

NHII 03

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**Standards (including Vocabulary):
Past ~ Present ~ Bright Future?**

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Content standards include:

- ◆ Data elements, e.g., gender, presenting complaint)
- ◆ Descriptions of entities, e.g., birth certificate
- ◆ Messages, e.g., lab test result
- ◆ Allowable values for data elements, which can be entire *vocabularies*
- ◆ Mappings between different value sets, e.g., between SNOMED and ICD-9-CM
- ◆ Information models that define the context in which standards are used
- ◆ Survey questions and any coded responses
- ◆ Guideline, protocol, and algorithm formats



This topic has been addressed before ...

- ◆ **1991 – IOM:** *The Computer-Based Patient Record*
- ◆ **1994 – AMIA Board of Directors**
- ◆ **1995 – PHS:** *Making a Powerful Connection*
- ◆ **1996 – Congress:** *HIPAA*
- ◆ **2000 – IOM:** *To Err is Human*
- ◆ **2000 – NCVHS:** *Report on Standards for PMRI*
- ◆ **2001 – IOM:** *Crossing the Quality Chasm*
- ◆ **2001 – AMIA Congress:** *PH Informatics Agenda*
- ◆ **2002 – NCVHS:** *PMRI recommendations (1st Set)*
- ◆ **2002 – AMIA Congress:** *Drug Nomenclature/Information*
- ◆ **2002 – AAMC conference:** *IT Enabling Clinical Research*
- ◆ **2003 – CHI eGov:** *U.S. gov't target standards (1st set)*
- ◆ **2003 – Connecting for Health:** *Standards Wk.Gr.Report*



To summarize.... (1)

- ◆ Establish a mechanism for designating uniform National Standards
- ◆ Pick best available as starting point
- ◆ Broaden participation in standards development
- ◆ Support development, maintenance, and low/no cost distribution

To summarize.... (2)

- ◆ Promote use and improvement through:
 - Early Federal adoption
 - Conformance and production testing
 - Demonstration projects, Cost/benefit research
 - Financial incentives
- ◆ Coordinate development and maintenance to achieve comprehensive, non-overlapping, interlocking standards

Progress to Date - 1

◆ Establish a mechanism for designating uniform National Standards

- **1996** – HIPAA regulations established as mechanism for administrative standards
- **2000** – NCVHS recommends federal guidance and early adoption – *not* regulation - for clinical standards
- **2002** – Consolidated Health Informatics (CHI) eGov project becomes vehicle for adopting *target* U.S. government-wide clinical standards

Progress to date - 2

◆ Pick best available as starting point

- **2000** – Final HIPAA transactions and code sets regulation published (effective October 2003)
- **2002** – NCVHS recommends adoption of 4 clinical messaging standards
- **2003 March** – CHI adopts NCVHS recommendations, plus LOINC, as target U.S. government-wide standards – *more coming*
 - http://www.whitehouse.gov/omb/egov/gtob/health_informatics.htm

Progress to date - 3

◆ Broaden participation in standards development

- **1999** – Public Health Data Standards Consortium
- **2002** – IOM Patient Safety Data Standards Committee
- **2002** – Connecting for Health



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Key Findings (21k)

Facts and Stats (106k)

Progress to date - 3

- ◆ **Support development, maintenance, and low/no cost distribution**
- ◆ **Federal support for vocabulary**
 - **1999** – LOINC contract
 - **2002** – RxNorm development
 - **2003** – SNOMED CT contract & license
 - <http://www.nlm.nih.gov/research/umls>
 - **2004** – Uniform distribution of standard clinical vocabularies and HIPAA code sets in UMLS



Progress to date - 4

◆ **Support development, maintenance, and low/no cost distribution**

◆ HL7

- Increased pace and scope of activity, e.g.,
 - Implementation guides; Reference Information Model; Templates; Guidelines; Decision support rules; Electronic Health Record
- Additional financial support

Much remains to be done

- ◆ More message implementation guides, other vocabularies, etc.
- ◆ The “rest” of the content standards
- ◆ Growing HL7’s capacity while retaining its great strength:
 - standards developers who will actually use the standards they are developing.

The *Real* Challenges

- ◆ Promote use and improvement through:
 - Early Federal adoption
 - Conformance and production testing
 - Demonstration projects, Cost/benefit research
 - Financial incentives
- ◆ Coordinate development and maintenance to achieve comprehensive, non-overlapping, interlocking standards
- ◆ **Solve the “update” problem**

