Implementing Terminology Services with SNOMED CT

A number of FHIR Terminology Service Operations have unique considerations when working with SNOMED $\ensuremath{\mathsf{CT}}$

Operation Name	Resource	Considerations	Priority for implementation
\$validate- code	ValueSet	Further discussion by the SNOMED on FHIR working group can be read here: Implementing Terminology Services with SNOMED CT	2b
\$validate- code	CodeSystem		2b
\$expand	ValueSet	Implicit valuesets (Valuesets defined using ECL), filters, POST (upload) valuesets	1
\$lookup	CodeSystem		2
\$translate	ConceptMap		5
\$subsumes	CodeSystem		3
\$closure	ConceptMap		4
\$find-matches	CodeSystem	See Find Matches, however using the \$expand operation with ECL will allow for more expressive querying.	6

Implementation Notes

- Default to JSON response
 Discuss authentication for public server
- Swagger interface to HAPI?
 Response to context-root access
- Command line switch

Best Practice Discussions

Paging - note that the \$expand operation defines its own offset and count (count be 0 if you're interested in the total number of matches)

Limits on value set sizes - 1M configurable limit, default page size of 1K

Default language considerations - http headers, server settings (Link to Reuben's work and discussion of X-headers for LangRefsets)

Algorithms for text searching (reference implementation course eg "PNE PNE" finding Pneumococcal pneumonia)