

World Health Organization

Family of International Classifications

Current - June 2004

# World Health Organization Family of International Classifications

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## Part I BACKGROUND

### Introduction

This document defines a World Health Organization Family of International Classifications (WHO-FIC) and presents a set of principles for including a classification in the family. Part I gives a background to the Family. Part II describes the principles that govern the acceptance of a classification as a member of the WHO Family and Part III the process to incorporate a candidate classification in the Family. Part IV is a registration or administrative record that is completed for each Family member. Appendices can be found in Part V. This June 2004 version has been updated to incorporate suggestions made at the WHO-FIC Network meeting in October 2003, comments received from WHO Headquarters and to align the WHO-FIC more closely with international standards.

The WHO Family is a suite of products that may be used in an integrated fashion to compare health information internationally.

Internationally endorsed classifications facilitate the storage, retrieval, analysis, and interpretation of data and their comparison within populations over time and between populations at the same point in time as well as the compilation of internationally consistent data. Populations may be Nations, States and Territories, regions, minority groups or other specified group.

The aims of the WHO Family are to:

- ♦ provide a conceptual framework of information domains for which classifications are, or are likely to be required for purposes related to health and health management;
- ♦ provide a statement of endorsed classifications for particular purposes defined within the framework;
- ♦ promote the appropriate selection of classifications in the range of settings in the health field across the world,
- ♦ establish a common language to improve communication; permit comparisons of data across Nations, States and Territories, health care disciplines, services and time, and between Nations; and
- ♦ to provide systematic classification schemes for health information systems; and
- ♦ stimulate research on health and the health system.

In order to achieve its purpose, members of the WHO Family must:

- ♦ be based on sound scientific and taxonomic principles;
- ♦ be culturally appropriate and internationally applicable;
- ♦ focus on the multi-dimensional aspects of health;
- ♦ meet the needs of its different and varied users;
- ♦ enable derivation of summary health measures; and
- ♦ provide a platform for users and developers.

Classifications are used to support statistical data across the health system. To this end WHO has developed two reference classifications that can be used to describe the health state of a person at a particular point in time. Diseases and other related health problems, such as symptoms and injury, are classified in the International Classification of Diseases, now in its 10<sup>th</sup> revision (ICD-10)<sup>1</sup>. Functioning and disability are classified separately in the International Classification of Functioning, Disability and Health (ICF)<sup>2</sup>. A third reference classification, the International Classification of Health Interventions (ICHI), is under development.

The individual health experience in general can be described using the dimensions of the ICD and ICF. The needs of the user will determine the number of dimensions, and the level of specificity used. Other classifications needed to describe other aspects of the health experience and the health system have been adopted as related classifications (e.g. ATC/DDD<sup>3</sup> classifies therapeutic chemicals). The WHO Family Development Committee has developed a matrix to describe the scope of a WHO Family of International Classifications.

The United Nations Statistical Division (UNSD) has defined the UN family of international economic and social classifications and published basic principles for standard statistical classifications. 'The family of international economic and social classifications is comprised of those classifications that have been internationally approved as guidelines by the United Nations Statistical Commission or other competent inter-governmental board on such matters as economics, demographics, labour, health, education, social welfare, geography, environment and tourism'<sup>4</sup>.

Where possible the WHO-FIC has sought consistency with the UNSD approach. The UN family of classifications includes the ICD-10 and ICF under social and economic classifications.

Adapting the UN definition the WHO-FIC is defined as:

The WHO family of international classifications is comprised of those classifications that have been prepared by the World Health Organization, or other groups on its behalf, and approved by the Organization's governing bodies. It also includes those classifications on similar subjects which are derived from or related to the international classifications and are primarily, but not solely used for regional or national purposes.

## Health Language

In recent years there has been much discussion on the definitions of terms used to describe the language of health. Even within the international standards setting bodies there is

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<sup>1</sup> World Health Organization. International Statistical Classification of Diseases and Related Health Problems (10th Edition). Geneva, WHO, 1994.

<sup>2</sup> World Health Organization. International Classification of Functioning, Disability and Health. Geneva, WHO, 2001.

<sup>3</sup> WHO Collaborating Centre for Drug Statistics Methodology. Guidelines for ATC classification and DDD assignment 6<sup>th</sup> Edition Oslo: Norwegian Institute of Public Health. 2003.

<sup>4</sup> Hoffman E, Chamie M (1999) Standard Statistical Classifications: Basic Principles. New York: United Nations.

inconsistency in the definitions. In general there is agreement that there are different levels of structured language for different purposes.

The confusion in defining terms may, in part, have arisen because many of the products developed for the electronic management of health information have characteristics of different types of terminology. They may contain terms used in the exchange of information between health care provider and recipient, so called 'natural language'. The product may be organised in such a way that synonyms are brought together, thus containing elements of a thesaurus. The structure of the product may aggregate like concepts, a characteristic of classifications.

'Health language' is used in this document as an umbrella term for the language of health from unstructured (natural language) to structured language for specific purposes within the health system. Terms that may have broader meaning within the wider community, may have specific meaning within the context of given classifications.

### *Classifications*

A classification is an "arrangement of concepts into classes and their subdivisions to express the semantic relations between them; the classes are represented by means of a notation."<sup>5</sup> Classification normally involves the categorisation of relevant natural language for the purposes of systematic analysis within a single field of concepts.

It is normally possible to create a cross-reference 'map' from each individual entry in a vocabulary to the 'appropriate' and corresponding classification through cross references. However there is need to take into account, and make provision for, various types of exception to the general relationship.

