

Organizational Track

10a.m. - 11a.m.

TRAINING



Qualifications for a Terminology Analyst

Veterans Health Administration

Melanie Loucks, RHIT

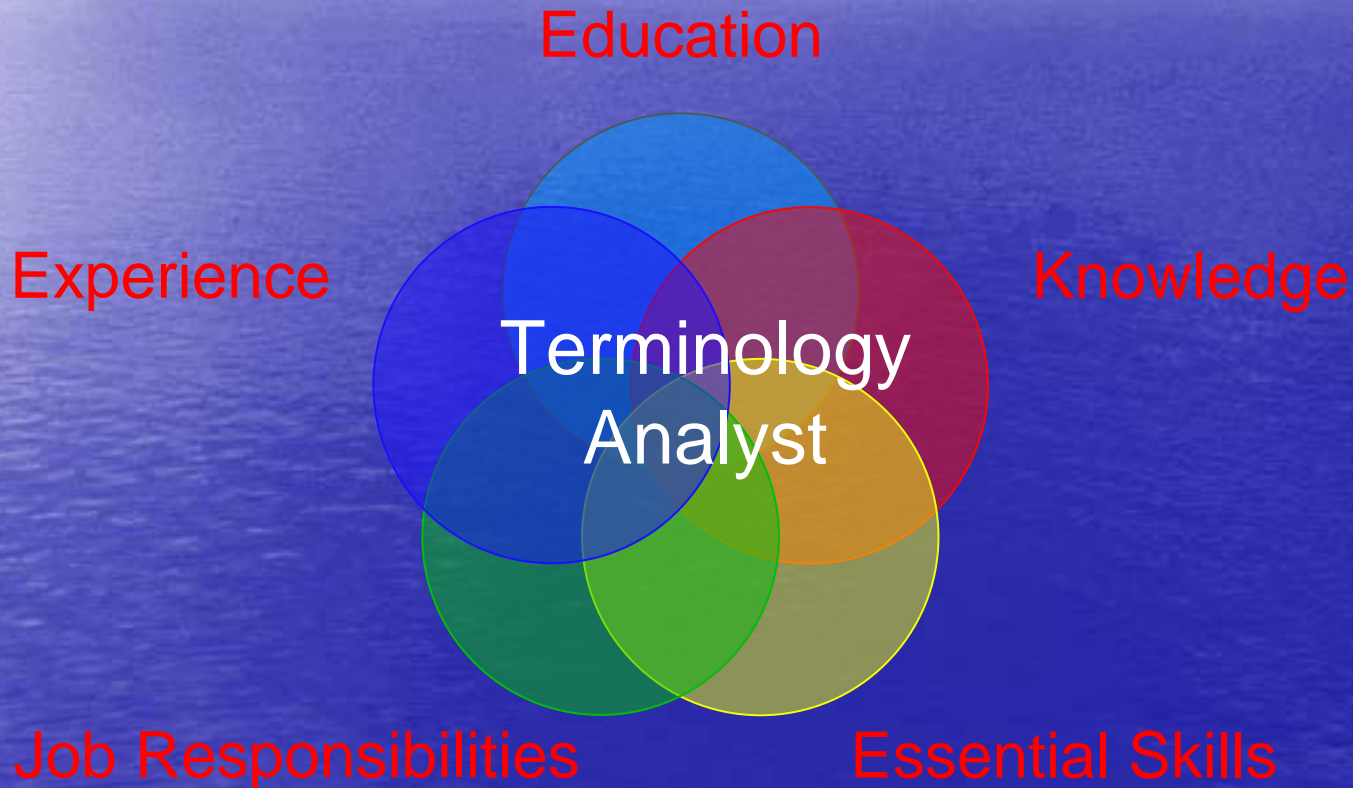
VHA Enterprise Terminology Services

- Enterprise Terminology Services (ETS)
 - Inclusive name for both the ERT and VETS teams
- Enterprise Reference Terminology (ERT)
 - TERMINOLOGY CONTENT** creation and maintenance
 - ERT Team - 4 physicians, 2 pharmacists, 1 dentist, 2 nurses, 1 lab technician, 1 dietician, 1 HIM, 4 analysts; of which 7 are trained in informatics.
- VHA Enterprise Terminology Services (VETS)
 - TERMINOLOGY SERVICES** (Database, APIs, etc.) for terminology distribution and access
 - VETS Team - 7 Java/Mumps developers, 1 DBA, 1 configuration management, 1 planner, and 3 project managers.

