**Chapter 5**

**Clinical Terminologies, Classifications, and Code Systems**

*Kathy Giannangelo, MA, RHIA, CCS, CPHIMS, FAHIMA*

**Real-World Case 5.1**

Clinical quality measure developers create evidence-based standards used to assess the performance of providers in the provision of care. Developers include government agencies, accreditation organizations, and physician specialty groups among others. They select terminologies, classifications, and code sets as a way to express healthcare performance data used in the measure. For example, the National Committee for Quality Assurance (NCQA) may want to author an electronic Clinical Quality Measure (eCQM) for breast cancer screening. Using the web-based Measure Authoring Tool (MAT), NCQA decides to include mammograms as a population criterion. Having identified mammogram as one of the criteria, NCQA determines LOINC and HCPCS are necessary for the measure. Mammogram codes from these two systems are then selected to create the content for the breast cancer screening eCQM.

# Real-World Case Discussion Questions

1. What purpose do terminologies, classifications, and code systems serve in an electronic Clinical Quality Measure (eCQM)? The terminologies would helps by standardizing clinical phrases, making it easier to produce accurate electronic health information and to make sure the information is uniform and consistent. The classifications will help explain the reason the person needs the treatment. It will define the needs based on various codes such as the ICD 10. The code system includes a little of both terminologies and classifications. The LOINC has 2 major groups laboratory and clinical. Based upon the terminologies and classifications, will determine which testing should go along with the study.

2. Why would NCQA choose LOINC and HCPCS for the electronic Clinical Quality Measure (eCQM) for breast cancer screening? The LOINC includes lab and clinical which can be used in clinical care and research. HCPCS I and II have all the procedures necessary and it is a uniform way to report and trends can easily be seen

3. Why are the various types of organizations important to the development of the clinical quality measures? The various types of organizations build a comprehensive study and with the study they are able to put together based on evidence the requirements for specific trials.

**Real-World Case 5.2**

The 2015 Edition EHR technology certification criteria states the following:

*Smoking status*: Enable a user to electronically record, change, and access the smoking status of a patient in accordance with the standard specified.

45 CFR 170.315(a)(11).Coded to one of the following SNOMED CT codes:

* Current every day smoker. 449868002
* Current some day smoker. 428041000124106
* Former smoker. 8517006
* Never smoker. 266919005
* Smoker, current status unknown. 77176002
* Unknown if ever smoked. 266927001
* Heavy tobacco smoker. 428071000124103
* Light tobacco smoker. 428061000124105

*Objective*: Record smoking status for patients 13 years or older.

*Measure*: More than 85 percent of all unique patients 13-years-old or older seen by the eligible professional or admitted to the eligible hospital’s or critical care hospital’s inpatient or emergency department during the EHR reporting period have smoking status records as structured data.

Included in the National Learning Consortium’s resources is a quick reference guide from the American Academy of Family Physicians (AAFP) for meeting the smoking status Meaningful Use requirement. The AAFP supports the incorporation of tobacco cessation into EHR templates (AAFP n.d.). The quick reference provides guidance on what should be included in a tobacco cessation EHR template.

# Real-World Case Discussion Questions

1. Why would SN OMED CT be used to record the smoking status of a patient on an EHR template? These codes can be shared and easily tracked to the who what where and how. This tracking will help develop programs for various age groups.

2. Why was ICD-10-CM not chosen as the system to capture smoking status? SNOMED is a clinical terminology which will keep the information uniform and it will name and arrange medical content so it can be used in patient care. This will exchange data meaning about healthcare course. ICD 10 is a classification system. These are key to secondary use. These are used to track morbidity.

3. Review the SNOMED CT codes. What else related to smoking would you recommend should be collected? What kind of tobacco filtered, unfiltered, marijuana, etc. Second hand smoke exposure, age of when started.

# Application Exercises

*Instructions:* Answer the following questions.

