

PMRI Terminology

VA Comments for Testimony to the NCVHS Subcommittee on Standards and Security

August 28, 2002

VA Selection Approach Statement

- VA's electronic medical record is essentially complete
 - Features clinician-centered data entry
 - Requires good terminology support
- VA is committed to data standardization to improve patient care and enhance patient safety initiatives
- VA is extremely supportive of collaborative efforts towards data standardization

Scope of PMRI Terminologies

- Subset Organization
 - Current subset organization is quite variable
 - Drug subset is very consistent
 - Other subsets, such as “Clinically Specific Codes,” less so
 - “Convergence” subset is unclear
 - One proprietary terminology is unlikely to serve all needs
 - Convergence is more likely to occur as a series of interlocking terminologies with complimentary content
 - Terminologies should share formal foundations with well defined boundaries (CPRI/Jamia Chute et al & Keith Campbell)
 - Current VA expectation is in line with CPRI paper

Scope of PMRI Terminologies

- The Consolidated Health Informatics initiative is initially reviewing terminologies in the following 10 categories:
 - Laboratory Data
 - Medications
 - Population Health & Reporting
 - Text-based Reports
 - Immunizations
 - History & Physical Exam
 - Problem Lists
 - Procedures
 - Imaging
 - Nursing
- Others will follow

Scope of PMRI Terminologies

- Some subsets relevant to VA not yet covered in PMRI graph
 - Patient and Family History
 - Eligibility
 - Military Periods of Service
 - DNR Status
 - Emergency Contacts
 - Advanced Directives
 - Disability Codes (e.g. VBA)

“Scope of PMRI Terminologies” Graph

- In the box titled “Drug Codes”
 - Suggest changing the name “FDA/VA Drug RT” to “FDA/NLM/VA collaborative initiatives”

Priorities of PMRI Terminologies

- Medications, labs, and problems should be the highest priority for the PMRI selection process
 - Core medical data for decision making in VA
 - Immediate need for this in a structured format
 - Direct impact on veteran patient safety
- Also of high priority are small vocabulary sets such as DNR/DNI and advanced directives
 - Critically useful in emergency situations and during severe illnesses
- Areas of free text are considered low priority as they are too difficult to address within a reasonable amount of time

General Selection Criteria

- Timely update process, *responsive to field requests*
- Relatively inexpensive to acquire and implement
 - Agree in principle, needs further definition
 - Pricing structure should scale & not restrict information flow
 - Open source, whenever possible, is ideal
- Flexible to adapt to changing processes and technologies
 - This criteria needs clarification prior to comment

General Selection Criteria

- Not dependent upon a specific vendor or *proprietary* technology
 - VA prefers vendor independence or open source licenses
 - XML & DL are nonproprietary ‘technologies’ that are OK
- Marketplace acceptance does not necessarily equate to quality
 - New development should be supported in areas with significant weaknesses according to other criteria

Clinically-Specific Terminology Characteristics

- Domain focus for selection more useful than lumping into broad “clinically-specific” set
- Many of these “clinically-specific” criteria should be “general” criteria
- The term “atomic concepts” is too vague
 - Should refer instead to pre- and post- coordination
- Concept orientation
 - There should be one meaning per surface form
 - By definition there is one meaning per concept

Clinically-Specific Terminology Characteristics

- Relationship to other terminologies
 - Terminologies should have explicit semantic models in order to support mapping.
 - Mapping to another coding system used in billing
 - Mapping to a higher level of granularity for data roll-up
 - Automated or semi-automated mapping is the goal
 - Brute force mapping is not particularly desirable
- Implementation Practices
 - Tools are nice, but not a make or break criteria

Potential Additions

- Semantic models should be explicit & capable of formal representation
- The PMRI should adhere to best terminology practices as promulgated by government, academic, industry, and standards organizations e.g. Desiderata, ASTM 2087
- Non-proprietary import & export formats should be supported

Potential Additions

- Intellectual property issues need to be addressed
 - Patient data should never be put “at risk”
 - Explicit and scalable cost
 - Opportunity for future migration
 - Open source when appropriate, otherwise harmonized with open standards
 - Support collaboration between government, academic, and industry partners

Selection Criteria and Developers

- It is not necessary for them to be ANSI Standard developers
- Open meetings are to be encouraged and considered important
- The developers should use the ANSI consensus process for voting/balloting
 - Reflects how ISO falls into this scheme
 - Considered a sensible approach to standards development

VA Selection Approach Summary

- VA's electronic medical record essentially complete
 - Features clinician-centered data entry
 - Requires good terminology support
- VA is committed to data standardization to improve patient care and enhance patient safety initiatives
- VA therefore is adopting an Enterprise Reference Terminology strategy
 - Created in collaboration with industry, academic and government partners, e.g. CDC, NLM, FDA, DoD
 - Designed to support data repository, patient safety, health maintenance, and research
- VA requires high quality terminologies for the ERT: scalable, affordable, and interoperable/interlocking