ICD-10

International Statistical Classification of Diseases and Related Health Problems

Tenth Revision

Volume 2

World Health Organization
Geneva

ICD-10

International Statistical Classification of Diseases and Related Health Problems

Tenth Revision

Volume 2
Instruction manual

World Health Organization
Geneva
1993

Volume 1	Introduction WHO Collaborating Centres for Classification of Diseases Report of the International Conference for the Tenth Revision List of three-character categories Tabular list of inclusions and four-character subcategories Morphology of neoplasms Special tabulation lists for mortality and morbidity Definitions Regulations
Volume 2	Instruction manual
Volume 3	Alphabetical index

WHO Library Cataloguing in Publication Data

International statistical classification of diseases and related health problems.—10th revision.

Contents: v. 1. Tabular list—v. 2. Instruction manual—v. 3. Alphabetical index

1. Classification I. Title: ICD–10

ISBN 92 4 154419 8 (v. 1) (NLM Classification: WB 15)
ISBN 92 4 154420 1 (v. 2)
ISBN 92 4 154421 X (v. 3)

Typeset in England
Printed in France
91/8833–93/9555—Eastern/Jouve—30000

Contents

1. Introduction

This volume of the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10) contains guidelines for recording and coding, together with much new material on practical aspects of the classification's use, as well as an outline of the historical background to the classification. This material is presented as a separate volume for ease of handling when reference needs to be made at the same time to the classification (Volume 1) and the instructions for its use. Detailed instructions on the use of the Alphabetical Index are contained in the introduction to Volume 3.

This manual provides a basic description of the ICD, together with practical instructions for mortality and morbidity coders, and guidelines for the presentation and interpretation of data. It is not intended to provide detailed training in the use of the ICD. The material included here needs to be augmented by formal courses of instruction allowing extensive practice on sample records and discussion of problems.

If problems arising from the use of the ICD cannot be resolved either locally or with the help of national statistical offices, advice is available from the WHO Collaborating Centres for Classification of Diseases (see Volume 1, pages 7–8).

2. Description of the International Statistical Classification of Diseases and Related Health Problems

2.1 Purpose and applicability

A classification of diseases can be defined as a system of categories to which morbid entities are assigned according to established criteria. The purpose of the ICD is to permit the systematic recording, analysis, interpretation and comparison of mortality and morbidity data collected in different countries or areas and at different times. The ICD is used to translate diagnoses of diseases and other health problems from words into an alphanumeric code, which permits easy storage, retrieval and analysis of the data.

In practice, the ICD has become the international standard diagnostic classification for all general epidemiological and many health management purposes. These include the analysis of the general health situation of population groups and the monitoring of the incidence and prevalence of diseases and other health problems in relation to other variables, such as the characteristics and circumstances of the individuals affected. The ICD is neither intended nor suitable for indexing of distinct clinical entities. There are also some constraints on the use of the ICD for studies of financial aspects, such as billing or resource allocation.

The ICD can be used to classify diseases and other health problems recorded on many types of health and vital records. Its original use was to classify causes of mortality as recorded at the registration of death. Later, its scope was extended to include diagnoses in morbidity. It is important to note that, although the ICD is primarily designed for the classification of diseases and injuries with a formal diagnosis, not every problem or reason for coming into contact with health services can be categorized in this way. Consequently, the ICD provides for a wide variety of signs, symptoms, abnormal findings, complaints, and social circumstances that may stand in place of a diagnosis on health-related records (see Volume 1, Chapters XVIII and XXI). It can therefore be used to classify data recorded under headings such as "diagnosis", "reason for admission", "conditions treated" and "reason for consultation", which appear on a wide variety of health records from which statistics and other health-situation information are derived.

2.2 The concept of a "family" of disease and health-related classifications

Although the ICD is suitable for many different applications, it does not always allow the inclusion of sufficient detail for some specialties, and sometimes information on different attributes of the classified conditions may be needed. It has also been suggested that the ICD should include classifications of additional information related to health status or health care.

It was felt that the main ICD (the three- and four-character classification), covered by the three volumes of ICD-10, could not incorporate all this additional information and remain accessible and relevant to its traditional users, so the idea arose of a "family" of disease and health-related classifications, including volumes published separately from the main ICD, to be used as required.

