

# WHO Family of International Classifications Network Annual Meeting 2014

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Barcelona, Spain  
11 to 17 October 2014

## Executive Summary

### Abstract

The **WHO-FIC Network Annual Meeting** served to review the work within the WHO Family of International Classifications in line with the Strategic Work Plan of the Network. The meeting included 38 individual Committee and Reference Group sessions and 9 plenary sessions; and 3 Poster sessions.

The WHO-FIC Network Committees, namely the *Update and Revision Committee* (URC), the *Education and Implementation Committee* (EIC), the *Family Development Committee* (FDC), and the *Informatics and Terminology Committee* (ITC), together with the WHO-FIC Network Reference Groups, including the *Mortality Reference Group* (MRG) and the *Functioning and Disability Reference Group* (FDRG) conducted their annual meetings elected their new co-chairs and updated the **Strategic Work Plan for the WHO-FIC Network** (SWP) with a particular focus on the review of the results of activities of the past year and formulate the new activities for the year to come.

The *WHO-FIC Advisory Council* met for two half days during the week to review the SWP, and jointly discussed common themes. Dr Lars Berg and Ms Jenny Hargreaves are serving as co-chairs of the WHO-FIC Network. In accordance with the election rules, the **WHO-FIC Advisory Council** and the **Small Executive Group** (SEG) were reconstituted. The work of the Network and its committees and reference groups will continue, in line with the Strategic Work Plan, and will be monitored by the SEG, the WHO-FIC Advisory Council, and WHO.

The special theme of the WHO-FIC Network Annual Meeting in 2014 was “**Driving improvement in healthcare: from data to eHealth tools**”. Accordingly, main classification activities were reviewed from the digitalization perspective, including how to support WHO-FIC using digital tools and standards and evaluating their added-value. Classification standards on mortality, morbidity and on interventions are essential for the integration into the digital health applications.

**161 posters** on various WHO-FIC topics were presented and printed as a booklet, 30 were presented in special sessions and all were displayed throughout the meeting. Five posters were selected garnering special awards as a result of online voting by the meeting participants.

A special plenary session was included on ICHI: International Classification of Health Interventions that is being planned as a collaborative activity between WHO and American Medical Association to develop ICHI as an international reference classification.

The Annual Meeting discussed the **ICD Revision Process** in detail in a special plenary session including: the current state of the ICD-11 Joint Linearization for Mortality and Morbidity Statistics (JLMMS) and the two Primary Care Linearizations: SHORT and INTERMEDIATE for use in low-resource and medium-resource settings, comparability between ICD-10 and ICD-11, the added value of ICD-11, the transition process in WHO Member States, conducting the reviews for the ICD-11 linearization for mortality and morbidity statistics, conducting Field Trials for testing feasibility and reliability, special bridge-coding between ICD-10 and ICD-11, basic questions and, in particular, on mechanisms for producing ICD-11 in multiple languages as an international standard.

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## 1. Opening

The WHO Family of International Classifications (WHO–FIC) Network Annual Meeting was opened on 11 October with a welcome address from Dr. Argimon, Director AQUAS - Agency for Health Quality and Assessment, and the head of the proposed WHO-FIC Collaborating Centre in Barcelona, Spain; as well as from Dr Lars Berg, Co-chair of the Advisory Council of the WHO-FIC Network, and Dr Bedirhan Üstün, on behalf of the World Health Organization.

The meeting ran from 11 to 17 October, 2014, and included 38 individual committee and reference group sessions plus 9 plenary sessions, as well as a special session dedicated to the work plans of WHO-FIC Collaborating Centers (**Appendix 1: Agenda**).

The special theme of the Annual Meeting this year was “**Driving improvement in healthcare: from data to eHealth tools**”. Accordingly, main classification activities were reviewed from the digitalization perspective, including how to support WHO-FIC using digital tools and standards and evaluating their added-value. Classification standards on mortality, morbidity and on interventions are essential for the integration into the digital health applications.

161 posters on this and related topics were presented and printed as a booklet, with five garnering special awards as a result of online voting by the meeting participants. The lead author will be invited to the WHO-FIC 2015 Annual meeting. The winners of the poster award this year are as follows:

1. C214 – Activities of the WHO Asia Pacific Network (H. Endo; S. Kim; W. Paoin; et al.)
2. C507 – User requirements for a mobile ICF application (S. Snyman; O.K. de Camargo; J.Z. Gong)
3. C531 – Coordination program in the education-health interface for early childhood with special needs (D. Cid; E. Jimenez; G. Rojas)
4. C207 – Korean Collaborating Centre Annual Report (K. Park; S. Hur; S. Roh; T. Kim)
5. C508 – Developing a mobile application for ICF (P. Saleeby; C. Skykes; A. Martinuzzi; V. della Mea; et al.)

