

# **World Health Organization Family of International Classifications: definition, scope and purpose**

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# Introduction

This document defines a World Health Organization Family of International Classifications (WHO-FIC) and includes discussion of the scope and purpose for which the Family has been developed.

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

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 groups.

The purposes of the WHO-FIC are to:

- improve health through provision of sound health information to support decision making at all levels;
- 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 suite of endorsed classifications for particular purposes defined within the framework;
- promote the appropriate selection of classifications in a wide range of settings in the health field across the world,
- establish a common language to improve communication,
- permit comparisons of data within and between member states, health care disciplines, services and time; and to
- stimulate research on health and the health system.

In order to achieve its purpose, members of WHO-FIC 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 10th 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 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 boards on such matters as economics, demographics, labour, health, education, social welfare, geography, environment and tourism'<sup>4</sup>.

The WHO-FIC has sought consistency with the UNSD approach. The UN family of classifications includes 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 (WHO-FIC) is comprised of classifications that have been endorsed by the World Health Organization to describe various aspects of the health and the health system in a consistent manner. The classifications may be the property of WHO or other groups. The purpose of the Family is to assist the development of reliable statistical systems at local, national and international levels, with the aim of improving health status and health care.

# Health Vocabulary

In recent years there has been much discussion on the definitions of terms used to describe the vocabulary of health. Even within the international standards setting bodies there is inconsistency in the definitions. In general there is agreement that there are different types of structured vocabularies for different purposes.

The confusion in defining terms may, in part, have arisen because many of the products developed for the collection and management of health information have characteristics of different types of vocabularies. They may contain terms used in the exchange of information between health care provider and recipient, so called 'natural language'. The product may be organized 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 vocabulary' is used in this document as an umbrella term for the vocabulary of health from unstructured (natural language) to structured vocabulary systems 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 health language.

## Reference Terminologies

The ISO defines a **clinical terminology** as a 'terminology required directly or indirectly to describe health conditions and healthcare activities' (ISO 17115)<sup>5</sup>. Given the scope of WHO-FIC, this paper will use **health terminology** in place of clinical terminology. Each entry incorporates sufficient elements to differentiate one individual entity from another. The essential characteristic of a terminology is that of definition and accurate specification of meaning.

Different health and health related professionals have developed their own sets of terms for their own purposes. But terminologies must allow unambiguous communication of meaning across health settings.

The need for electronic communication therefore requires a controlled 'health vocabulary' covering all the basic concepts of health and health care: hence the need for the development of controlled terminologies. ISO 17115 defines a reference terminology as 'a terminology containing only concept names as determined by an authorized organization'. Organizations can be within a discipline or based in a single country. But terminologies must allow unambiguous communication of meaning across settings and among professionals and consumers.

## Classifications

ISO 17115 defines a **classification** as 'an exhaustive set of mutually exclusive categories to aggregate data at a pre-prescribed level of specialization for a specific purpose'.

Classification involves the categorization of relevant concepts for the purposes of systematic recording or analysis. The categorization is based on one or more logical rules.

Terminologies and classifications are not simply different points on a continuum. A classification involves clustering according to logical rules. Moreover, there is no single criterion that differentiates between terminologies and classifications. A classification may involve grouping many concepts into one category. There could be a focus on including all relevant concepts in the category, or alternately on only including concepts that meet precise inclusion criteria.

The purpose of the classification will be important, for example cause of death or morbidity, activity limitation or participation restriction. The use may be statistical (and so low frequency concepts would tend to be grouped), economic (so that cost may be a categorization logic, as in casemix systems), or for a purpose where rare concepts are of great interest. Coding rules must be incorporated in the classification.

Classifications are a necessary adjunct to terminologies for standardised coding of information for statistical purposes. Terminologies and classifications should be considered as complementary.