The "core" classification of ICD-10 is the three-character code, which is the mandatory level of coding for international reporting to the WHO mortality database and for general international comparisons. The four-character subcategories, while not mandatory for reporting at the international level, are recommended for many purposes and form an integral part of the ICD, as do the special tabulation lists.

There are two main types of classification. Those in the first group cover data related to diagnoses and health status, and are derived directly from the ICD by either condensation or expansion of the tabular list. The condensed lists can be used for many kinds of data presentation, for summary statistical tables, and potentially for information support in the development of primary health care (see p. 9), while the expanded lists are used to obtain increased clinical detail as in the specialty-based adaptations (see p. 5). This group also includes classifications complementary to the tabular list, that allow the allocation of diagnoses using a different axis of classification, such as the morphology of tumours.

The second group of classifications covers aspects related to health problems generally outside the formal diagnoses of current conditions, as well as other classifications related to health care. This group includes classifications of disablement, of medical and surgical procedures, and of reasons for contact with health care providers.

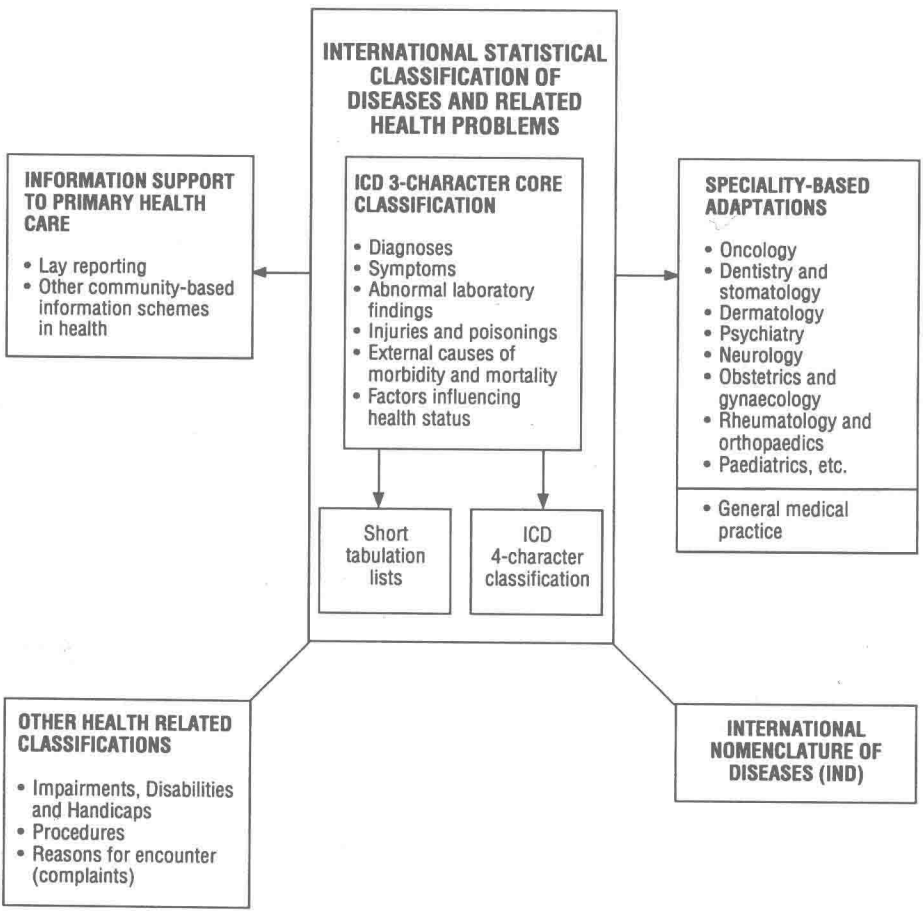
The ICD family also covers a conceptual framework of definitions, standards, and methods that, although they are not classifications in themselves, have been closely linked to the ICD for a long time. One of these concepts is the

development of methods to support the local collection and use of information for primary health care.

Another publication related to, but not derived from, the ICD is the International Nomenclature of Diseases (IND). The difference between a classification and a nomenclature is discussed on page 12.

The figure below shows the content and interrelationships of the various members of the family of classifications.