There is no single logical criterion that differentiates between terminologies and classifications. The primary differences relate to the level of detail to which the data values are defined. Thus, individual entities are identified by natural language or in electronic vocabularies (fine granularity). Other levels increasingly involve clustering. Existing classifications like ICD-10, its modifications and the ICF can be viewed as having a structure and content typical of the 'second' level or 'intermediate' granularity.

The professional languages of the health sector have a limited number of terms which can be used to describe problems, items and concepts. So it is possible for an apparently individual concept to be identifiable at all levels of granularity. Users need to be aware that the same term may have different meanings depending on its context. This is important because detail in the information is inevitably lost by moving from a finer to a coarser level. Individual 'granules' at the coarser level frequently embrace multiple discrete concepts at the finer one. The essential characteristic of a classification is aggregation.

Classifications are a necessary adjunct to vocabularies for standardised coding of information for statistical purposes. Vocabularies and classifications should be considered as complementary. Any mapping from a vocabulary to a classification should be acceptable to the proprietors of both the vocabulary and the classification.

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<sup>5</sup> International Organization for Standardization. 1988 ISO Standards Handbook 1, 3<sup>rd</sup> Edition. Documentation and information. Switzerland: ISO.

### *Terminologies*

Terminology is defined as 'a set of terms representing the system of concepts of a particular subject field'<sup>6</sup>, or 'a collection of terms used in a particular discipline'<sup>7</sup>. CEN TC251 defines vocabularies as 'sets of terms used for a particular purpose' or 'a list of terms with definitions of those terms'. The first is synonymous with nomenclature and terminology and the second with glossary.

The need for electronic communication requires a common 'health language' covering all the basic elements of health and health care: hence the need for the development of controlled terminologies/vocabularies. In these vocabularies each entry normally incorporates sufficient elements to differentiate one individual entity from another. The essential characteristic of a vocabulary is that of discrimination.

Different health professionals use their own sets of terms for their own purposes, and these vocabularies are crucial for communication across health settings. In vocabularies, as far as possible, it should be ensured that one word or one code only has one meaning, and the context in which it is being used should be apparent.

Terminologies/vocabularies have varying levels of structure. Clinical terminology is the least structured and describes various health language systems. Interface terminologies provide the interface between the user and the electronic system that is being used to record clinical information. Reference terminologies are sets of uniquely defined concepts which relate to a number of interface terminologies and to classifications. A reference terminology is a collection of terms that provide a common reference point to classifications for reporting and statistical use.

### *Systems that combine data from multiple classifications*

In spite of the analytic potential of the hierarchical nature of classifications, there is an increasing need to develop combinations which incorporate concepts from two or more subject areas for specific purposes.

In the health sector, an example is the diagnosis related group (DRG) (used in casemix systems) which combines data on the individual patient such as diagnoses and procedures and other characteristics such as age and gender.

Combination systems differ from the two lower levels first and foremost by being comprised of outputs from various data sources of which only some are based on the use of classifications in the WHO Family. They are characterized by a very 'coarse' granularity, which do not necessarily hierarchically aggregate the concepts in the WHO Family classifications. These systems will not be discussed further in this document.

The WHO Family is to confine itself to classifications, the intermediate level of granularity.

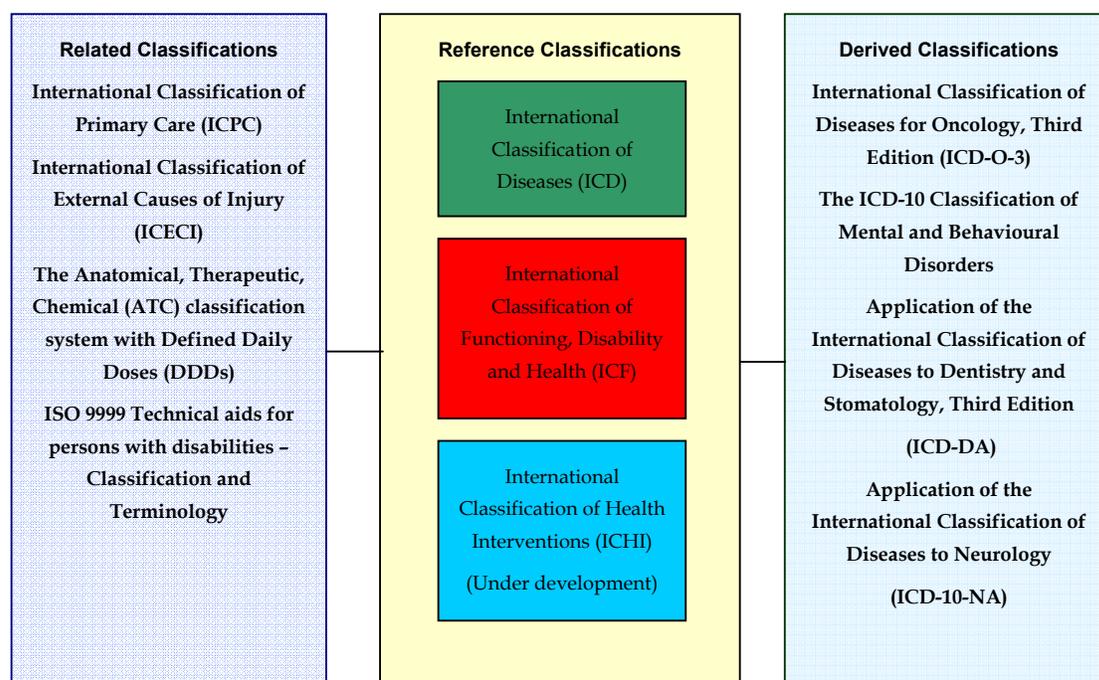
## **Types of classifications in the WHO Family**

The classifications in the WHO-FIC and the broader United Nations family of economic and social classifications are of three major types. Figure 1 represents the types of classifications in the WHO-FIC.