VHA Terminology Positions

- Chief Terminologist – MD
- Associate Terminologist – MD, DDS, PhD
- Terminology Analyst – HIM, RN, Masters Degree in Medical Informatics

What are the Needed Qualifications for a Terminology Analyst?



Experience

- Clinical or Health Information Management background.
- A master's degree in clinical informatics or equivalent experience is strongly preferred.
- Previous terminology development or implementation within a clinical information systems is desirable.
- Understand the flow of an embedded clinical terminology and how it is utilized in an electronic health record environment.

Knowledge

- Clinical terminologies
 - SNOMED CT, LOINC, NIC, NOC, NANDA, PNDIS, etc.
- Unified Medical Language System (UMLS)
- Drug terminologies
 - RxNORM, NDF-RT or Vendor databases (e.g., Micromedex)
- Reimbursement systems
 - ICD-9-CM, ICD-10, CPT, and HCPCS

Knowledge

- Standard Developing Organizations
 - HL7 Messaging, ASTM, and DICOM etc.
- Consolidated Health Informatics Initiative
 - Recommends messaging and vocabulary standards that enable federal agencies to exchange electronic health information
- Good terminology practices
 - Applying Jim Cimino's "desiderata" of controlled medical terminologies for terminology development
- Mapping principals
 - Understand differences between mapping & coding
 - Creation of use cases with a specific purpose

Essential Skills

- Understand software development life cycle
- Experience with terminology development tools is desirable
- Create and maintain use-case models
- Working knowledge of relational databases systems
- Ability to create, execute, and analyze SQL queries
- Strong analytical and problem solving skills
- Demonstrate effective verbal and written communication skills
- Strong and detailed organizational skills
- Work independently and effectively with development teams and stakeholders

Job Responsibilities

- Ability to analyze and evaluate clinical data
- Work with stakeholders and business owners to identify contents to be standardized
- Assist terminologists and developers in the development and deployment of interface or reference terminologies
- Participate in mapping projects
- Ability to plan and shift workload, working on several projects simultaneously

How can a HIM professional make the transition to a terminology analyst?

- Take the AHIMA Career Development Clinical Vocabulary Manager Self-Assessment
- Assess your proficiencies through a personalized gap analysis
 - Identify learning opportunities to improve your skills and increase your value
 - Gains insights and strategies to plan a new career in becoming a clinical vocabulary manager/terminology analyst!
 - Get involved!

Mappers - how to find them, train them, and keep them

Patricia S. Wilson, RT(R), CPC,
PMP

3M Health Information Systems

Hire the right person to train

- Where to look for potential mappers
 - Head hunter
 - Referral
 - Advertise
- What to look for on a resume
 - Type of past work experience (clinical or administrative)
 - Length of time at previous positions

What to look for during the interview

- What to ask during an interview
 - Likes and dislikes of past positions
 - What do they do for relaxation
 - Short term and long term goals
 - Personality fit (you can train a person, but you can't change their personality)

Do coders make good mappers?

- Detail oriented
- Works well alone
- Good at following rules and processes
- Coders are consistent
- Understanding of Classification Systems

Expansion of knowledge areas

- Mapping does not have the same principles as coding
- Understand clinical vocabularies
- Understand knowledgebase and polyhierarchies
- Understand information models

How to train

- Classroom setting
- Web-based test suite
- One-on-one with a mentor
- Read, watch, act, review
- All work, regardless of level of training, is second-reviewed

What to train

- Medical informatics principles
- Relational database structure and function
 - Standard Query Language (SQL)
 - Troubleshooting
- Information modeling
 - Abstract Syntax Notation One (ASN.1)
 - Extensible Markup Language (XML)