Mapping from a reference terminology to a classification is not straightforward. A concept in a reference terminology will generally be more fine-grained than the corresponding category in a classification. The context for use of the map will affect the development of the map. Any mapping between a terminology and a classification should be developed with the involvement of (and must be acceptable to) the proprietors of both the terminology and the classification.

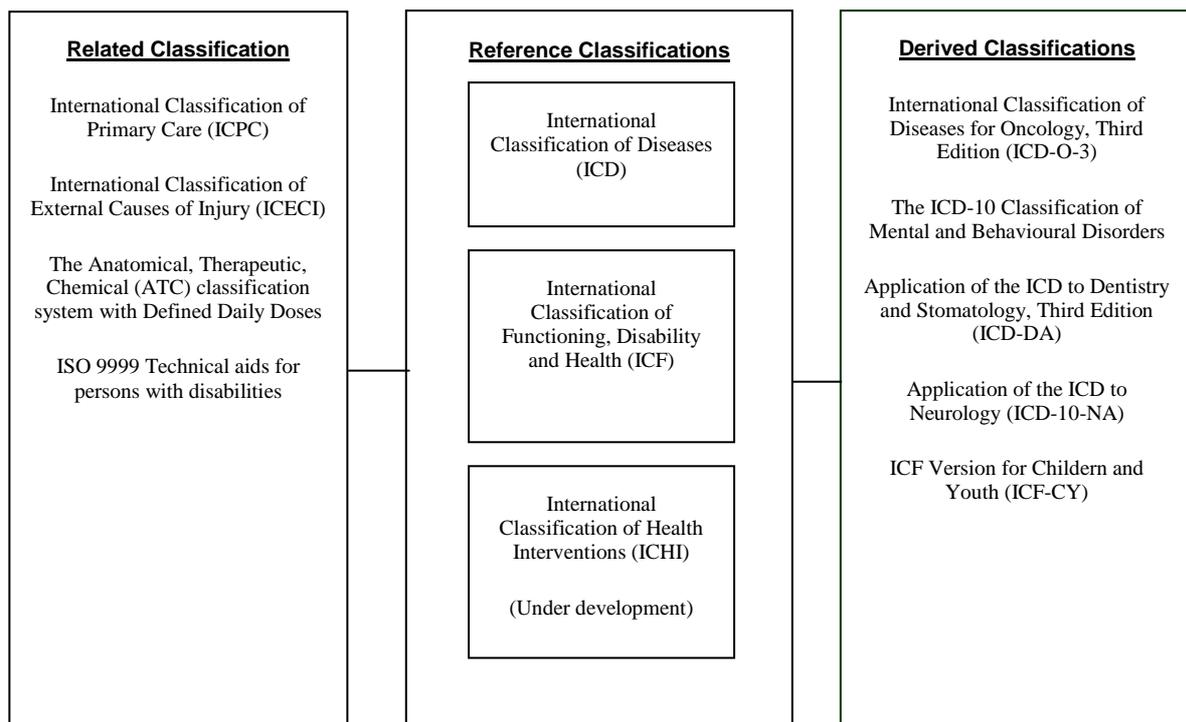
# Types of Classifications in the WHO Family

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.

## Reference classifications

These are the classifications that cover the main parameters of health and the health system, such as death, disease, functioning, disability, health and health interventions. WHO reference classifications are a product of international 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.

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



## Derived classifications

Derived classifications are based upon one or more reference classifications, and are consistent with them. Derived classifications may be designed to provide additional detail beyond that provided by the reference classification for a specialised purpose. Alternatively, 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 WHO-FIC the derived classifications may include specialty-based adaptations of ICF or ICD, such as the ICF Version for Children and Youth (ICF-CY), the International Classification of Diseases for Oncology (ICD-O-3), the Application of the ICD to Dentistry and Stomatology, 3rd Edition (ICD-DA), the ICD-10 for Mental and Behavioural Disorders and the Application of the ICD to Neurology (ICD-10-NA).