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<sup>6</sup> ISO 1087: Terminology work – Vocabulary – Part 1: Theory and application 1990

<sup>7</sup> CENTC251 <http://www.centc251.org/GInfo/glossary>



**Figure 1:** Schematic representation of the WHO-FIC

*Reference classifications*

These are the classifications that cover the main parameters of the health system, such as death, disease, functioning, disability, health and health interventions. WHO reference classifications are a product of national agreements. They have achieved broad acceptance and official agreement for use and are approved and recommended as guidelines for international reporting on health. They may be used as models for the development or revision of other classifications, with respect to both the structure and the character and definition of the categories.

*Derived classifications*

Derived classifications are based upon reference classifications. Derived classifications may be prepared either by adopting the reference classification structure and categories, providing additional detail beyond that provided by the reference classification, or they may be prepared through rearrangement or aggregation of items from one or more reference classifications. Derived classifications are often tailored for use at the national or multi-national level.

Within the WHO-FIC the derived classifications may include specialty-based adaptations of ICF or ICD, such as the International Classification of Diseases for Oncology (ICD-O-3), the Application of the International Classification of Diseases to Dentistry and Stomatology, 3rd Edition (ICD-DA), the ICD-10 for Mental and Behavioural Disorders and the Application of the International Classification of Diseases to Neurology (ICD-10-NA).

*Related classifications*

Related classifications are those that partially refer to reference classifications, or that are associated with the reference classification at specific levels of the structure only. Procedures

for maintaining, updating and revising statistical classifications of the family encourage the resolution of problems of partial correspondence among related classifications, and offer opportunities for increased harmony over time. Within the WHO-FIC the related classifications include: the International Classification of Primary Care (ICPC-2), the International Classification of External Causes of Injury (ICECI), Technical aids for persons with disabilities: Classification and terminology (ISO9999) and Anatomical Therapeutic Chemicals Classification with Defined Daily Doses (ATC/DDD).

### Scope of the WHO Family

Health has been defined as ‘a state of complete physical, mental, and social well being and not merely the absence of disease or infirmity’<sup>8</sup>. Health or state of health can only be defined in terms of an individual and that person’s goals and expectations. For example a professional gymnast with a need to be extremely flexible, will feel unhealthy at a level most people would consider healthy; or a person born with cystic fibrosis may never know the level of energy most people associate with health. The individual defines when their state of health generates a health problem either by accessing or seeking access to the health system or by describing the issues of concern to that person. The health system includes ‘all activities whose primary purpose is to promote, restore or maintain health’<sup>9</sup>.

Health concepts may be defined as concepts that are related to the description and documentation of the health status of an individual and the services and interventions available for examining, improving, maintaining and supporting it.

Health and health systems defined by WHO are very broad and include areas not traditionally considered by Government health administrations. Some areas of public health are funded and administered by other agencies, for example road safety programs designed specifically to reduce deaths and injury due to road accidents. Sometimes services, which seek to maintain the health state of a person with a disability, are not considered health services; for instance some home care services. The following are included within scope for WHO-FIC purposes.

Health status	Environmental health
Health care (including rehabilitation)	Food standards and hygiene
Health policy and planning	Health screening
Disability policy and planning	Prevention of hazardous and harmful drug use
Communicable disease control	Public health research
Selected health promotion	External causes of injury
Organised immunisation	Occupational health

Although the United Nations Family of Classifications covers a wide spectrum, it is considered that the scope of the WHO Family should be limited to concepts relating directly

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<sup>8</sup> World Health Organisation, 1946. Constitution of the WHO. Reprinted in: Basic documents, 37<sup>th</sup> ed. Geneva: WHO.

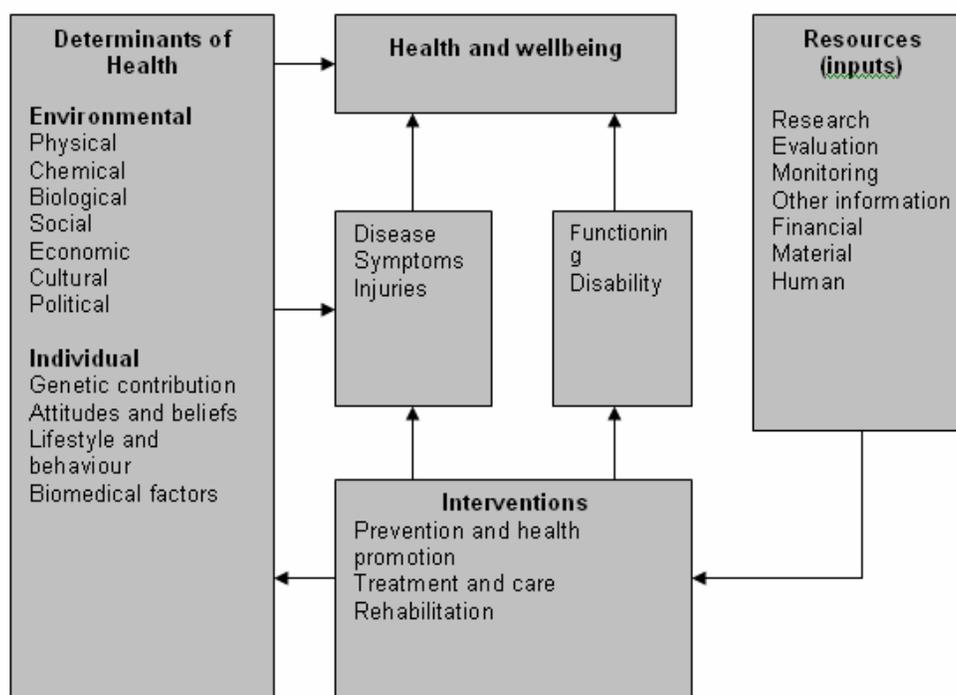
<sup>9</sup> World Health Organisation, 2000 The World Health Report 2000 Health systems: improving performance. Geneva: WHO.

