Synthesis and Future Directions
The Definition of Mapping

- Computable
- ReUse of Data
- One Vocabulary to Another
- Purposeful
Purposes in Mapping

- Type of Mapping Varies with Use
- Eliminate Drudgery
- Leverage Human Strengths
- Reduce Inefficiencies
- Improve Quality
- Lower Costs?
Pragmatic v. Normative

- Top-Down or Bottom-Up
  - Is Perfection the Enemy of the Good?
- Can We Identify Problematic Cases?
  - Prospectively?
  - By Experience?
- Use of UMLS Editing
  - Leveraging Efforts
- Use Leads to Improvement
Towards More and Better Automatic Mapping

- Interaction with Information Model
- Interaction with Vendor Systems
- Making Computable Rules
- Update Models
- Better Timing of Vocab Updates
How Do We Get There?

- Need Concurrence of Developers
- Validation by Stakeholders
- Vendor Cooperation
  - Usability
  - Adaptability
- Translation and Distribution to Users
- Understanding Information Models
Leadership

- The Problem of Consensus
- “Standards Follow Success”
- The Political Process
- Funding
Principles Moving Forward

- Understandable
  - All mappings have stated purpose and audience
  - Map documentation is complete, clear and unambiguous
  - Defines source and target domain scope for the map
Principles Moving Forward

- Reproducible
  - Employs authoritative reference sources uniformly
  - Documentation defines all assumptions, heuristics and procedures required to manage context and create the map
  - All terminology developers move to compliance with sound principles of permanence and version management
  - A standard for the EHR static information model is developed and employed in mapping procedures
Useful

- All mappings have a business case, a purpose and an audience
- Use cases are defined for the map which are relevant to the implementation of electronic health records
- Publication cycle is timely and linked to version change for source and target vocabularies
- Agreement is reached for standards of knowledge representation in mapping
- Stable business plan supports map creation and maintenance for all NCVHS approved terminologies
Quality Control

- **Use Case**
  - Map only as a last resort
  - Fully specified
  - Must answer questions
    - Do they need separate inbound and outbound?
    - Are there payor or other third party issues?
    - Who’s in charge?
  - Standard technical issues between source and target
Quality Control

- Training - beyond vocabularies
- Maintenance and updating
  - Schedules
  - Standard operating procedures
  - Maintain stability of dynamic process
- Legacy data - it would be easier to start from scratch
Clinical Vocabulary Mapping Methods Institute
Saturday, October 15, 2005