

The AAHA Diagnostic Terms Subset

More than a list

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Background – The Process

- AAHA Electronic Health Records Task Force (EHRTF)
 - developed a list of terms commonly used in small animal practice
- VTSL entered the project in late 2008
- Spreadsheet of ~5100 terms
 - Divided into 23 categories
 - location/system (urinary, renal, GI...)
 - Disorder type (neoplasia...)
 - Type of term (modifiers, anatomy...)



Background – The Process

- Step 1: VTSL terminologists make a first pass mapping
 - Map each term to a SNOMED concept
 - Identify “alignment” (exact, granularity...)
 - Exact match
 - No match, needs review
 - No match, needs new concept
 - Each mapping was reviewed by another VTSL terminologist, and any conflicts resolved.



Background – The Process

- Step 2: AAHA Electronic Health Record Task Force (EHRTF) review
 - VTSL created a web interface for review of mappings
 - 3 members of EHRTF reviewed all maps
 - Gave input on terms needing review
 - Multiple conference calls to discuss difficult issues



Background – The Process

- Step 3: VTSL finalized the concepts
 - ~1000 AAHA terms were retired based on review
 - Duplicates (often resulted in addition of descriptions)
 - Ambiguity (often split into multiple concepts)
 - Erroneous
 - Unnecessary
 - ~1100 extension concepts were created
 - Necessary to map all remaining terms



Background – The Process

- Step 4: Description review
 - AAHA EHRTF wanted to provide terms that “meet the needs of users”
 - SNOMED CT fully specified names are by necessity verbose and detailed
 - Solution: provide description terms for each concept that are appropriate for AAHA users



Background – The Process

- Step 4: Description review
 - VTSL terminologists reviewed all SNOMED-CT descriptions for each AAHA concept
 - Marked “Preferred” (one per concept)
 - same or similar phrasing to the original AAHA term, in most cases
 - Marked “Acceptable”
 - Any other descriptions that are felt to be commonly used and CORRECT



Background – The Process

- Step 5: The XML File
 - Format is an IHTSDO standard
 - Note: Standard is changing
 - Contains:
 - All concepts with all descriptions found in SNOMED-CT (& VTSL extension)
 - 3 Subsets
 - Concepts Subset
 - Preferred Descriptions Subset
 - Acceptable Descriptions Subset
 - Freely available at:
 - <http://www.aahanet.org/resources/guidelines.aspx>



The XML File

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-<snomedCt>  
  <fileInfo edition="SNOMED CT–US Edition" releaseVersion="20090731"/>  
  -<concepts>  
    - <concept...>  
      -<descriptions>  
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      </descriptions>  
    </concept>  
  </concepts>  
  -<subsets>  
    -<subset...>  
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    </subset>  
  </subsets>  
</snomedCt>
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The XML File – The Concepts

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-<snomedCt>
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  -<concepts>
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        <description descriptionId="621810017" term="Pneumonia (disorder)" descriptionType="3" ...></description>
      </descriptions>
    </concept>
    -<concept conceptId="73452002" conceptStatus="0" fullySpecifiedName="Abscess of lung (disorder)"
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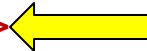
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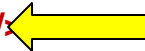
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Using the XML File

- It's "just XML"
- Can be transformed (XSLT) into
 - Database content
 - Viewable table
 - Your format of choice
- Can be queried directly
 - XQuery



What's Next?

- People will find “needs”
 - Missing content
 - Missing descriptions
 - Concepts that need “tweaking”
- Priority: Content Request System
 - Allow users/systems to request new content or review of current content
 - <http://vtsl.vetmed.vt.edu/forums/index.php>



What's Next?

- Distribution System for “Updates”
 - Re-release full subsets every time?
 - Release incremental update files?
 - Some combination?
 - How delivered?
 - Passive ... users must seek out updates
 - Active ... updates “pushed” to license holders
 - Manual ... email/download
 - Web service ... automation possible



What's Next?

- Post-coordination rules & syntax
 - Pre-coordination of all content is impossible
 - “zebras” will break a system
 - Variety of ways that complex terms can be “post-coordinated”
 - Should be interchangeable
 - Reality is that mechanics for resolving are incomplete
 - Best Practice: everyone use the same guide



What's Next?

- Relationships
 - Users like to “browse”
 - All of SNOMED hierarchy is overwhelming
 - Need to develop a navigational hierarchy for the selected concepts
 - Power of SNOMED CT is in the relationships
 - Full set of relationships should be available for aggregation, retrieval, analysis
 - So how do we make these two different “views” of relationships available?



What's Next?

- Other areas...
 - Equine (in the works), Food animal, wildlife...
 - Cardiology, dermatology, ophthalmology...
- This is the **START** not the **FINALE**