to health. The contents of some UN classifications are relevant to the health sector (for example occupation).

To specify a manageable Family of Classifications, the health system can be described using two axes or dimensions. The idea of a matrix was developed to represent the areas of health and related information and the scope of health classifications to be included in a WHO-FIC<sup>10</sup>.

A conceptual framework of the health system and factors influencing health has been used for one dimension. This is based on the Canadian Roadmap, developed in 1998 to guide health information developments in that country<sup>11</sup>. The framework in turn is essentially consistent with the conceptual framework for the Australian health system that has been published by the Australian Institute of Health and Welfare (See Figure 2)<sup>12</sup> and the United States 21<sup>st</sup> Century Vision for Health Statistics<sup>13</sup>. The framework is also consistent with WHO's World Health Report 2000<sup>14</sup> view of health which places people at the centre of health services.

**Figure 2 Conceptual frame work for health**



<sup>10</sup> Ashley JA, Schiøler G, Hirs WM, Madden RC 2000. The concept of the family of international health classifications. Paper presented at the WHO Centre Heads meeting in Rio de Janeiro October 2000.

<sup>11</sup> Canadian Health Information Roadmap <http://www.cihi.ca>

<sup>12</sup> Australian Institute of Health and Welfare 2000. Australia's health 2000: the seventh biennial health report of the Australian Institute of Health and Welfare. Canberra: AIHW.

<sup>13</sup> Developing a 21<sup>st</sup> Century Vision for Health Statistics Interim Report. <http://www.ncvhs.hhs.gov>

<sup>14</sup> World Health Organization 2000. The World Health Report 2000 Health Systems: Improving Performance. Geneva: WHO

The second dimension is Areas of Application. This is a multi-conceptual dimension including a combination of settings, measurement methods, target group, methods of data collection and data informants. The rows were developed to cover, in broad terms, the range of areas of applications of classifications in different health systems across a country or the world.

Each of these dimensions should give rise to mutually exclusive domains. It was recognised that the ideal is unlikely in practice, because the health system takes so many forms across Nations, regions and for specific population groups. The test of the dimensions defined is a pragmatic one: whether it helps to identify the appropriate classification(s) for use in specific circumstances.

Putting the two dimensions together produces a matrix. If this matrix is to be useful, it should produce cells that are sufficiently well defined so all eligible domains within the cell can be described using a single classification at the highest level (and associated derived and related classifications). It is not necessary that there be only one classification per cell that fulfils this requirement, although in logic, there is no need for more than one.

As already commented, the indicative framework so formed is unlikely to be sufficiently detailed for many purposes. It has therefore been suggested that it could be the entry point to a knowledgebase: from each cell it would be possible to drill down to a classification for use in a more specialised area of application. This is consistent with the UN classifications system which includes reference classifications (such as ICD and ICF), derived classifications and related classifications. In these terms, the family of health classifications, and the relationships between them, can be as complex as the modern human family, with genetic relationships augmented by blended ones.

### **The Health and Health Related Classifications Matrix**

A matrix for the WHO Family has been developed (See p11). In the matrix:

- Each cell should contain a single classification at highest level. When drilling down there is a need to ensure there is not more than one equivalent classification. Two equivalent classifications in one cell may be a sign of further work required;
- specialist adaptations (mainly derived or related classifications) may be included in the matrix by drilling down through the appropriate cell; and
- a few cells, marked  are “not applicable”.

An electronic tool to view the scope of the matrix has been developed (insert web address). There are links between the highest level of the matrix and related and derived classifications.