1. Choose one clinical terminology, one classification, and one code system mentioned in this chapter and compare and contrast its general characteristics, purpose, use, content, and structure. Cpt is a clinical terminology. The purpose is to provide a uniform language that allows for accurately descriptions of medical, surgical and dx services. This is put together by the AMA. HIPPA mandates the use of cpt in healthcare data electronic transactions. It includes codes descriptions and guidelines and covers the breadth of health services physicians provide. Classifications uses ICD-10-CM This is orginiated by WHO this greatly expands the classification resulting in greater specificity an clinical detail. Icd 10 id’s the diagnosis established by the provider. It is updated 2 times a year. The purpose is to provide a classification of diseases for morbidity. This contains 3-7 characters that stands for descriptions for patient conditions. HCPCS is a code system developed by CMS. The level II hcps are required for reimbursement of ambulatory services proved in healthcare settings. They contain products, supplies and services.

2. Search the Internet and locate information on the Common Clinical Data Set in order to determine which terminologies, classifications, and code systems **mentioned in this chapter** are used for the individual data elements in table 5.4. Duplicate table 5.4 and adds three columns. See below. Once completed, draw a conclusion about what the table shows with regards to terminology, classification, and code system use in the Common Clinical Data Set.

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Clinical Terminology** | **Classification** | **Code System** |
| Patient name | SNOMED CT | ICD10 | LOINC |
| Date of birth | SNOMED CT | ICD10 | LOINC |
| Ethnicity | SNOMED CT | ICD10 | LOINC |
| Smoking status | SNOMED CT | ICF ICD | HCPC, LONIC |
| Medications | SNOMED CT | ICD | RxNorm |
| Laboratory test(s) | Cpt SNOWMED CT | ICD | LOINC |
| Vital signs (body height, body weight, diastolic blood pressure, systolic blood pressure, heart rate, respiratory rate, body temperature, pulse oximetry, and inhaled oxygen saturation, body mass index (ratio), and mean blood pressure) | Cpt SNOWMED CT | ICD | LOINC |
| Procedures | SNOMED CT, CPT | ICD | HCPCS Level II |
| Immunizations | CPT | ICD 10 | HCPC, LOINC |
| Assessment and plan of treatment | SNOWMED CT | ICD 10 | LOINC |
| Health concerns | SNOWMED CT | Icd 10 | HCPC AND LOINC |
| Sex | SNOWMED CT | ICF | LOINC |
| Race | SNOWMED CT | ICF | LOINC |
| Preferred language | SNOWMED CT |  | LOINC |
| Problems | SNOMED CT | Icd 10 | HCPC LOINC |
| Medication allergies | SNOWMED CT | Icd10 | RxNorm |
| Laboratory value(s)/result(s) | SNOWMED CT | ICD 10 | LOINC |
| Care plan field(s), including goals and instructions | SNOWMED CT | ICD | OASIS |
| Care team member(s) | SNOWMED CT |  | LOINC, HEDIS |
| Unique device identifier(s) for a patient’s implantable device | Cpt snomed ct | ICD | HCPC |
| Goals | SNOWMED CT | ICD | OASIS |

Snowmed and cpt are most commonly used as the terminology piece. CPT Describes the specific procedure to be billed and snowmed is typically used in the documentation to standardize the terminology and how it is documented. ICD describes the morbidity of the patient from outpatient, ip, mental health and disabilities. Hcpc’s and LOINC are the most common code systems. LINC is a universal code system for tests measurements and observations where HCPC level II’s are to meet the Medicare and Medicaid reimbursement program needs.

**Review Quiz**

*Instructions:* For each item, complete the statement correctly or choose the most appropriate answer.

1. If data aggregation is the goal of collecting the data, \_\_\_\_\_\_ are the best choice.

**a. Classifications**

b. Code systems

c. Clinical terminologies

d. Nomenclatures

2. The SNOMED CT \_\_\_\_\_\_\_\_\_ includes the semantic tag.

a. Definition

**b. Preferred term**

c. Synonym

d. Fully specified name

3. The \_\_\_\_\_\_\_\_\_\_\_ is a core component of SNOMED CT.

a. Identifier

b. Hierarchy

**c. Concept**

d. Definition

4. \_\_\_\_\_\_\_\_\_\_\_ is a nursing terminology.