## Related classifications

Related classifications are included in WHO-FIC to describe important aspects of health or the health system not covered by reference or derived classifications. They may arise from work in other sectors of the WHO, as in the case of external causes of injury (ICECI)<sup>6</sup> and medicines (ATC-DDD)<sup>5</sup>, or have been developed by other organisations (examples include the International Classification of Primary Care (ICPC-2)<sup>7</sup> and Technical aids for persons with disabilities (ISO9999)<sup>8</sup>). An aim of the Family is to work over time with custodians of related classifications to reduce as far as possible inconsistencies with reference classifications, which could involve change in either the reference classification or the related classification, or both. It is possible that alignment could increase to the point where a related classification could become a derived classification.

# Scope of the WHO Family

A conceptual framework of the health system and factors influencing health is described in the Canadian Roadmap, developed in 1998 to guide health information developments in that country<sup>9</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>10</sup> and the United States Health Statistics Vision for 21st Century<sup>11</sup>. The framework is also consistent with WHO's World Health Report 2000<sup>12</sup> view of health which places people at the centre of health services.

WHO-FIC currently contains an environmental classification as part of the ICF. The bulk of WHO-FIC covers the Health and Wellbeing and Interventions sections of the Framework. The reference classifications cover the following axes (in addition to Environment):

Diseases

Health Problems

Body function

Body structure

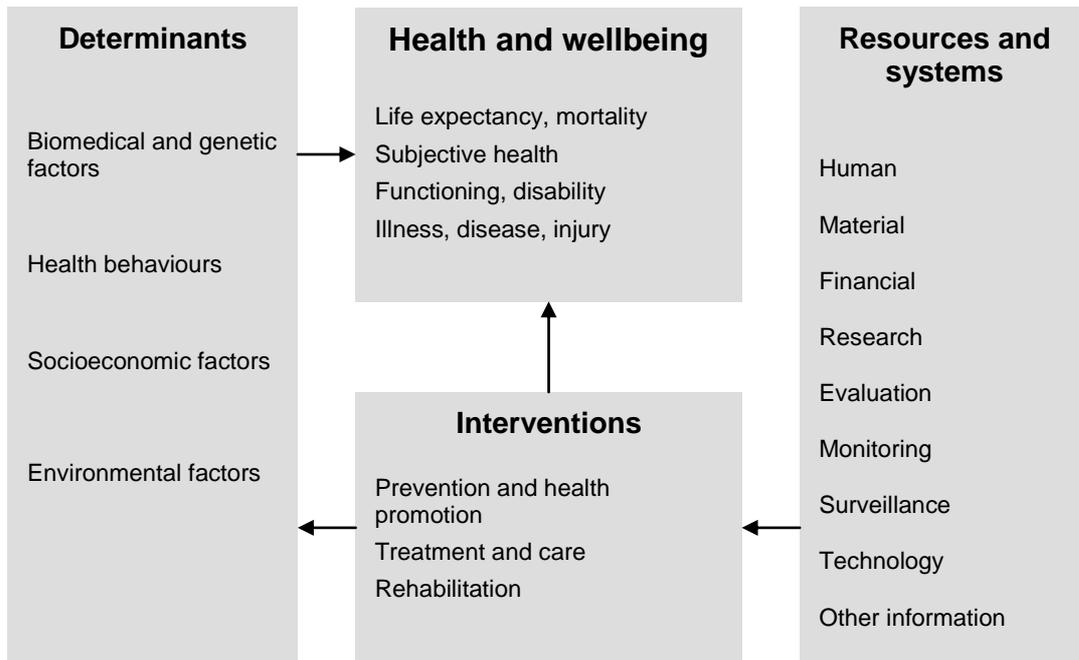
Activity

Participation

Interventions

In addition, Classifications relevant to treatment and care include the ATC-DDD, which covers Medicines and the ISO9999, which covers Technical Aids. In addition to some coverage in ICD, ICECI comprehensively covers External Causes of Injury.