## World Health Organization Family of International Classifications

### Schematic representation of the World Health Organization Family of International Classifications

Area of Application	Factors influence health and well being <sup>1</sup>		Health and well being		Interventions / Services	Resources
	Environmental	Personal	Health Condition / disease/ problem	Functioning and disability	Prevention <sup>3</sup> Assessment/ diagnostic Therapeutic Maintenance <sup>4</sup>	Research, Evaluation Monitoring, Other information, Financial, Material, Human
<u>Mortality</u> (cause of death)	<b>ICD-10</b>	The United Nations maintains classifications of a range of variables relevant to this, including Industry and Occupation. These standard classifications, or classifications which are compatible with them, are to be used in health data collection.	<b>ICD-10</b>			The United Nations maintains classifications of a range of variables relevant to these, including Industry and Occupation. These standard classifications, or classifications which are compatible with them, are to be used in health data collection.
<u>Self report</u> eg. Population health survey and reason for encounter	<b>ICF</b>			<b>ICF</b>		
<u>Population and Environmental health</u>	<b>ICF</b>		<b>ICD-10</b>	<b>ICF</b>	<u>ISO9999</u>	
<u>Primary Care</u> <sup>5</sup> - General practice - Emergency - Other	<b>ICF</b> - - <u>ICECI</u>		- <u>ICPC-2</u> - -	<b>ICF</b> - -	- <u>ICPC-2</u> - -	
<u>Acute hospital admissions</u>	<b>ICD-10</b> (Ch XX)		<b>ICD-10</b>	<b>ICF</b>	<b><i>ICHI</i></b> <u>ATC/DDD</u> <u>ISO9999</u>	
Specialised care <sup>2</sup> (residential or non-residential)	<b>ICF</b>		<i>ICD-0-3</i> <i>ICD-DA</i> <i>ICD-NA</i> <i>ICD Mental health</i>	<b>ICF</b>	<u>ATC/DDD</u> <u>ISO9999</u>	

**Bold** - reference classifications, **Bold italics** - reference classification under development, Underline - related classification, *Italics* - derived classification

- 1 Factors influencing health and well being are defined here as including risk factors, determinants and external causes, but not health services and interventions.
- 2 Specialised care includes care in consultant rooms, palliative care, rehabilitation, services for older people, disability services and other forms of non-acute care.
- 3 The term prevention is used for interventions that occur before a specific health event occurs. Prevention aims to reduce the occurrence of new cases, decrease risk and/ or increase protective factors that can be documented, delay onset of illness, reduce length of time that early symptoms continue, and halt/delay a progression of severity.
- 4 Maintenance interventions are supportive, educational, and/or pharmacological in nature, and are provided on a long-term basis to individuals with continuing impairment. Maintenance interventions involve the provision of support and after-care services to the patient.
- 5 Primary care is defined here as the care provided at the first point of contact with health services and relates to the function, not the person delivering the care.

## Part II PRINCIPLES

The development of the WHO Family of International Classifications is being managed by the Family Development Committee on behalf of the network of WHO Collaborating Centres for the Family of International Classifications and WHO (WHO-FIC Network). The wider context of the Family is explained in Part I.

The ISO/IEC FCD 11179-6<sup>15</sup> has been used, where possible, to provide standard terms for the processes of registering classifications to the WHO-FIC.

WHO recognises that it is impossible to define specific criteria for all possible eventualities, hence the following principles are to provide guidance to those preparing a submission of a candidate classification.

A submission should contain entries with comments on each section of the principles listed in part II. The level of detail in these comments may vary depending on the extent to which the proposed classification is regarded new or established. Supporting documentation should be supplied or referenced, where applicable. The main points of the information should be included in the administration form (Part IV).

### 1 *Place of the classification within the matrix*

A classification within the WHO Family of International Classifications should be clear about what it classifies: its scope, its units of classification, its organization, and how these elements are structured in terms of their relation to each other. Its place in relation to other areas of health or related information should be clearly defined.

The electronic tool for the matrix, will accommodate the WHO-FIC matrix as shown in Part 1, but will also provide access to details of classifications (as expressed on the administration document) and relationships between classifications at more detailed levels within the matrix. A related or derived classification will occupy a lower level stratum within the matrix. For example the version of the ICF for children and youth will occupy a lower level of the matrix than the ICF itself.

- A new classification should demonstrate that it occupies an identifiable cell within the matrix (See Part 1) and the relationships to other areas of health or related information.
- It is important that the new classification cover a concept not adequately covered by the reference classifications.
- Any possible redundancy or overlapping of the classification or categories with other related classifications should be identified and will be considered in the process of assessing the candidate classification.
- Consistency between international standards is desirable. The relevant international standards should be identified and any deviation from the standard noted.

### 2 *Purpose and definition of the classification*

If a classification is to be considered for membership of the WHO-FIC, its submission must adhere to certain formal requirements including:

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<sup>15</sup> ISO/IEC FCD 11179-6 Information Technology – Metadata registries (MDR) – Part 6: Registration Geneva: ISO 2004.

- Provisions of a classification title, clear definition and expression of the scope of the classification.
- Presentation of well described categories in standard format backed up by explanatory notes, coding indexes, codes and correspondence tables to related classifications when applicable.
- The extent to which classification categories reflect the realities of the field (ie, the population) to which they relate, should be carefully considered. For example, in a classification of diseases, the categories should reflect the total picture of diseases of the specific population.
- Consideration of the key stakeholders and likely users of the classification should be demonstrated in the submission. The submitting organisation should ensure that these groups are consulted regarding classification development and use.

### 3 *Technical qualities of the classification*

There are certain characteristics of a good classification (UN, 2001)<sup>16</sup>. The technical qualities of the candidate classification should be demonstrated.

- Each classification should have a hierarchical and/or multi-axial structure such that it is possible to aggregate data from individual codes into larger categories.
- Classification categories should be exhaustive and mutually exclusive.
- The categories are stable, ie they are not changed too frequently or without proper review, justification and documentation (See also *Update processes*).
- An entity within a classification that is of particular importance should have its own category.
- Categories within a classification should facilitate the description of phenomena in a way that allows unambiguous understanding by others, including statistical users.
- Each code should have a unique definition.
- Terms should not be ambiguous and the relationship between terms should be consistent.
- The classification is comparable to other related (national or international) standard classifications.

### 4 *Applicability of the classification*

Following the development of a classification from first principles it is necessary to demonstrate the applicability of the classification in the field for which it was developed, or in the case of existing classifications for the purpose for which it seeking membership of the WHO-FIC.

