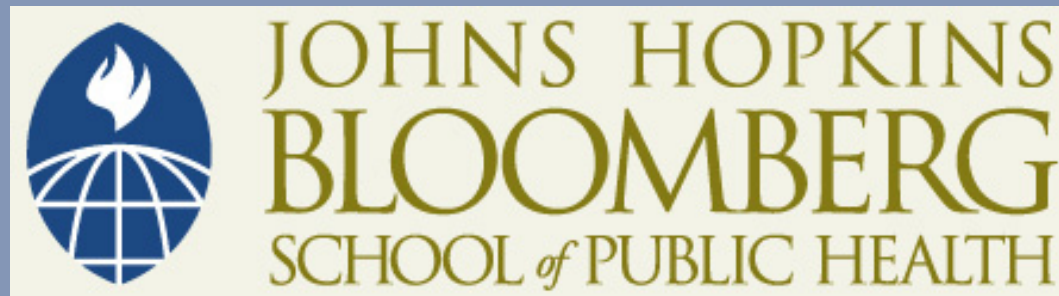


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International Perspectives

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Section A

Overview of International Health IT Standards

Presentation Agenda: International Perspectives

- Why participate in international standards activities?
- Brief overview of international standards organizations and activities
 - ISO, HL-7, IHE
- International Classification and Terminology standards
- Challenges

Overview: International Perspectives

- Health data standards can be traced back several centuries
 - London Bills of Mortality: seventeenth century
 - Florence Nightingale: mid nineteenth century
 - Bertillon classification: late nineteenth century
 - International Organization for Standardization (ISO): mid twentieth century
 - World Health Organization (WHO): mid twentieth century

What Is *International Standardization*?

- When the large majority of products or services in a particular business or industry sector conform to international standards, a state of industry-wide standardization exists

- The economic stakeholders concerned agree on specifications and criteria to be applied consistently in:
 - The classification of materials
 - The manufacture and supply of products
 - Testing and analysis
 - Terminology
 - Provision of services

- International standards provide a reference framework—or a common technical language—between suppliers and their customers

Why Participate in International Standards Setting?

- Create a global market for products
- Facilitate trade and make it fairer
- Share technological advances and good management practices
- Disseminate innovation
- Achieve solutions to common problems
 - When standards are absent, we soon notice

Why Participate in International Standards Setting?

- Foster comparable data and statistics in developed and developing countries
 - A major priority for international aid organizations

- Enable international surveillance
 - Bio-surveillance
 - Drug safety
 - Patient safety
 - Mortality and morbidity data

- Learn from other countries

- Improve population health

Main International Standards Organizations

- International Electrotechnical Commission (IEC)
- International Organization for Standardization (ISO)
- International Telecommunication Union (ITU)
- United Nations
- World Health Organization

International Players in Health Care Standards

- ISO TC 215: health informatics
- CEN: European standard development
- DICOM: imaging standard
- UN/EDIFACT: EDI standards
- HL7: clinical messaging standards
- IEEE: medical device standards
- WHO and IHTSDO: vocabulary standards

The US and International Standards Organizations

- American National Standards Institute (ANSI) is the US-voting representative on IEC, ISO, and ITU
- ANSI delegates responsibilities to US Technical Advisory Groups (TAGs), which develop and transmit US positions on activities and ballots

International Organization for Standardization (ISO)

- Founded in 1947
- A network of the national standards institutes of 163 countries
- One member per country
- Non-governmental organization
- Acts as bridge between governments and private sector
- Sets standards that often become law

Acronyms



ISO Hallmarks

- Equal footing
- Voluntary
- Market-driven
- Consensus
 - Openness, balance, due process, appeal
- Worldwide: 163 countries
- Over 200 ISO Technical Committees (TCs)

ISO TCs Relevant to Health Data Standards

- Information technology (JTC1)
- Terminology (TC 37)
- Devices for administration of medicinal products (TC 84)
- Dentistry (TC106)
- Surgical instruments (TC 170)
- Assistive products for persons with disabilities (TC 173)
- Sterilization of health care products (TC 198)
- Quality management for medical devices (TC 210)
- Clinical Laboratory testing (TC 212)
- **Health informatics (TC 215)**
- Traditional Chinese medicine (TC 249)

ISO TC 215

- Founded in 1998
- Scope is standardization in the field of information for health
- Goal is to achieve compatibility and interoperability between independent systems
- Also strives to ensure compatibility of data for comparative statistical purposes and to reduce duplication of effort

ISO TC 215 Work Groups

- WG1: data structure
- WG2: data interchange
- WG3: semantic content
- WG4: security
- WG6: pharmacy and medicine
- WG7: devices
- WG8: business requirements for electronic health records
- WG9: SDO harmonization

Examples of US Adoption of ISO Standards

- Healthcare Information Technology Standards Panel approved nine security and privacy constructs, which include a number of ISO standards
 - For example, ISO 10164-7
 - Information Technology—Open Systems Interconnection—Systems Management
- National Uniform Billing Committee adopted ISO 639-2 language codes for collecting preferred language spoken

Health Level Seven

- Refers to seventh level of ISO communications model
- ANSI accredited
- Not-for-profit voluntary organization
- Produces standards for electronic interchange of clinical and administrative data
- Messaging standard is most widely used
- International affiliates (33 countries have affiliates)



Health Level Seven Active Work Groups

Technical Steering Committee	Orders/ and Observations
Architectural Review Board	Organization Review Committee
Child Health	Outreach Committee for Clinical Research
Clinical Context Object Workgroup	Patient Administration
Clinical Decision Support	Patient Care
Education	Patient Safety
Electronic Health Record	Process Improvement
Emergency Care	Public Health and Emergency Response
Financial Management	Publishing
Implementation/Conformance	Regulated Clinical Research Information Mgmt.
Infrastructure and Messaging	Security
International Affiliates	Services Oriented Architecture
International Mentoring	Structured Documents
Marketing	Tooling Committee
Modeling and Methodology	Vocabulary
Technical Steering Committee	Orders/ and Observations



Health Level Seven eVitals Project

- NCHS informatics staff are working at HL-7 to develop Vital Records Domain Analysis Model
 - To identify birth and death registration work flow processes and stakeholders in the United States
 - To guide future design and implementation efforts for standardizing electronic data exchanges between VR and EHR systems
- Also developing VR Functional Profile
 - To facilitate EHR systems capturing selected vitals-related data at point of contact
- Strong interest by international affiliates



Integrating the Healthcare Enterprise International

- A global initiative that creates the framework for seamless sharing of health information
- Does not create new standards but promotes the coordinated use of established standards (e.g., HL-7, DICOM) and drives their adoption
- National and regional deployment committees in Asia-Oceania, Europe, and North America
- Annual Connectathon for vendor organizations to demonstrate interoperability

