

# Known concerns about the ICD-11 Beta Phase

Given the varying interests of different user groups, ICD-11 Beta Phase is expected to generate different reactions. WHO seeks a scientific basis to ensure comparability and consistency and to allow flexibility of the tool to be fit for different purposes.

We have noted some concerns and criticisms, and these may be useful to provide solutions to problems.

## 1. ICD-11 Beta has too many innovations - stability of ICD 10 and previous versions will be discontinued.

During recent years ICD-11 has been developed through an alpha stage where new categories were added. Some old categories were retired. Some categories have changed their position in the classification tree. These changes were done by 24 different groups of selected scientific experts. We have maintained a complex mechanism of **tracking changes** which shows the additions, deletions and changes.

In addition, we continue to make a “Stability Analysis” to enable key users of ICD-10 to ensure that the code set that they used in ICD-10 is adequately represented in ICD-11 Beta. This is done systematically for two major use cases:

### i) Mortality:

There are about 2400 codes that are different from the ICD10 Code sets. 1100 are in the external causes and injury chapters, while 1300 are in other chapters. A stability analysis is under way to show the correspondence of the ICD10 Code set in ICD-11 Beta. Once this is complete, it will be announced and the Mortality TAG will approve the correspondence. When this is done, mortality users may further examine the correspondence via “bridge-coding” type of field trials which code the same set of cause of death using both ICD10 and ICD-11 to analyze any sources of discrepancy.

### ii) Morbidity

The major use of ICD is in Diagnosis-Related groupings. WHO is systematically comparing the changes introduced in the ICD-11 to the national modifications that exist in ICD10 CM in the United States of America, ICD10 AM in Australia, ICD10 GM in Germany and ICD10 CA in Canada.

Separate analyses are under way to show the correspondence of the ICD10 Code sets in each national modification to ICD-11 Beta. Once these are complete, it will be announced and the Morbidity TAG will approve the correspondence of the morbidity linearization for this purpose. When this is done, morbidity users may further examine the correspondence in field trials which code the same set of morbidity data using both ICD10 and ICD-11, to analyze any sources of discrepancy.

## **2. The work on fixing the ICD Structure is not finished yet.**

This statement is true. ICD-11 declares this as a caveat from start. The work to update the structure has been ongoing for the last five years. Given the multiple interests competing on the structure, the hierarchy of the classification will not be complete for every use case for today. Our priority is to finalize the Mortality and Morbidity linearizations in an interlocking fashion. We expect that drafting of TAG work will be completed by 18 June. The classification structure will then be reviewed systematically for the mortality and morbidity use cases. The Beta Phase was decided to start to enable more input by additional stakeholders. So far, the development was only open to a limited number of selected advisory groups. Beta Phase opens the process to more input. The balance between scientific accuracy and completeness will be continuously monitored by scientific peer review and other quality assurance methods.

## **3. The content in the ICD foundation and linearization is confusing.**

In the Beta browser participants may see more detail in “the foundation component” and this may be perceived as clutter. In fact this is a design feature, where a category may have multiple parents: e.g. a skin tumor is both a skin disease and a neoplasm. Linearizations will look tidier, as they will be leaner and their layout will look more like traditional ICD lists. Also as a design feature retired ICD categories from previous versions take place in the foundation – to account for their discontinuation. These are to be marked clearly by **a flag**. See: <http://www.who.int/classifications/icd/revision/betaexpectations/en/>

## **4. Beta is not a functional tool yet**

ICD-11 Beta has borrowed the terms “alpha phase” and “beta phase” from the software development field. Alpha has been used as the first phase where the development was limited to “in-house”. Beta is meant to be development open to “public”. As it stands today, the beta draft on the web site will not ready for use in some classical use cases for mortality or morbidity until the quality assurance steps are carried out. These are listed in 1 (i) and (ii) above. Once these are done, the Beta Phase will announce their availability and invite users to test the linearizations in function. Until then, the product is open to public only for comments, suggestions and review.

**5. The system is vulnerable to SPAM and distortions by advocacy groups who have vested interests**

We have taken reasonable steps to prevent spam or vandalism.

It may be true that some advocacy groups may give inputs in line with their vested interests or object to the listings in ICD-11 Beta. When such public controversy occurs, it is better to have it in an open and transparent discussion. Each contributor must register themselves and declare their interests.

**6. The ICD-11 Beta software system cannot handle social computing**

WHO aims to produce the ICD-11 with all necessary digital tools to enable others to use it in their systems as an international standard. Our aim was not to create an ICD-devoted social computing platform. Instead, we have a set of software tools in the ICD-11Beta as a “mash-up” for authoring, commenting, and reviewing purposes. Underlying this software system, we use unified resource identifiers which enable persistent representations of concepts.

It is planned to support this software development with other social computing sites such as Wikipedia, Facebook, Social Reader, Linked-in etc. so that we may reach wider audiences.

**7. It is premature to plan to go to ICD-11 when major applications for ICD-10 are not implemented.**

Currently there is a gap in the ICD-10 implementation world. Only 117 countries out of 194 report mortality data using one form of ICD to WHO despite the fact that there is an international health regulation since 1967. Some countries still prefer to use ICD9 and its modifications. For example, the transition from ICD-9 to ICD-10 for morbidity use is planned for October 2014 in the USA.

These implementation issues are context specific. For example, global implementation is dependent upon the existence of “vital registration systems” and country specific examples depend on their unique health information infrastructure.

WHO is managing a revision process to enable a scientific update of the classification scheme on the one hand (ICD10 was constructed between 1982-89 and was approved in 1990. In a sense we are using a 20-25 year old medical information standard). On the other hand, the emergence of information technology requires ICD to “interoperate” with electronic health applications – to be compatible with the Systematized Nomenclature of Medicine (SNOMED CT) and other terminology and ontologies.

**Here is a number of KNOWN PROBLEMS and ISSUES**

<http://www.who.int/classifications/icd/revision/betaexpectations/en/>

We would like to warn the Beta participants not to spend valuable time on problems that are already known and for which solutions are planned or in progress.

**The WHO Beta Team is poised to respond to additional questions and comments about the ICD-11 beta phase.** Please address your concerns to [icd@who.int](mailto:icd@who.int)