- Translation with consistent meaning into the languages of the member states. Data derived from the classification is of standard suitable for international comparisons
- Validity of the classification for the purpose for which it has been developed. The classification should be acceptable internationally.

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<sup>16</sup> United Nations Statistics Division. UN Glossary of Classification Terms. Internet Communication, 13 June 2001 at [http://www.un.org/depts/unsd/class/glossary\\_short.htm](http://www.un.org/depts/unsd/class/glossary_short.htm)

- Reliability of the classification for the purpose for which it has been developed. It should be possible to code reliably (inter-rater reliability) and consistently (test-retest reliability).
- The classification should be easy to use, unambiguous and well presented. The appropriate tools for use, (training materials, indexes, tabular lists etc) should be clear.

5 *Ownership and support arrangements: responsibilities of Stewards*

Submitting agents should demonstrate that the role of the Stewards of classifications to maintain, update and revise the candidate classifications is being fulfilled. Due respect of the intellectual property of Stewards and developers of classifications should be demonstrated.

- In accordance with Steward requirements, the classification must be backed up by availability of instructions, manuals, coding indexes, handbooks and training.
- The system is dynamic and hence calls for regular information dissemination and cooperation between custodians of the system. Stewards or their representative must register their classifications into a WHO Classifications Register, to be part of the Network to exchange information systematically and efficiently among responsible agencies. The electronic tool developed at the Australian Institute of Health and Welfare (AIHW) will be the register. It is envisaged that the tool will be made available on the WHO-FIC website (Insert web address).
- Stewards should collaborate as necessary in the preparation of correspondence tables between reference, derived and related classifications and instructions for data collection, coding and analysis, for those using the classification.
- Stewards should also recognise their dependence on each other. When a reference classification changes, the other members of the family should work for consistency with the changes made at the international level. When a derived classification notes difficulty in following the reference classification, changes to the reference classification may be proposed. Following from this, when setting strategies for making a change to a classification, it is important that Stewards take note of the classifications possibly affected by the change.

6 *Maintenance and update processes (role of users, transparency, sign-off)*

- Stewards should have a plan for editing and updating a classification or group of related classifications. The timing of these updates and revisions should, if possible, be coordinated with Stewards of other classifications in the WHO-FIC.
- Stewards should specify the location of the persons, offices, or committees responsible for the preparation and/or maintenance of the classification.
- The updating and revision process will be improved through the release of classification timetables for major work on the classifications on a WHO-FIC Classifications Website, allowing those interested in the process to contribute at appropriate moments. Similarly announcing the timings of hearing, updates, and revision meetings will ensure that valuable opportunities for direct dialogue are not missed.

7 *The WHO-FIC Matrix and relations to the WHO Network*

- Stewards or their representative must register the candidate classification into a WHO-FIC Register so that there is efficient and systematic exchange of information amongst responsible agencies.

- Classifications that are members of the WHO-FIC will be promoted alongside WHO reference classifications as being an international standard for the purpose indicated by the location in the matrix.
- There will be no changes to intellectual property status as a result of becoming a member of the WHO-FIC.
- Representatives of the Steward and/or submitting organisation will be eligible to attend Network meetings to engage with representatives of the Collaborating Centres and make presentations about the member classification. Knowledge and awareness of the new member classifications will be enhanced and it is hoped that increased implementation of member classifications will mean improved data for international comparisons on a range of health and social service issues.
- The Representatives of the Steward and/or submitting organisation will be part of the Network to exchange information and work to improve the relationships between reference and related and derived classifications in a coordinated and systematic way.

#### 8 *Accessibility*

Classifications within the WHO-FIC must be accessible to the broadest possible cross-section of interested bodies. It is preferable to make classifications easily available in the public domain by publishing in a number of formats and making it available on the Internet.

- Stewards should work together to prepare guidelines for interpretations of classifications at the applied level and develop guidance and training materials that make explicit the classification's relationship to the WHO-FIC, as well as provide guidelines for those wanting to use the classifications as a basis for developing derived or related classifications, e.g., for use at the National, State/Territory level.
- Availability of the classifications in a variety of electronic formats and as user friendly applications to make the classifications widely used is strongly encouraged.
- Making classifications widely available in a number of languages and formats such as Braille, large print; machine readable and audio will broaden the sphere of accessibility to include those with disabilities.

#### 9 *Resource implications*

There are significant resource implications for inclusion of a new classification in the WHO Family. Stewards must demonstrate adequate consideration of the resource implications (costs) involved with:

- development and implementation of a new classification;
- ongoing implementation and use of the classification; and
- on-going maintenance and updating of the classification.

Stewards should state who has the main financial responsibility for the maintenance and updating of a classification.

Stewards should also consider the levels at which these costs will incur (i.e., WHO, National, Multi-national, or Private).

## **Part III      PROCESS**

### **Introduction**

This part outlines the process for registration of classifications as members of the World Health Organization Family of International Classifications. The process is managed by the WHO-FIC Network and involves the Classification, Assessment and Terminologies Team (CAT Team) in WHO, the Family Development Committee (FDC) and the Heads of Collaborating Centres.

A submission for classification inclusion in the WHO-FIC must demonstrate consideration on the principles in Part II. These principles are designed to provide guidance for classification Stewards and Submitting organisations and should not limit information included in any submission.