More of what to train

- Understanding of each terminology, vocabulary and/or classification system to be mapped
- Review of Use Cases
- Review of Standard Operating Procedures

3M mapping staff

- Skill set
 - Four physicians/ medical informaticists
 - One public health professional/medical informaticist
 - Four coders
 - Six lab techs
 - Three radiology techs
 - Two project management professionals
 - Three pharmacy techs
 - One database administrator
- Total of 21 staff members, many with multiple qualifications

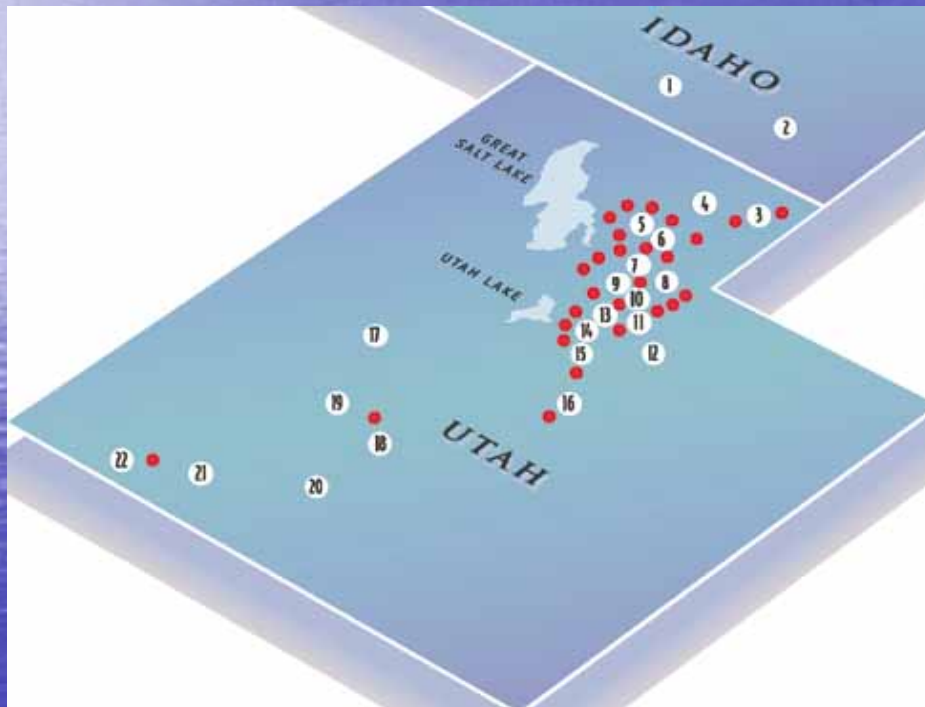
Bottom line

- Time investment is 3 to 6 months for a completely trained mapper
- Objective is to retain a mapper that
 - Thinks for themselves
 - Is detail oriented
 - Follows protocols
 - Is happy in what they do
 - Makes it a career not a job

Terminology Training Intermountain Healthcare

Susan Matney, M.S., R.N

Intermountain Health Care (IHC)



- Not for profit corporation
- 22 Hospitals
 - 500->25 beds
- 70 Clinics
- 14 Urgent Care Centers
- Health Plans
- Physician's Division

The Terminology Team at IHC

- 9 clinicians/informaticists
 - 5 Nurses, 1 Pharmacist, 2 Physicians, 1 Cytotechnologist
 - 5 with formal training in Informatics
 - Experience from 15 years to 3 months
- The team adds 3000 entries per week
 - Some weeks are as high as 50,000 to 100,000+
- Interface engine (messaging middleware)
 - 1500+ interfaces
 - 3 million+ transactions/day
- Current areas of work
 - POE, Allergens, Medications, Blood Bank, Labor & Delivery, Microbiology, Insurances, Providers, Neonatal Data, Ventilator Data, Radiology, Laboratory, etc.