a. International Classification of Procedures

**b. Clinical Care Classification**

c. International Classification of Functioning

d. International Classification of Diseases

5. Category I CPT includes which of the following?

a. HCPCS Level II

**b. Surgery**

c. Drugs

d. Durable medical equipment

6. A \_\_\_\_\_\_\_\_\_\_\_ is a set of terms representing the system of concepts for the medical field.

**a. Clinical terminology**

b. Code system

c. Nomenclature

d. Classification

7. ICD-10-PCS is a classification of \_\_\_\_\_\_\_\_\_.

a. Emergency room procedures

b. Nursing procedures

**c. Inpatient procedures**

d. Outpatient procedures

8. Which of the following developed the Diagnostic and Statistical Manual of Mental Disorders?

a. Mental Health Association

**b. American Psychiatric Association**

c. Mental Health Foundation

d. World Psychiatric Association

9. A classification provides clinical data to \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**a. Allow collection and reporting of healthcare statistics**

b. Indicate smoking status in the Common Clinical Data Set

c. Facilitate electronic data collection at the point of care

d. Use for primary data purposes

10. The \_\_\_\_\_\_\_\_\_\_\_ is responsible for the development and maintenance of ICD-10-CM.

**a. NCHS**

b. CMS

c. ICD-10 C&M Committee

d. NCHS and CMS

11. The \_\_\_\_\_\_\_\_\_ is a system for classifying the topography and morphology of neoplasm.

**a. ICD-O-3**

b. ICD-10-CM

c. ICD-10

d. SNOMED CT

12. WHO defines \_\_\_\_\_\_\_\_\_\_\_ as a reference classification.

a. SNOMED CT

b. DSM-5

**c. ICF**

d. ICD-O-3

13. An accumulation of numeric or alphanumeric representations or codes for exchanging or storing information is a \_\_\_\_\_\_\_\_\_\_\_.

a. Nomenclature

**b. Code system**

c. Concept system

d. Data set

14. Which of the following is the standard for clinical lab test results under the Meaningful Use program?

a. CPT

**b. LOINC**

c. ICD-10-PCS

d. HCPCS Level II

15. HCPCS is made up of which code systems?

**a. CPT and HCPCS Level II**

b. Dental codes and HCPCS Level II

c. ICD-10-PCS, CPT and HCPCS Level II

d. CPT, HCPCS Level II and HCPCS Level III

16. If you were looking for a code for a medication taken orally, in which system is it found?

a. ICD-10-CM

b. HCPCS Level II

**c. RxNorm**

d. ICD-10-PCS

17. The \_\_\_\_\_\_\_ is responsible for development and maintenance of RxNorm

a. AMA

b. ONC

c. FDA

**d. NLM**

18. One of the two major groups of LOINC content is \_\_\_\_\_\_\_\_\_.

a. Clinical drugs

b. Clinical diagnoses

**c. Clinical observations**

d. Clinical interventions

19. The \_\_\_\_\_\_\_\_\_\_\_ is responsible for the publishing and maintaining HCPCS Level II.

**a. CMS**

b. AMA

c. NCHS

d. ADA

20. The \_\_\_\_\_\_\_\_ originated from federal reporting requirements tied to certification criteria found in the Meaningful Use regulations.

a. Outcomes and Assessment Information Set

b. Healthcare Effectiveness Data and Information Set

**c. Common Clinical Data Set**

d. Uniform Hospital Discharge DataSet

21. Home health agency process and improvement outcome measures are based on data from the \_\_\_\_\_.

a. Home Health Compare Data Set

**b. Outcomes and Assessment Information Set**

c. Uniform Hospital Discharge Data Set

d. Common Clinical Data Set

22. The standardized HEDIS data elements are collected by \_\_\_\_\_\_\_\_\_.

a. Acute care hospitals

**b. Certified survey vendors**

c. Healthcare purchasers

d. Consumers

23. The UHDDS’s core data elements were incorporated into the \_\_\_\_\_\_\_\_\_\_\_ prospective payment system.

a. Outpatient

b. Long-term care

c. Inpatient rehabilitation

**d. Acute inpatient**

24. Which standard is attached to the data element smoking status contained in the Common Clinical Data Set?

a. ICD-10-CM

b. HCPCS Level II

c. ICD-10-PCS

**d. SNOMED CT**

25. LOINC would be found in the UMLS \_\_\_\_\_\_\_\_\_\_\_\_.

a. Terminology Network

b. SPECIALIST Lexicon

c. Semantic Network

**d. Metathesaurus**