Family of disease and health-related classifications



2.2.1 Diagnosis-related classifications

Special tabulation lists

The special tabulation lists are derived directly from the core classification, for use in data presentation and to facilitate analysis of health status and trends at the international, national and subnational levels. The special tabulation lists recommended for international comparisons and publications are included in Volume 1 (pp. 1205–1231). There are five such lists, four for mortality and one for morbidity (for further details, see sections 5.4 and 5.5, pp. 125–127).

Specialty-based adaptations

Specialty-based adaptations usually bring together in a single, compact volume the sections or categories of the ICD that are relevant to a particular specialty. The four-character subcategories of the ICD are retained, but more detail is often given by means of fifth-character or sometimes sixth-character subdivisions, and there is an alphabetical index of relevant terms. Other adaptations may give glossary definitions of categories and subcategories within the specialty.

The adaptations have often been developed by international groups of specialists, but national groups have sometimes published adaptations that have later been used in other countries. The following list includes some of the major specialty adaptations to date.

Oncology

The second edition of the *International Classification of Diseases for Oncology* (ICD-O), published by WHO in 1990, is intended for use in cancer registries, and in pathology and other departments specializing in cancer (*1*). ICD-O is a dual-axis classification with coding systems for both topography and morphology. The topography code uses, for most neoplasms, the same three-character and four-character categories used in ICD-10 for malignant neoplasms (categories C00–C80). ICD-O thus allows greater specificity of site for nonmalignant neoplasms than is possible in ICD-10.

The morphology code for neoplasms is identical to that in the *Systematized nomenclature of medicine* (SNOMED) (*2*), which was derived from the 1968 edition of the *Manual of tumor nomenclature and coding* (MOTNAC) (*3*) and the *Systematized nomenclature of pathology* (SNOP) (*4*). The morphology code has five digits; the first four digits identify the histological type and the fifth the behaviour of the neoplasm (malignant, *in situ*, benign, etc.). The ICD-O morphology codes also appear in Volume 1 of ICD-10 and are added

to the relevant entries in Volume 3, the Alphabetical Index. Tables are available for the conversion of the ICD-O second edition codes to ICD-10.

Dermatology

In 1978, the British Association of Dermatologists published the *International Coding Index for Dermatology* compatible with the Ninth Revision of the ICD. As the present volume went to press, the Association was working on an adaptation of ICD-10 to dermatology, under the auspices of the International League of Dermatological Societies.

Dentistry and stomatology

The third edition of the *Application of the International Classification of Diseases to Dentistry and Stomatology* (ICD-DA), based on ICD-10, is in preparation for publication by WHO. It is designed to bring together ICD categories for diseases or conditions that occur in, have manifestations in, or have associations with the oral cavity and adjacent structures. It provides greater detail than ICD-10 by means of a fifth digit, but the numbering system is organized so that the relationship between an ICD-DA code and the ICD code from which it is derived is immediately obvious, and so that data from ICD-DA categories can be readily incorporated into ICD categories.

Neurology

WHO intends to publish a neurological adaptation of ICD-10, which retains the classification and coding systems of ICD-10 but is further subdivided at the fifth-character level and beyond to allow neurological diseases to be classified with greater precision.

Rheumatology and orthopaedics

The International League against Rheumatism is working on a revision of the *Application of the International Classification of Diseases to Rheumatology and Orthopaedics* (ICD-R&O), including the *International Classification of Musculoskeletal Disorders* (ICMSD), to be compatible with ICD-10. The ICD-R&O provides detailed specification of conditions through the use of additional digits, which allow for extra detail while retaining compatibility with ICD-10. The ICMSD is designed to clarify and standardize the use of terms and is supported by a glossary of generic descriptors for groups of conditions, such as the inflammatory polyarthropathies.

Paediatrics

Under the auspices of the International Pediatric Association, the British Paediatric Association (BPA) is working on an application of ICD-10 to paediatrics, which will use a fifth digit to provide greater specificity. This follows similar applications prepared by BPA for ICD-8 and ICD-9.

Mental disorders

The ICD-10 Classification of Mental and Behavioural Disorders: clinical descriptions and diagnostic guidelines. This volume, published in 1992, provides for each category in Chapter V of ICD-10 (Mental and behavioural disorders) a general description and guidelines concerning the diagnosis, as well as comments about differential diagnosis and a listing of synonyms and exclusion terms (*5*). Where more detail is required, the guidelines give further subdivisions at the fifth and sixth digit levels. A second publication relating to Chapter V, *Diagnostic criteria for research*, is in press.

