

Standards on a National Level: NLM Activities

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HL7's 19th Annual Plenary Meeting
San Diego, CA
September 12, 2005



President's Goal for HIT

2004 - President Bush called for nationwide interoperable health information infrastructure and electronic health record (EHR) available for most Americans within ten years.

Goal Lead To:

- **April 2004** - Presidential Executive Order created ONC
- **July 2004** – HIT Strategic Framework Goals announced
- **May 2005** – Secretary Leavitt announces 500-day plan
- **June 2005** – Report on Nationwide Health Information Exchange (results of ONC RFI)
- **June 2005** – ONC RFPs published

Upcoming HIT Activities

- **Sept./Oct 2005 – ONC RFPs awarded**
- **2005 - Congress drafting several HIT bills**
- **October 2005 – Report from Commission on Systemic Interoperability**
- **Fall 2005 - American Health Information Community (AHIC)**

NLM Long Range Plan

- Work with other agencies and organizations to support establishment, maintenance, testing and use of health data standards.
 - Active partners: *Office of the Secretary - HHS, AHRQ, CDC, CMS, FDA, other NIH components, VA, DoD, NCVHS, standards development organizations, vocabulary producers, professional associations*
- Use the Unified Medical Language System (UMLS) Knowledge Sources and programs to facilitate maintenance and distribution of vocabulary standards.

Letter from HHS Secretary to NCVHS

Sept. 2004

- “As you [the National Committee on Vital and Health Statistics] requested ..., NLM to serve as the central coordinating body within HHS for PMRI [Patient Medical Record Information] terminologies. ... several ... mapping recommendations currently are being implemented by the NLM.”

Coordination Means:

- Uniform distribution of designated standard vocabularies through the UMLS Metathesaurus
- Reducing peripheral overlap and establishing explicit relationships between standard clinical vocabularies (e.g., SNOMED, LOINC, RxNorm)
- Aligning standard clinical vocabularies with standard record and message formats
- Mapping between standard clinical vocabularies and administrative code sets and/or other important vocabularies

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2005AB Metathesaurus now available to [download](#) from the UMLSKS. Includes the **RRF Browser** (beta) for viewing your subsets. ●●● New to the UMLS? [Register now](#).

▶ [About the UMLS Resources](#)

Metathesaurus; Semantic Network; SPECIALIST Lexicon and lexical programs; MetamorphoSys

▶ [Accessing UMLS Knowledge Sources](#)

Metathesaurus license; Semantic Network; SPECIALIST Lexicon; DVD

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Metathesaurus Source Vocabularies

- [SNOMED CT](#)
- [LOINC](#)
- [RxNorm](#)
- [MeSH](#)
- [List of Sources](#)
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More Resources

- [Metathesaurus License](#)
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umlsinfo.nlm.nih.gov

About

NLM's Unified Medical Language System (UMLS) project develops and distributes multi-purpose, electronic "Knowledge Sources" and associated lexical programs for system developers. Researchers will find the UMLS products useful in investigating knowledge representation and retrieval questions.

NLM-led Support for Development and Maintenance

- **1999** – LOINC (lab tests/instrument observations) - contract support
- **2002** – RxNorm (clinical drugs) - direct development
- **2003** – SNOMED CT contract & license for U.S.-wide use (*as distributed by NLM in the UMLS*)

Harmonization efforts NLM coordinating

- SNOMED and LOINC – discussions under way with CAP and Regenstrief
- SNOMED and RxNorm – aligning clinical drugs in SNOMED CT with RxNorm concepts
- Coordinating harmonization effort with ONC

NLM- HL7 Contract Arrangement

Sept. 2004

- Align HL7 message standard with CHI standard vocabularies (*NLM-initiated*)
 - Specify which subsets of standard vocabularies are valid for particular message segments
 - Replace HL7-maintained lists of coded values with subsets of standard vocabularies, where feasible
- Create implementation guide(s) for transmitting an entire Electronic Health Record between systems (*on behalf of HHS*)

NLM - HL7 Project Management

HHS Project Manager – Vivian Auld
HL7 Project Manager – Sarah Ryan

Vocabulary:

■ HHS Lead:

Vivian Auld

■ HL7 Technical Leads:

- Chris Chute
- Stan Huff
- Ted Klein

EHR:

■ HHS Lead:

Suzie Burke-Beebe

■ HL7 Technical Leads:

- Bill Braithwaite
- Ed Hammond
- 3rd to be announced

Mapping Projects planned/underway

- CHI standards → HIPAA code sets:
 - SNOMED CT → ICD-9-CM, ICD-10-CM
 - SNOMED CT → CPT
 - LOINC → CPT

- SNOMED CT → “other” vocabularies:
 - Medical Dictionary for Regulatory Affairs (MedDRA)
 - International Classification of Primary Care (ICPC)
 - Medcin
 - Medical Subject Headings (MeSH®)
 - Nursing Vocabularies (NIC, NOC, NANDA)

- First draft mappings available in the UMLS Metathesaurus for testing by end of 2005

Key NLM Assumptions about Mappings

- Participants must include:
 - Producers of vocabularies on both ends; prospective users and recipients of the output, e.g., health care providers, payers, as testers and validators
- Mapping may/will prompt changes/corrections to content and adjustment to update schedules
- Mappings must be updated every time either end is updated
- Mappings will be distributed in the UMLS (not exclusively); use will be governed by terms applicable to both ends
- Mapping is still an R & D problem - it will take iteration to build highly functional maps. Alignment of update schedules is critical.

Questions?

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