Chapter 6

Nomenclatures and Classification Systems
Introduction

• Vocabularies, clinical terminologies, and classification systems are used in the health care field
• The need for a common understanding of medical language and uniform standards of classifying data cannot be overstated
• Medical vocabularies, clinical terminologies, and classification systems were created to describe the medical care process in a standard manner
LANGUAGES

• Medical language
  • Based on Greek and Latin word parts
  • Uses eponyms
    • Words based on personal names of people
• Comes from modern language
  • Laser – acronym
VOCABULARY

• Clinical vocabulary
  • Specializes in words or phrases of a medical nature
  • Functions mainly to assign names to unique concepts
  • Sometimes referred to as nomenclatures
Languages, Vocabularies, and Nomenclatures

NOMENCLATURE

- Referred to as terminology
  - Systematic listing of proper names
    - Concepts
    - Items
    - Actions
    - Other aspects of a particular area of knowledge
Languages, Vocabularies, and Nomenclatures

NOMENCLATURE

• Clinical terminology
  • Preferred clinical or medical terminology
• Prominent health information management nomenclatures
  • Standard Classified Nomenclature of Disease (SNDO)
  • Systematized Nomenclature of Pathology (SNOP)
  • Systematized Nomenclature of Medicine (SNOMED)
NOMENCLATURE

- Nomenclature development
  - Late 19th and early 20th centuries
    - Attempts to identify all diseases known to mankind
    - Basic Nomina Anatomica
  - Nomenclatures and classification systems
    - Specific to certain hospitals
    - Difficult to compare data across hospitals
Languages, Vocabularies, and Nomenclatures

NOMENCLATURE

• SNDO
  • Published in 1933
  • Classified diagnostic terminology
  • Used through 1961

• SNOP
  • Used by pathology departments from 1965 on
  • Gradually lost favor
NOMENCLATURE

- SNOMED
  - Standardized nomenclature
  - Crosses fields of specialization
  - Published in 1977
  - Designed for automated encoding of medical text
Languages, Vocabularies, and Nomenclatures

**NOMENCLATURE**

- CPT
  - Lends itself to automated use
  - Is a comprehensive listing of medical terms and codes
  - Is commonly used in physician offices
  - Serves as a means to report services for reimbursement
  - Commonly used for outpatient services and emergency visits
NOMENCLATURE

- Computerization obstacles
  - Meanings may be slightly different between nomenclatures
  - Extremely difficult to communicate electronically with variances
- Linking biomedical nomenclatures
  - Unified Medical Language System (UMLS)
  - Enabling computer systems to understand medical meaning
NOMENCLATURE

• Knowledge Sources resulting from UMLS
  • Metathesaurus
    • Influenced the progress of the electronic health record
    • Designed to link biomedical vocabularies from disparate sources
  • Lexicon
  • Semantic network

Languages, Vocabularies, and Nomenclatures
Classification Systems

Classification Systems

- Taxonomies
  - Grouping of similar items
  - Items have one or more common denominators
  - Includes all terms that could fall within a classification

- Coding
  - Numeric or alphanumeric code
  - Assigned to data found in the health record
Classification Systems

HISTORY AND APPLICATION OF CLASSIFICATION SYSTEMS

• London Bills of Mortality, 1629
  • First attempt at registration of causes of death
• Nosologia Methodica, mid-1700s
  • Second attempt at a classification system
• List of Causes of Death, a century and a half later
  • Well received
  • Demand grew
Classification Systems

HISTORY AND APPLICATION OF CLASSIFICATION SYSTEMS

• International Classification of Diseases (ICD)
  • Developed by the World Health Organization
  • Previously called List of Diseases and Causes of Death
  • New iterations of ICD are issued every 10 years
  • ICD-9 is currently in use in the U.S.
  • ICD-10 scheduled for adoption in the U.S. in 2014
Classification Systems

HISTORY AND APPLICATION OF CLASSIFICATION SYSTEMS

• ICD in the United States
  • Four groups share responsibility for updating the ICD
    • National Center for Health Statistics (NCHS)
    • Centers for Medicare and Medicaid Services (CMS)
    • American Hospital Association
    • American Health Information Management Association
Classification Systems

CODING SCHEMES

- **ICD-9-CM**
  - Volume 1 – tabular numerical listing of diagnosis codes
  - Volume 2 – alphabetical listing of codes
  - Volume 3 – both tabular and alphabetical listings
- **CPT system**
  - What a practitioner does when providing medical services
Classification Systems

CODING SCHEMES

- ICD-10-CM/PCS
  - Differs significantly from ICD-9-CM
  - Increased number of diagnosis and procedure codes
  - Minimum and maximum numbers of characters allowed have changed
Classification Systems