**Figure 2 Conceptual framework for health**



Source: AIHW 2006

At this time, the Resources domains are not covered by WHO-FIC; however some relevant classifications (eg, industries and occupations) may be found in the UN Family<sup>13</sup>. It is noted that the OECD's International Classification of Health Accounts (ICHA)<sup>14</sup> provides a classification in this area for the purpose of classifying health expenditures; WHO and Eurostat have endorsed ICHA for use in health expenditure reporting. To date, it has not been adopted as a basis for broader reporting on the health system.

Inclusion in WHO-FIC of classifications designed for a specific area of application provides a direct link to the other members and provides a platform for seeking maximum consistency across classifications covering similar domains of the health system but designed for different groups of users. For example, A classification such as ICPC has been prepared explicitly for use in Family Medicine. It includes elements found within ICD, ICF and ICHI.

# Principles and process for including classifications in the Family of International Classifications

## Introduction

The WHO Collaborating Centres for the Family of International Classifications and WHO (WHO-FIC Network) seeks to enhance WHO-FIC by including existing health classifications not currently WHO-FIC members as well as through the development of new classifications. The Network has endorsed a set of principles (Attachment 1) against which it will review classifications that can be recommended for use in health information systems along with WHO reference classifications. It is recognized that it is impossible to define specific criteria for all possible eventualities; hence these principles are intended only to guide.

The development of the WHO-FIC is managed by the Family Development Committee (FDC) on behalf of the WHO-FIC Network. The FDC meets twice a year in April and October for face-to-face discussions to review and advise on the development of the Family of Classifications.

## New classifications

Developing classifications from first principles can be complex and prolonged. The WHO-FIC Network has within it the expertise to assist developers of classifications and thereby assure the quality of the final product. A series of steps whereby the WHO-FIC Network can observe progress and provide advice, if sought, is outlined in Attachment 2.

When a proposal to include a new classification is received, the FDC will consider the scope and purpose of the classification and the need for such a classification in the framework of the WHO-FIC, and make an appropriate recommendation to the Network.

## Existing classifications

An established classification, which has been used for a specific purpose in one or more countries, may be recommended for inclusion in the WHO-FIC. Proprietors of an existing classification may identify an information gap and propose a classification to be included in the Family. Alternatively the Network may identify a classification that could be used to fill such a gap and actively engage with the proprietors to bring the classification into the Family. It is

important to note that inclusion of a classification in WHO-FIC does not affect the intellectual property rights of the owner of the classification. However, existing classifications will need to accord to the principles in Attachment 1.

### **Classifications derived from WHO-FIC Reference Classifications**

WHO-FIC reference classifications may be expanded for specific purposes, such as including more detail for a clinical specialty or for a specific population, or to suit a specific purpose of a country or organisation. Examples already included in the Family are the International Classification of Diseases for Oncology, Third Edition (ICD-O-3) and the International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY).

The WHO-FIC Network (contact details below) should be informed of any intention to adapt one of the WHO-FIC reference classifications. WHO permission to use its Intellectual Property must be obtained. The purpose and scope of the adaptation in relation to the WHO-FIC framework will be reviewed.

The adaptation should be developed in line with the guidelines and principles attached.

Enquiries may be sent to:                      Classifications and Terminologies Team  
World Health Organization  
Avenue Appia  
Geneva  
Switzerland

[classifications@who.int](mailto:classifications@who.int)

# **Attachment 1—Principles for including classifications in the WHO Family of International Classifications**

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

Classifications within the WHO Family of International Classifications include a clear statement about the scope, units of classification and organization of the classification. How these elements are structured in terms of their relation to each other and the place of a classification in relation to other areas of health or related information is clearly expressed. It is important that additional classifications cover concepts not adequately covered by the WHO reference classifications.