Types of Training

- Formal Training and Exercises
 - Web based
- Job Shadowing
- Coaching
- External Training Courses



Terminology Exercises

Num	CID	LOINC Code	Component	Property	Timing	System	Scale	Method	Answer List
Example	BabinskiReflex	3285-7	BABINSKI REFLEX	FIND	PT	NEURO	NOM	OBSERVED	Positive, Negative
2	Birth Injury								
3	Body Fluid Discharge Quality								
4	Pleural Fluid Output Left 24H Total								
5	Ankle Reflex								
6	Enteral Calorie Total 24H								
7	Female Genitalia Tanner Scale								

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Map Local Terms - SAMPLE

File Tools HIPAA Intelligent Mapper View Help

Local Term File

Mapped to: Shortname: Local Term Details

OBR-4 Code: OBR-3 Code: Units: Sample Values: Limit to Default Specimen:

Extra Search Words: Accept or enter OBR name and/or OBX name

Search (Ctrl+F Enter) BABINSKI

Set Search Limits Clear Inputs Propose Term Lookup Term By #

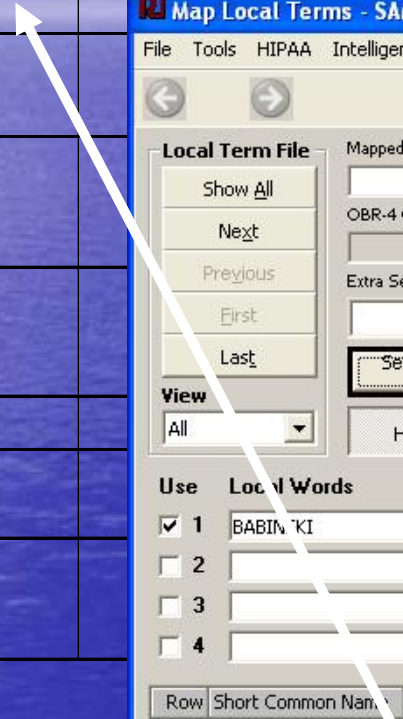
Hide Words Clear Limits

Use	Local Words	# Hits	Use	Local Words	# Hits
<input checked="" type="checkbox"/> 1	BABINSKI	1	<input type="checkbox"/> 5		
<input type="checkbox"/> 2			<input type="checkbox"/> 6		
<input type="checkbox"/> 3			<input type="checkbox"/> 7		
<input type="checkbox"/> 4			<input type="checkbox"/> 8		

Row	Short Common Name	LOINC #	Component	Property	Time	System	Scale	Method	C
1		3285-7	BABINSKI REFLEX	FIND	PT	NEUROLOGIC SYSTEM	NOM	OBSERVED	H

Grid View Print Grid Map Same

Entry #: 1 of 105 Units Specimen Methodless Common Battery Max Words: Grid No Dups 1 records found in 0.23 sec



Job Shadowing and Coaching

- Assigned as a backup to specific domain paired up with the domain expert.
 - Radiology
 - Problem List
 - Scheduling
- Given small specific mapping tasks with coaching for each step.
 - Maintenance mapping



External Training Courses

- XML and XSLT
 - Data modeling language
- Visio
 - Flow diagrams
- Unix
 - Text processing required for terminology development



Susan Fenton, MBA, RHIA



AHIMA Initiatives

- Support professional development in terminology related roles critical to an industry that relies on electronic tools and health care data exchange
- Clinical terminology management and mapping are key to the future roles for coding professionals that comprise a portion of our membership

AHIMA's Experience

- HIM professionals who currently work as coders have many appropriate qualities
- Knowledge of ICD-9-CM and CPT is preferred, even necessary, but not sufficient so additional orientation and education is required for new roles

Current Offerings from AHIMA

- Online introductory clinical terminology courses
- Career Development Assessment: Clinical Vocabulary Manager
- Comprehensive textbook with expected publication date of March 2006 covers most terminologies in use today

The Future

- Developing specialized unit for applied health informatics work including map validation and associated activities and research
- Envision distance education offerings and annual Institute and additional outreach offerings for career advancement in this discipline
- Specialty Advancement Certificate program
- Establish advisory group
- AHIMA will continue to work closely with organizations that use or evaluate clinical terminology for health information management



Questions?



Clinical Vocabulary Mapping Methods Institute
Saturday, October 15, 2005