DIAGNOSIS-RELATED GROUPS

- Prospective payment system (PPS)
  - For inpatient hospital services
- Diagnosis-related group (DRG)
  - Groups patients who are medically related by diagnosis
  - Designed to be statistically consistent and medically meaningful
Classification Systems

DIAGNOSIS-RELATED GROUPS

• Logical decision tree model used for DRGs
  • Major diagnostic category (MDC)
  • Medical category patients subdivided by principal diagnosis
  • Surgical category patients subdivided by procedure performed
Classification Systems

DIAGNOSIS-RELATED GROUPS
Classification Systems

HIM TRANSFORMATION

• Nosologists
  • Persons responsible for vocabularies and classification systems
• Encoders
  • Software tools that incorporate text and logic of coding systems
• Groupers
  • Software programs that use branching logic
HIM TRANSFORMATION

- Optimizing programs
  - Seek the highest-paying DRG based on codes assigned
- Natural language processing encoding systems
  - Software programs that read and interpret digital text
- Coding guidelines
  - Educational materials
  - Resources for assigning diagnostic and procedural codes
Classification Systems

HIM TRANSFORMATION

- Ethical aspect of coding
  - Upcoding
    - Selecting a code for a higher level of reimbursement
  - Compliance
    - Preventing conduct that does not conform to law
- Coding compliance program
  - To prevent health care fraud and abuse
HIM TRANSFORMATION

- Combatting fraud and abuse
  - Health Insurance Portability and Accountability Act (HIPAA)
  - Recouping overpayments
  - Providers operate coding compliance programs
    - Reduces civil damages and criminal sanctions
Classification Systems

OTHER CLASSIFICATION SYSTEMS

• Classification systems in current use
  • SNOMED
    • Codifies all activities in patient care
    • Variations of SNOMED
      • SNOMED-RT (Reference Terminology)
      • SNOMED-CT (combines SNOMED-RT with Read Codes)
Classification Systems

OTHER CLASSIFICATION SYSTEMS

• Classification systems in current use (cont.)
  • Current Procedural Terminology
    • Used in ambulatory care settings
    • Three categories
      • Category I – general code set
      • Category II – tracking codes
      • Category III – temporary codes
Classification Systems

OTHER CLASSIFICATION SYSTEMS

• Classification systems in current use (cont.)
  • Healthcare Common Procedure Coding System (HCPCS)
    • Pronounced “Hic pics”
    • Expanded version of CPT
    • Includes codes for nonphysician services
Classification Systems

OTHER CLASSIFICATION SYSTEMS

• Mental health classification systems
  • Diagnostic and Statistical Manual of Mental Disorders
    • In its fourth edition
    • Referred to as DSM-IV
    • Provides both a glossary and categories for classification
    • Not entirely compatible with ICD-9-CM
Classification Systems

OTHER CLASSIFICATION SYSTEMS

• Mental health classification systems (cont.)
  • Manual on Terminology and Classification in Mental Retardation
  • Mental Retardation: Definition, Classification, and Systems of Supports
Classification Systems

OTHER CLASSIFICATION SYSTEMS

- Nursing classification systems
  - Nursing Intervention Classification (NIC)
  - Nursing Outcome Classification (NOC)
  - Omaha System
  - Home Health Care Classification
Classification Systems

OTHER CLASSIFICATION SYSTEMS

• International Classification of Diseases for Oncology, third edition (ICD-O-3)
• International Classifications of Injuries, Disabilities, and Handicaps (ICIDH)
  • Now known as the International Classification of Functioning, Disability, and Health (ICF)
• International Classification of Health Interventions (ICHI)
• International Classification of Primary Care (ICPC-2)
Emerging Issues

CLASSIFICATION SYSTEMS AND CODING PRACTICES

• Case mix
  • Type and volume of patients
• Case mix management
  • Analyzing patient case mix related to reimbursement
• Factors for analyzing case mix
  • Classification systems employed by the organization
  • Reports developed to provide detailed information
Emerging Issues

CLASSIFICATION SYSTEMS AND CODING PRACTICES

• Clinical data representation
  • Manner in which clinical data are presented

• Data mapping
  • Linking terminology between two different schemes

• General equivalency mappings (GEMs)
  • Includes all valid relationships between two ICD-9-CM and ICD-10-CM/PCS
Summary

• Vocabularies list words or phrases and their associated meanings
• Terminologies indicate proper names for concepts, items, actions, and other aspects of a particular area of interest or knowledge
• Classification systems group similar items