## **2 Technical qualities of the classification**

There are certain characteristics of a good classification (UN 2001)<sup>15</sup>. These include:

- 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 should be stable, i.e. 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

Classifications in the WHO-FIC are consistent with these technical qualities.

### **3 Applicability of the classification**

Classifications in the WHO-FIC:

- are available, or could be made available, with consistent meaning in the languages of the WHO member states
- enable data derived from the classification to be of a standard suitable for international comparisons;
- are acceptable internationally
- are valid for the purposes for which they have been developed
- are able to be used reliably; i.e. there is inter-rater reliability and test-retest reliability in coding using the classification, and
- are supported by instruction manuals, coding indexes, tabular lists, handbooks and training.

WHO-FIC classifications should be relatively easy to use, unambiguous and well presented.

### **4 Ownership and support arrangements: responsibilities of Stewards**

For continued use, classifications need to be maintained, updated and revised. The responsibility for these tasks usually lies with the custodian or developer of a classification.

- WHO-FIC is dynamic and hence regular information dissemination and cooperation is essential between custodians of WHO-FIC classifications. Custodians should provide summary information on the classifications, covering Purpose, Classification Structure, Administrative Status and Reference Documents, for the WHO-FIC website. This will enable the systematic and efficient exchange of information among responsible agencies and the Network
- Current versions of each WHO-FIC classification should be provided to the WHO Classifications secretariat for reference by the WHO-FIC Network
- Custodians 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
- Custodians should 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 custodians take note of other classifications possibly affected by the change.

- There will be no changes to intellectual property status as a result of being included in the WHO-FIC.

## **5 Maintenance and update processes**

- The timing of updates and revisions should, if possible, be coordinated with custodians of all classifications in the WHO-FIC.
- Coordination of updates depends on keeping each other informed. The Network asks to be informed of the location of the persons, offices, or committees responsible for the preparation and/or maintenance of the classifications in the Family.
- The updating and revision process may be improved through the release of timetables for major work on the classifications on the WHO-FIC website, allowing those interested in the process to contribute at appropriate times. Similarly announcing the timings of hearings, updates, and revision meetings will ensure that valuable opportunities for direct dialogue are not missed.

## **6 Relations with the WHO Network**

- Classifications that are members of WHO-FIC will be recommended and promoted alongside WHO reference classifications as being an international standard for the purpose indicated
- Representatives of the custodian may attend Network meetings and become members of the Network. This allows them to engage with representatives of the Collaborating Centres, make presentations about the classification, and exchange information and improve relationships between reference, derived and related classifications in a coordinated and systematic way.
- The Network will advise its members 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.
- It is hoped that increased WHO-FIC membership will mean improved data for international comparisons on a range of health and social service issues.

## **7 Accessibility**

The WHO-FIC Network endeavors to make classifications 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 them available on the Internet.

- Custodians of classifications may work together with the relevant Reference Group or Committee to prepare guidelines for interpretations of classifications at the applied level and to develop guidance and training materials that make explicit the classification's relationship to the WHO-FIC.
- 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.

## **8 Resource implications**

Including a classification in the WHO-FIC should bring savings to users through readily available, internationally endorsed products to support health and related data collection.

Development costs may be met through contributions from WHO or other international bodies, member states or commercial organisations, or recouped through user charges.

Users should contribute to the development and maintenance of the classification where it is used to earn revenue or improve efficiency (whether in the private or public sector), eg, as a base for hospital reimbursement systems.

Capacity to pay should be carefully considered, especially where there is no revenue return from the use of the classification, eg, in national mortality statistics or national population surveys.

## **9 Derived classifications**

WHO-FIC reference classifications may be adapted for specific purposes to create derived classifications. For example, the ICF for Children and Youth (ICF-CY) is derived from ICF and the ICD for oncology (ICD-O-3) is derived from ICD-10. In making the adaptations the following provides guidance.

