Lab 7: Medical terminology

7.1 Learning Objectives:

- to practice differences of use in medical terminology for different medical purposes
- to practice finding and identifying different types of medical terminologies
- to practice and apply medical terminologies and their knowledge representation for different uses.

7.2 Resources

- RxNORM: Drugs : https://mor.nlm.nih.gov/RxNav/

- Loinc: Lab tests: https://search.loinc.org/searchLOINC/

- SNOMED-CT browser: clinical terms: http://browser.ihtsdotools.org/

- ICD-10-CM: Disease classification terminology
    https://nciterms.nci.nih.gov/ncitbrowser/pages/vocabulary.jsf?dictionary=ICD-10-CM

- NCI medical terminology Browser (UMLS): https://ncim.nci.nih.gov/ncimbrowser/

- NCI medical terminology Thesaurus:
    https://nciterms.nci.nih.gov/ncitbrowser/pages/multiple_search.jsf?nav_type=terminologies

7.3 Practical Exercises

Q1. Find the medical terminology codes for the following RxNORM concepts, as medication or medical drugs. Identify each concept and write the code in the space provided.

Medical concept name	Code	Class	Brand Name Example
Metformin			
Metformin 100mg/ml			
Calcium Citrate			
Aspirin			
Acetaminophen			
Ibuprofen			

Q2. Find the medical terminology codes for the following LOINC concepts, as laboratory procedures. Identify each concept and write the code in the space provided.

Medical concept name	Code	sematic-type	Class
HbA1c			
CBC			
Total Bilirubin			
Direct Bilirubin			
Fasting Blood Glucose			
BUN			
Creatinine			

Q3. Find the medical terminology codes for the following SNOMED-CT concepts, as disease/disorder/finding/body structure/therapy/procedure. Identify each concept and write the code in the space provided.

Medical concept name	Code	sematic-type
Diabetes		
Lung Cancer		
Hand (Left)		
Metformin		
CBC		
HbA1c		

Q4. Find the medical terminology codes for the following ICD-10-CM and UMLS concepts, as medical disease/syndrome. Identify each concept and write the code in the space provided.

Medical concept name	ICD-10	UMLS_CUI	sematic-type

Bilirubin			
Diabetes mellitus			
Cancer			
Prostate Cancer			
Lung Cancer			
Metformin			
HbA1c			
Hand pain			

Q5. Find the medical terminology codes for the following medical concepts. Use the appropriate terminology coding system and browser to the find the correct code. Identify each concept type and write the code in the space provided.

Medical concept name	sematic-type	Code	Coding System
Bilirubin	lab test		
Diabetes Insipidus	disease		
Breast Cancer	disease		
Stage II Breast Cancer	disease process		
Seen by breast cancer nurse	finding		
Lung Cancer	lab test		
Metformin	medication		
HbA1c	lab test		
Hand pain	finding		

Q6. Find medical terminology codes mapping for the following medical concepts. Identify each concept type and write the code in the space provided.

Hint: Use the NCI browser to the find the correct code.

Medical concept	ICD-10	UMLS_CUI	SNOMED-CT	LOINC
Diabetes mellitus				
Stage III Breast Cancer				
Metformin				
HbA1C				
Creatinine				
Metformin				
Aspirin				

Q7. Which medical terminology coding system you found easier to find medical concepts and understand? List below in terms of preference. Justify your answer.

Coding System   Justification/Why?

UMLS

RxNORM

SNOMED-CT

ICD-10

LOINC