It is also planned to test a version of the classification for use in primary health care, and another version that will use a rearrangement of categories of childhood mental disorders in a multiaxial system, to allow simultaneous assessment of the clinical state, relevant environmental factors, and the degree of disability linked to the disease.

2.2.2 Non-diagnostic classifications

Procedures in medicine

The *International Classification of Procedures in Medicine* (ICPM) was published in two volumes by WHO in 1978 (*6*). It includes procedures for medical diagnosis, prevention, therapy, radiology, drugs, and surgical and laboratory procedures. The classification has been adopted by some countries, while others have used it as a basis for developing their own national classifications of surgical operations.

The Heads of WHO Collaborating Centres for Classification of Diseases recognized that the process of consultation that had to be followed before finalization and publication was inappropriate in such a wide and rapidly advancing field. They therefore recommended that there should be no revision of the ICPM in conjunction with the Tenth Revision of the ICD.

In 1987, the Expert Committee on the International Classification of Diseases asked WHO to consider updating at least the outline for surgical

procedures (Chapter 5) of the ICPM for the Tenth Revision. In response to this request and the needs expressed by a number of countries, the Secretariat prepared a tabulation list for procedures.

At their meeting in 1989, the Heads of the Collaborating Centres agreed that the list could serve as a guide for the national publication of statistics on surgical procedures and could also facilitate intercountry comparisons. The list could also be used as a basis for the development of comparable national classifications of surgical procedures.

Work on the list will continue, but any publication will follow the issue of ICD-10. In the meantime, other approaches to this subject are being explored. Some of these have common characteristics, such as a fixed field for specific items (organ, technique, approach, etc.), the possibility of being automatically updated, and the flexibility of being used for more than one purpose.

International Classification of Impairments, Disabilities, and Handicaps (ICIDH)

This manual of classification relating to the consequences of disease (including injuries and disorders) was published in English by WHO in 1980 (*7*). It has subsequently been translated into over a dozen languages.

ICIDH contains three distinct classifications, each relating to a different consequence of disease.

Impairments (I code) are concerned with loss or abnormality of psychological, physiological, or anatomical structure or function. In principle, impairments represent disturbances at the level of the organ.

The basic structure of the I code consists of two digits before and one digit after a decimal point. In some parts, a fourth digit has been used. There is an alphabetical index to this classification.

Disabilities (D code) reflect the consequences of impairment in terms of any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being; disabilities thus reflect disturbances at the level of the person.

The basic structure of the disability code consists of two digits, with the option of a supplementary digit after a decimal point. There is no alphabetical index to this classification.

Handicaps (H code) are disadvantages for a given individual, resulting from an impairment or a disability, that limit or prevent the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual; handicaps thus reflect discordance between the individual's performance and the expectations of the individual or of the group of which he or she is a member.

The handicap classification has seven dimensions: six key dimensions which have been designated as "survival roles" and one "other handicaps" dimension to accommodate the problems not included in the survival roles. A one-digit scale is applied to each dimension. This classification is not a classification of individuals. It is a classification of circumstances that place people with disabilities at a disadvantage relative to their peers when viewed from the norms of society. There is no alphabetical index to this classification.

Work is in progress on the use of the ICIDH in various countries, and has been reviewed at several international meetings in recent years. WHO Collaborating Centres for the Development and Use of the ICIDH have been established and will participate in work on the revision of the ICIDH.

2.2.3 Information support to primary health care

One of the challenges of the Global Strategy for Health for All by the Year 2000 is to provide information support to primary health care (PHC). In countries without complete information or with only poor-quality data, a variety of approaches need to be adopted to supplement or replace the conventional use of the ICD.

Since the late 1970s, various countries have experimented with the collection of information by lay personnel. Lay reporting has subsequently been extended to a broader concept called "non-conventional methods". These methods, covering a variety of approaches, have evolved in different countries as a means of obtaining information on health status where conventional methods (censuses, surveys, vital or institutional morbidity and mortality statistics) have been found to be inadequate.

One of these approaches, "community-based information", involves community participation in the definition, collection and use of health-related data. The degree of community participation ranges from involvement only in data collection to the design, analysis and utilization of information. Experience in several countries has shown that this approach is more than a theoretical framework. The International Conference for the Tenth Revision