### **1 No deletions**

- The adaptation must not delete or move any category in the reference

classification, or delete or alter descriptions of categories, their definitions, inclusions or exclusions.

- For categories in the reference classification that are not applicable to the subject matter of the adaptation, it is acceptable to use a typographical convention (shaded type, smaller type, type in different font or colours) to identify categories that are not relevant or not applicable to the subject matter of the adaptation.
- If necessary, exclusions or inclusions may be added for the subject matter, suitably distinguished typographically from those originally in the reference classification.

## **2 No alteration of category name or description**

- Category names, their operational descriptions and inclusions/exclusions in the reference classification must be retained as they are.
- If a category in the reference classification is insufficient for the subject matter of the adaptation, then an additional category can be added. It is expected that the decision to add an additional category will be justified by evidence or expert consensus (the evidence or rationale for the additional category should be presented in an annex to the adaptation).
- If a new category is added, numbering should be preserved.
- If the definitions of categories in the reference classification are considered to be inadequately described for the subject matter of the adaptation, then additional description can be provided in a separate paragraph after the definition in the reference classification.
- Additional inclusions can also be provided if appropriate.
- All additional material should be typographically different and clearly identified as an addition.
- In no circumstance can reference category names, operational definitions, inclusions and exclusions be altered.

## **3 Retaining coding structure**

- When additional categories are added, their code numbers must fit into the logic of the hierarchy and follow the coding conventions of the reference classification. The reference classifications have available codes for additional categories. In some cases, where more code numbers are required than are available, it will be necessary to move down a level and use a single stem for multiple new categories.

## **4 Retain category name conventions**

- The naming conventions in the reference classification should be followed in the adaptation. For example, in the ICF, an effort has been made to ensure that category names refer to neutral functions rather than negative

problems with functioning. This rule should be followed in adaptations of the ICF.

- In addition category names should be short, clear, and free from embedded examples or other additional phrases.

**5 No alteration of text**

- Adaptations must utilise the same definitions, descriptions, explanations and all textual material found in the reference classification.
- Additional text describing the development of the adaptation, its need and uses, explaining its conventions, are appropriate, so long as this text does not conflict with or contradict the text in the reference classification.



## Attachment 2—Bringing a classification into the WHO-FIC

This attachment outlines a process for developing and nominating classifications to the World Health Organization Family of International Classifications. The process is managed by the WHO-FIC Network and involves the Classification and Terminologies Team (CAT Team) in WHO Headquarters, the Family Development Committee (FDC) and the Heads of Collaborating Centres.

For inclusion in the WHO-FIC a classification should be consistent with the principles that are included in Attachment 1. These principles are designed to provide guidance for a review of the quality of a classification.

It is expected that usually there will be two phases in the development and review of a classification; nominally alpha and beta. However, developers of classifications may seek the assistance of Network members at any stage, by contacting either WHO or the Secretary of the FDC.

### Steps to bring a classification into the WHO-FIC

Step 1	The Network is informed of the intention to either: <ul style="list-style-type: none"> <li>• develop a new classification, a derived or related classification. Alpha status nominated; or</li> <li>• bring an existing classification for consideration for inclusion in the family. Beta status nominated.</li> </ul>
Step 2 Alpha phase	Development and conceptual testing. Beta status nominated.
Step 3 Beta phase	Establishment of validity and reliability through testing in the field.
Step 4	Review of testing and full endorsement in the WHO-FIC.

## Alpha phase

During the alpha phase of development of a classification technical characteristics of the classifications, such as those outlined in Principles 1-3 should be considered. Other principles may be addressed as appropriate to the stage of development of the classification.

During the development of a new classification broad-based consultation and evaluation will 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. This might include providers of information to be classified, users of the information, researchers, academics, governments, and statistical agencies, WHO and the UN. Consulting with representatives of member states from all WHO regions can ensure that the classification is appropriate for 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 an alpha phase the classification will be reviewed by the FDC and referred to the Network meeting. If ready for the next step the classification will be granted beta status.

