

Component 9 – Networking and Health Information Exchange

Unit 3-1 - National and International Standards Developing Organizations

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Unit 3 Objectives -(1/2)

- Explain why standards related to networking and health information exchange are important
- Standards development
 - How standards are developed
 - Who develops them
 - How standards are accredited
 - How standards are selected

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Unit 3 Objectives - (2/2)

- Define the different categories of standards
- Demonstrate how to find, obtain, and use standards that are needed to facilitate networking and health information exchange

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Why Standards?

- Necessary part of everyday life
- Enables working together
- Avoid chaos
- Ubiquitous use

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Standards in Health Care

- Aggregation of data among different sites of care
- Health surveillance
- Interoperability



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Interoperability Requires ...

- · Connectivity infrastructure
 - -Land lines
 - -Cable
 - -Wireless
 - -Satellites
 - -Other

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Interoperability Requires ...

- · Governance infrastructure
 - Decisions made and enforced
 - Standards
 - Knowledge
 Process

 - Process

 Ideally proper decisions made by experts and mandated by governments.

 Interoperability is difficult without government involvement
 Should be a partnership between public and private.

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Interoperability STORAGE -APPLICATION Data is understood and reusable throughout the pathways. EXCHANGE

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Comments About Standards

- "What I like most about standards are that there are so many to choose from."
- "There are no standards."
- "We need standards, so let's make some."

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Government and Standards

 Much of the activity for Health Information Technology for Economic and Clinical Health (HITECH) and the American Recovery and Reinvestment Act (ARRA) involves standards

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Who Is Doing the Thinking About Standards?

- The Office of the National Coordinator (ONC), supported by two committees:
 - Healthcare Information Technology Standards Committee (HITSC)
 - Healthcare Information Technology Policy Council (HITPC)
- Both are engaged in identifying appropriate standards for HIT

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How Are Standards Made?

- Government
- De facto standards (proprietary) created by a vendor
- Ad hoc standards created by industry groups
- Consensus standards created by open groups of interested stake holders

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Authority For Standards

- Government mandate
- Single vendor market share
- Ad hoc vendor agreement
- Consensus
 - Balanced voting process among categories of participants.
- Requires over-whelming agreement
- Vote by members or countries

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Who Creates Standards?

- Unfortunately, there are many groups that create standards. The result is competing, conflicting and overlapping standards. The result is inconsistency in what standards are chosen, defeating the purpose of standards.
- We refer to a group that creates standards as a Standards Developing Organization (SDO).
 Some SDOs are international, others are US only.

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International SDOs (1/2)

- International Standards Organization (ISO)
 ISO TC 215 Healthcare Informatics
- European Committee for Standardization (CEN)
- Health Level 7 (HL7) International
- Digital Imaging and Communications in Medicine (DICOM)
- Institute of Electrical and Electronic Engineers (IEEE)
- Clinical Data Interchange Standards Consortium (CDSIC)

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International SDOs (2/2)

- GS1
- International Healthcare Terminology SDO (IHTSDO)
- Joint Initiative Council (JIC)

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Related Organizations

- World Health Organization (WHO)
- Object Management Group (OMG)
- Integrating the Healthcare Enterprise (IHE)
- openEHR
- World Wide Web Consortium (W3C)
- Organization for the Advancement of Structured Information Standards (OASIS)
- Internet Engineering Task Force (IETF)

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US HIT SDOs

- ASTM
- ASC X12N
- National Council for Prescription Drug Programs (NCPDP)
- MedBiguitous
- · American Dental Association
- International/US
 - CDISC, DICOM, HL7, IEEE

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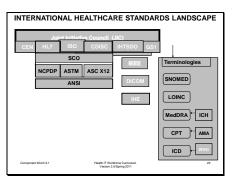
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Related US Groups

- American National Standards Institute (ANSI)
- US Tag to ISO TC 215
- National Institute of Standards (NIST)
- SDO Charter Organization (SCO)
- National Quality Forum (NQF)
- Office of the National Coordinator (ONC)
 - HIT Standards Committee (HITSC)
 HIT Policy Council (HITPC)
- National Library of Medicine (NLM)

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What have you learned?

- · Importance of standards
- · How standards are made
- · Who makes standards

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