The Submitting organisation may be any agency or program manager who has identified a classification and considers that the classification is suitable for inclusion in the WHO-FIC. The Submitting organisation need not be the Steward of the classification; however Stewards should be aware of the proposal and be included in consultations. Agencies or offices with responsibility for the maintenance, updating and revision of classifications are called the Stewards of classifications. These responsibilities are set out in the principles. The Submitting organisation may also be the Steward of a classification but irrespectively will need to demonstrate that the functions of the Steward are to be fulfilled. In the event that Stewards are unable to fulfil the functions, ensuring maintenance and updating of the classification will become the responsibility of the Submitting organisation.

### **New classifications**

During the development of a new classification broad-based consultation and evaluation should be undertaken. The purpose of this is to ensure that the classification is acceptable to stakeholders and fit for the purpose for which the classification is being developed. Consultations will need to include the full range of possible users.

There are two phases for the endorsement of a classification in the WHO-FIC, alpha and beta. Following development of classification from the first principles the Submitting organisation should bring a submission to the FDC for consideration. At this stage a position in the matrix should be identified and the state of development of the classification clarified. The FDC would provide advice about the further development of the classification determine the status.

The alpha phase includes development to the stage where the technical qualities can be demonstrated. During the beta phase the classification will be used in the field and the qualities of validity reliability and international applicability will be demonstrated. At the end of each phase the submitting organisation will present the candidate classification to the FDC and subsequently the Network meeting and if acceptable will be admitted to the WHO-FIC as a standard.

*Alpha phase*

A first round of evaluation should address at least the technical characteristics of the classification, as outlined in part II Principles 1-3. Other principles may be addressed as appropriate to the stage of development of the classification.

It is essential that the consultation be carried out with consideration of all the stakeholders. This might include providers of information to be classified, users of the information, researchers, academics, governments, and statistical agencies, WHO and the UN. Testing should represent member states from all WHO regions to ensure feedback from different language and cultural groups.

**Possible methodologies for the alpha phase**

Activity	Purpose
Literature review	To demonstrate the need for the classification, its role in health information the basis of the structure and the process of development.
Information Sessions	To present information about the classification to interested delegates at the conference; Receive feedback about the appropriateness of the classification for stakeholders; and Enlist attendees to join a focus group.
Focus Groups	Designed to be appropriate to participants; Provide information about the classification; and Receive feedback about the appropriateness of the classification for stakeholders
Workshops	Presentation and feedback as per focus groups; Application of classification to mini case studies.
Concept Evaluation	Using key stakeholders and academics discuss and receive feedback about the appropriateness of the definitions and concepts in the classification
Key informants	Using a structured questionnaire or interview.

At the end of the alpha phase the submitting organisation will present the classification to the FDC and, should the candidate classification meet the principles, to the Network meeting. Heads of Centres will grant beta status if the classification is acceptable. Documents required include:

- 1 A copy of the classification and/or links to an electronic version
- 2 Submission aligned to the principles in this document.
- 3 Administration record/ registration

Should the candidate classification not meet the principles, the FDC will make recommendations to the Submitting organisation. The candidate classification may be resubmitted if changes in accordance with the recommendations are made.

*Beta phase*

A second (Beta) phase including field-testing is to establish the feasibility and reliability of the classification in different settings and to address the issue of validity.

Beta testing should be carried out in a range of member states representing the WHO regions. The principles to be addressed are accessibility, resource implications and applicability of the classification (Principles 4-9).

**Possible methodologies for the beta phase**

Activity	Purpose
Literature review	To demonstrate use of the classification and, for example, results of reliability and validity testing.
Translation and linguistic evaluation	Translation and back translation to establish that the language of the classification is appropriate for WHO member states. Linguistic analysis to identify terms and definitions that may pose cultural difficulties. Recommend better terms for translation
Consensus conferences	Concept validation and issues of validity.
Key informants	Using a structured questionnaire or interview.
Feasibility and reliability of coding cases	Assigning codes under different situations for live cases Inter-rater reliability Test-retest reliability Questionnaire with questions about ease of use of the classification
Feasibility and reliability of coding case summaries or vignettes	As above but using case records or prepared summaries or vignettes.

The Submitting organisation will need to construct a test methodology that is appropriate for the purpose and state of development of the classification.

The quality of the classification should be demonstrated using the WHO-FIC Protocol. The results of the beta phase should demonstrate that the classification is fit for purpose based on use in the field. The candidate classification should be presented to the FDC and subsequently the WHO-FIC Network. If acceptable the will be admitted to the WHO-FIC as a standard.

Documents required include:

- 1 A copy of the classification and/or links to an electronic version
- 2 Submission aligned to the principles in this document.
- 3 Administration record/ registration

**Existing classifications that are being submitted as members of the WHO-FIC**

An established classification, which has been used for a specific purpose in one or several countries, may be considered for registration in the WHO-FIC without going through alpha and beta phases. The quality of the classification should be demonstrated using the WHO-FIC Protocol. A description against the principles and evidence of use in the field are required to demonstrate that the classification is fit for an identified place in the WHO-FIC matrix before presentation to the Family Development Committee and subsequently the WHO-FIC Network.

## Process

The Family Development Committee will consider submissions in the first instance and act as the Registration Authority<sup>1</sup> i.e. the organisation responsible for maintaining a register of classifications in the WHO-FIC. Membership of the Committee includes the Chair, a number of Heads and representatives of Collaborating Centres, WHO Regional Officers and the CAT team. At this time Australia provides the Chair and Secretary for the FDC.