The FDC will aim to secure the necessary expertise to work with the classification developer or make recommendations to ensure the classification is fit for its stated purpose.

## Beta phase

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

A test methodology that is appropriate for the purpose and state of development of the classification should be constructed so as to demonstrate that the classification is fit for purpose based on use in the field.

Literature on the use of an existing classification may be used to demonstrate its applicability.

### 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 FDC and WHO-FIC Network may advise on an appropriate test methodology, if required, and possibly assist with identification of test sites. At the end of the beta phase the classification may be reviewed by the FDC and Network and presented to Heads of Collaborating Centres for endorsement in the WHO-FIC. This would occur at the annual network meeting in October.

## Documentation

To facilitate review of a classification and exchange of views and advice the following documents would be useful:

- 1 A copy of the classification and/or links to an electronic version
- 2 A paper demonstrating the way the classification has addressed the WHO-FIC principles.
- 3 A summary of comments from stakeholders and the way these comments have been addressed.

4 Summary information table (see below).

For derived classifications the following documents would also be useful

5 A track change version showing the new classes

6 Rationale for changes to the reference classification

### **Summary information for inclusion on the WHO website**

The following table may be used to summarise information that could help potential users who are not familiar with this classification. The table is formatted to be consistent with the international standard for metadata registries (ISO 2000) which should assist with inclusion of classification information in metadata registries.

The information will be used on the WHO website to inform interested persons about the nature of the classification.

**Summary information for inclusion on the WHO website**

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

SUBMITTING ORGANISATION

Person or organisation submitting the  
classification

Organisation name

Contact name

Contact information

## References

- 1 World Health Organization. International Statistical Classification of Diseases and Related Health Problems (10th Edition). Geneva, WHO, 1994.
- 2 World Health Organization. International Classification of Functioning, Disability and Health. Geneva, WHO, 2001.
- 3 WHO Collaborating Centre for Drug Statistics Methodology. Guidelines for ATC classification and DDD assignment 6th Edition Oslo: Norwegian Institute of Public Health. 2003.
- 4 Hoffman E, Chamie M (1999) Standard Statistical Classifications: Basic Principles. New York: United Nations.
- 5 International Organization for Standardization 2003. Health Informatics—Vocabulary of terminological systems (ISO/CD 17115) Geneva:ISO
- 6 WHO Working Group on Injury Surveillance Methods. (2000). International Classifications of External Causes of Injury (ICECI), version 1.0. Consumer Safety Institute, Amsterdam. Website: [www.iceci.org](http://www.iceci.org)
- 7 WONCA International Classifications Committee 1998. International Classification of Primary Care 2nd Edition. Oxford: Oxford University Press.
- 8 International Organization for Standardization 2005. Technical aids for persons with disabilities—Classification and terminology (ISO/DIS 9999) Geneva:ISO.
- 9 Canadian Health Information Roadmap <http://www.cihi.ca>
- 10 Australian Institute of Health and Welfare 2006. Australia's health 2006. Canberra: AIHW.
- 11 Shaping a Health Statistics Vision for the 21st Century. Final Report. <http://www.ncvhs.hhs.gov>
- 12 World Health Organization 2000. The World Health Report 2000 Health Systems: Improving Performance. Geneva: WHO
- 13 <http://unstats.un.org/unsd/class/family/default.htm>
- 14 Organisation for Economic Co-operation and Development 2000. A System of Health Accounts. Paris: OECD.
- 15 United Nations Statistics Division. UN Glossary of Classification Terms. [http://www.un.org/depts/unsd/class/glossary\\_short.htm](http://www.un.org/depts/unsd/class/glossary_short.htm)
- 16 International Organisation for Standardization. 2000. Information Technology – Metadata Registries – Part 6 Registration (ISO/IEC FCD 11179-6). Geneva: ISO