and ISO

- Many HL7 Standards have been promoted through ANSI and the US Technical Advisory Group (TAG) to the International Standards Organization (ISO) TC-215 (Technical Committee for Medical Informatics).
  - HL7 Version 2.5, Reference Information Model, Data Types, Common Terminology Services II, CDA, EHR Functional Model, ICSR (individual case safety reports) Parts 1 & 2 in pharma-covigilance and pharmaceutical reporting requirements , Common Rx product model, medical waveform format.

In the United States

- HL7 standards are used in many of the IT systems interoperability requirements for meaningful use that are published by ONC.

HL7 Standards use by ONC

- ONC in Meaningful use Stage 1 and 2 use HL7 for:
  - A set of clinical information document templates called Consolidated Clinical Document Architecture (CDA).
    - Continuity of Care document and several others
  - Laboratory results (for inter-organizational use)
  - Immunization and Bio Surveillance reporting to the CDC

HL7 Standards use by ONC

- Meaningful use Stage 3 discussions and planning include:
  - Additional document templates (i.e., document type);
  - Laboratory Ordering messages (for inter-organizational use)
  - Data Query requests for patient information (anonymized).

Value of HL7 Standards

- Today, even though most do not know it, HL7 is used for almost all inter- and intra-organization diagnostic testing orders and results.
- Today HL7 is used for CDC immunization and bio-surveillance reporting

Difference of ONC's use of HL7

- The current wide use of HL7 has grown slowly and systemically as millions of interfaces where created to support the hundreds of thousand of HIT systems installed today.
- Although not widely understood, a "Standard" provides a wide set of fixed options that can be selected for any given interface.

Difference of ONC's use of HL7

- Options include elements such as language, character set, detailed use case supported, clinical terminology sets (e.g., LOINC, SNOMED, IPT, ICD, RxNorm, etc.) and their version levels.
- When all of these above items/conditions (and more) are selected, an "implementation guide" is created, tested, published and then implemented (typically by the vendor)

Implementation Guides

- Implementation Guides (sometimes also referred to as implementation profiles) enable the concept of “plug and play interfaces” and also broadly support the concept of (computed semantic interoperability).

HIT Standards Value

- The HIT Interoperability Standards (e.g., HL7, DICOM, NCPDP, etc.) are the foundation for inter-organizational unambiguous sharing of clinical information.
- ONC was charged by the US Congress to implement the electronic sharing of clinical information to improve the quality of care.

HIT Standards Value

- ARRA/HITECH
  - Title 13 of ARRA **H**ealth **I**nformation **T**echnology for **E**conomic and **C**linical Health **A**ct".
  - This has resulted in a number of policy decisions and incentives for the industry to adopt clinical electronic health records systems (EHR-Ss).
  - The EHR-Ss must interoperate in order to qualify for the incentives.
  - The incentives cease in 2016, penalties begin (Medicare and Medicaid) and Meaningful Use requirements can continue to evolve.

Value

- While some may disagree on the overall scope and degree of value created by using Standards to communicate among EHR-Ss, there are some broad new capabilities now available:
  - Elimination of handwritten records;
  - Ubiquitous availability of EHR at the point of decision/care;
  - etc.

DISCUSSION

Next Briefing from the Beltway

Thursday March 21, 2013

4:00 - 5:00 pm (ET)

eHEALTH INITIATIVE

Real Solutions. Better Health.

eHI Annual Government Affairs Retreat
Wednesday, March 13, 2013

10AM – 4PM

Hall of the States Building
Washington, DC

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Thank You

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