After consideration of a submission and the classification by the FDC it will be presented to the WHO-FIC Network annual meeting for endorsement by Heads of Centres as a member of the WHO Family. The FDC may recommend that further work is needed on the classification prior to presentation to Heads of Centres.

CAT will advise Regional Offices and/or member states of testing of proposed new members of WHO-FIC and involve them in the testing as appropriate.

WHO will update any documentation to include the new member and post the information on the website. There is no need to inform the WHO Executive Board and the World Health Assembly of new classifications in the WHO-FIC.

Submissions should be sent to:      The Family Development Committee Secretary  
The WHO Collaborating Centre for the Family of  
International Classifications in Australia  
Australian Institute of Health and Welfare  
GPO Box 570  
Canberra ACT 2601  
Australia  
[who\\_fic@aihw.gov.au](mailto:who_fic@aihw.gov.au)

A copy will be sent to:                Classifications, Assessment and Terminologies Team  
World Health Organization  
Avenue Appia  
Geneva  
Switzerland

## Part IV REGISTRATION

Please include information that may be helpful to users who are not familiar with this classification. An example using the ICF is attached at appendix 1.

This registration form will be used on the WHO website to inform interested persons about the nature of the classification.

### Administration Record

#### TITLE

Version

#### IDENTIFIER

#### DEFINITION

#### CLASSIFICATION STRUCTURE

#### ADMINISTRATIVE STATUS

Creation date

Last date change

Change description

#### REFERENCE DOCUMENTS

Available indexes

Concordance tables

Available formats e.g. CD-ROM,  
hard copy

Training and training materials

#### LANGUAGES

#### RELATIONSHIPS WITH OTHER CLASSIFICATIONS

Correspondence between  
revisions

Correspondence with  
international, multinational,  
national classifications

Relationships – conceptual,  
structural and other pertinent

#### RELATIONSHIPS WITH OTHER TERMINOLOGIES

Maps to reference terminologies  
or interface terminologies

#### STEWARD

Person or organisation with  
responsibility for maintenance and  
updating the classification

Organisation name

Contact name

Contact information

World Health Organization Family of International Classifications

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SUBMITTING ORGANISATION	Organisation name
Person or organisation submitting the classification	Contact name
	Contact information

## Part V APPENDICES

### Appendix 1

#### Administration Record

TITLE	<b>International Classification of Functioning, Disability and Health.</b>
Version	
IDENTIFIER	ICF
DEFINITION	ICF classifies health and health-related states.  The overall aim of the ICF classification is to provide a unified and standard language and framework for the description of health and health-related states. It defines components of health and some health-related components of well being (such as education and labour).
CLASSIFICATION STRUCTURE	The ICF is organised in two parts (i) Functioning and Disability and (ii) Contextual factors. In each part there are two components; first, Body Functions & Body Structures, and Activities & Participation, and second Environmental factors and personal factors. Personal factors are not classified in the ICF.  Each component of the classification is made up of neutral domains and requires the use of qualifiers to express positive or negative states.
ADMINISTRATIVE STATUS	Standard
Creation date	2001
Last date change	2001
Change description	ICIDH (1980) was a precursor of ICF
REFERENCE DOCUMENTS	.
Available indexes	
Concordance tables	
Available formats e.g. CD-ROM, hard copy	Full length and short (2 digit level) versions CD-ROM browser available from WHO
Training and training materials	Australian User Guide - <a href="http://www.aihw.gov.au">www.aihw.gov.au</a> CodelCF – web based training -Under development Training slides <a href="http://www.who.int/icf">www.who.int/icf</a>
LANGUAGES	English, French, Arabic, Spanish, Italian, Chinese, Russian
RELATIONSHIPS WITH OTHER CLASSIFICATIONS	Conceptual and structural relationships with the International Classification of Impairments, Disabilities and Handicaps, ICIDH, 1980. The concept of Impairments is consistent across the two classifications. 'Activities' replaces the concept of disability and 'participation' replaces the concept of handicap.  The ICF is a reference classification in the WHO Family of International Classifications and is complementary to the International Classification of Diseases (10th Revision).  A derived version for children and youth is under development.
Correspondence between revisions	
Correspondence with international, multinational, national classifications	
Relationships – conceptual, structural and other pertinent	
RELATIONSHIPS WITH OTHER TERMINOLOGIES	

## World Health Organization Family of International Classifications

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STEWARD	Organisation name	World Health Organization
Person or organisation with responsibility for maintenance and updating the classification	Contact name	Nenad Kostanjsek
	Contact information	Avenue Appia Geneva Switzerland kostanjsekn@who.int
SUBMISSION	Organisation name	World Health Organization
Person or organisation submitting the classification	Contact name	Nenad Kostanjsek
	Contact information	Avenue Appia Geneva Switzerland kostanjsekn@who.int

## Glossary

WHO	World Health Organization
WHO-FIC	WHO Family of International Classifications
WONCA	World Organisation of Family Physicians
ICD-10	International Classification of Disease, 10 <sup>th</sup> revision
ICF	International Classification of Functioning, Disability and Health
ICECI	International Classification of External causes of Injury
ICHI	International Classification of Health Interventions
ICPC	International Classification of Primary Care
ISO9999	Technical aids for persons with disabilities: Classification and terminology
ATC/DDD	Anatomical Therapeutic Chemicals Classification with Defined Daily Dose

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<sup>1</sup> International Organisation for Standardisation. 2000. Information Technology – Metadata Registries – Part 6 Registration (ISO/IEC FCD 11179-6. Geneva: ISO