

Chapter VII

Basic Principles and Benefits of Various Classification Systems in Health

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ABSTRACT

The introduction of information systems in health progressively led to coding systems. The purposes of these systems are: recording causes of death, coding diseases and procedures, etc. The most important medical coding system in our days is ICD (International Classification of Diseases). Other coding systems that health professionals use are: SNOMED, LOINC, MeSH, UMLS, DSM, DRG and HCPCS. There are also many Nursing Classification Systems, such as: NANDA, NIC, NOC, ICNP, Omaha and HHCC. This chapter describes these coding systems and their advantages.

INTRODUCTION

Since the introduction of information systems in health, the demand for coding systems has been major. Medical coding systems are fundamental to medical record keeping as well as to gathering and communicating public health statistics. They are used for a variety of purposes: recording causes of death, coding diseases and procedures, and physician billing and reimbursement. The elements that make a coding system good are completeness, nonredundancy,

clarity, stability, granularity, and the fact that it can be developed. Coding systems usually aim to be accurate, have unambiguous expressions, and are complete.

In classification systems, groups of words or terms are collected together and organised. Each of these terms will be associated with a particular concept. Systems of classification have typically been hierarchical, meaning that more detail is obtained the further down the hierarchy one proceeds, although ideas are still linked and organised around common attributes.

Each concept within a classification system can also be given a numeric or alphanumeric code. The more extensive the coding system, the more detail it can represent.

INTERNATIONAL CLASSIFICATION OF DISEASES

The most important medical coding system in our days is the ICD (International Classification of Diseases). The purpose of the ICD is to promote international comparability in the collection, classification, processing, and presentation of health statistics. Since the beginning of the 20th century, the ICD has been modified about once every 10 years, except for the 20-year interval between ICD-9 and ICD-10 (see Table 1). The purpose of the revisions is to stay abreast with advances in medical science.

The ICD is copyrighted by the World Health Organization (WHO), which owns and publishes the classification. Annual updates are published by the Health Care Financing Administration, now called the Centers for Medicare and Medicaid Services (CMS).

ICD-9 is the ninth version of ICD. ICD-9 is a classification system of diseases, health conditions, and procedures that represents the international standard for the labeling and numeric coding of diseases. These codes provide

a worldwide standard for comparison of birth, death, and disease data.

ICD-9 includes diagnosis codes consisting of three to five numeric characters representing illnesses and conditions; alphanumeric E codes describing external causes of injuries, poisonings, and adverse effects; and V codes describing factors influencing health status and contact with health services.

Today, there is also the 10th version of ICD. The ICD-10 consists of:

- Tabular lists containing cause-of-death titles and codes (Volume 1),
- Inclusion and exclusion terms for cause-of-death titles (Volume 1),
- An alphabetical index to diseases, the nature of injuries, and external causes of injury, and a table of drugs and chemicals (Volume 3), and
- Descriptions, guidelines, and coding rules (Volume 2).

One benefit of ICD-10 is a more comprehensive scope. Table 2 gives examples of some of the subcategories provided in ICD-10 for the capture of risk factors to health, such as lifestyle, life management, psychosocial circumstances, and the occupational or physical environment. Another benefit is improved specificity and currency. The results of a mapping from ICD-

Table 1. Revisions of the ICD according to the year of the conference in which they were adopted and the years they were in use in the USA

Revision of the ICD	Year of Conference in which Adopted	Years in Use in USA
First	1900	1900-1909
Second	1909	1910-1920
Third	1920	1921-1929
Fourth	1929	1930-1938
Fifth	1938	1939-1948
Sixth	1948	1949-1957
Seventh	1955	1958-1967
Eighth	1965	1968-1978
Ninth	1975	1979-1998
Tenth	1992	1999-present

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