## 2. Participants

Over 250 international participants attended the WHO–FIC Network Annual Meeting, with representatives from 22 WHO–FIC Collaborating Centres and 4 Collaborating Centers under designation (P.R. China, Cuba, Spain and the University of Calgary), as well as representatives from Ministries of Health and National Statistical Bureaus from 5 other WHO Member States. WHO Regional Advisors from AMRO, EURO and WPRO were present at the meeting, this provided many opportunities to integrate regional and country work into the WHO-FIC Network Strategic Work Plan.

The **List of participants** is included as **Appendix 2**.

The WHO-FIC Advisory Council noted with particular emphasis the efforts to broaden the Network, with additional WHO Collaborating Centres with wider geographical coverage and an increase in the expertise of the existing Collaborating Centres for better implementation and quality assurance.



## Education and Implementation Committee

The Education and Implementation Committee elected Yukiko Yokobori (Japan) and Huib ten Napel (Netherlands) as new EIC Co-Chairs. The EIC secretariat function will be provided by Yukiko Yokobori. EIC members and WHO expressed their gratitude to the outgoing Co-Chairs Sue Walker (Australia) and Cassia Buchalla (Brazil) for their leadership over the past years.

For the SWP for 2015, the following activities and deliverables were agreed upon:

1. WHO-FIC Implementation database
  - a. Include information on new countries: In consultation Regional Advisers WHO HQ identify up to 4-5 new countries and focal points who populate and maintain their country profile in the database.
  - b. Establish mechanism to keep an existing country information on the database up-to-date. For countries with WHO FIC CC the official EIC members should serve as focal point to ensure that information is up-to-date.
  - c. Complete the migration for hosting the database from the Dutch CC website to the WHO website.
2. WHO FIC Training materials and tools
  - a. Establish a working group to assist WHO in the development of ICD-11 Training material for use in the ICD-11 Field Trials. The training should focus on acquiring basic knowledge and skills for coding with ICD-11 and should be code-set specific (mortality, primary care etc.).
  - b. Explore development of advanced modules of the ICF e-learning tool. The envisaged collaboration between WHO CTS and WHO Disability and Rehabilitation (DAR) Team
  - c. Translation and maintenance of the ICD-10 web based training tool and the ICF e-learning introduction module. WHO purchased licenses for a new e-learning authoring tool software (i.e. Articulate Storyline). The software will be made accessible to WHO FIC CC and affiliated institution involved in the translations ICF e-learning tool and other WHO FIC training material.
3. ICD Revision
  - a. Support ICD-11 development and Field Trial (FT) preparations through
    - i. Assist in the review of ICD- 11 Reference guide (Vol. II)
    - ii. Assist in the preparation and refinement of FT protocols and instruments
    - iii. Assist in the development of Case Summaries for coding

The detail of the work of EIC is in appendix 5.

## Update and Revision Committee (URC)

Over the course of two days the Committee reviewed 77 recommendations for updating the ICD-10 and 41 recommendations for updating the ICF.

### ICD-10 Updates

- 63 approved – this number includes those accepted with modification and the ones where no change to ICD-10 was required
  - 31 major updates
  - 32 minor updates
- 5 rejected or withdrawn – this number includes proposals that were rejected by the members and proposals that were withdrawn at the request of the submitting Collaborating Centre. Withdrawn proposals are deleted from the ICD-10+ platform. Rejected proposals are retained for future reference.
- 8 proposals held over for further work next year:
- 1 proposal is considered for ICD-11
- Highlights of major updates:
  - New codes for Multi-system atrophy
  - New precedent to add a web-link for the definition of pandemic or zoonotic influenza
  - New code for acquired hydrocephalus of newborn
  - Indexing of Haddad syndrome and Eagle syndrome

### URC-ICD Discussions

- Recommendations to the WHO-FIC council included:
  - A recommendation to delete ICD-O-3 codes and index entries from the 2016 edition of ICD-10.
  - a recommendation to have another major update to ICD-10 in 2019
  - a recommendation to update the on-line version of ICD-10 to minimize confusion when updates are proposed
- URC members received presentations of the mapping tool and the proposal mechanism for ICD-11
- There was an in-depth discussion of **the transition and synchronization** from updating ICD-10 to updating ICD-11.
  - URC will determine how long to continue updating ICD-10.
  - Frequency of updates to ICD-11 will need to be determined. The type of updates will need to be considered as well because there may need to be different timelines for major updates that affect statistics as opposed to minor corrections of errors.

### ICF Updates

- 41 proposals were brought to URC Closed Discussion Layer with recommendation for approval or rejection:
    - 19 were rejected;
    - 9 were held over for further discussion;
    - 5 were approved (4 with amendment) and then ratified during the meeting;
    - 8 proposals were discussed at the meeting:
      - 2 were approved (1 with amendment)
      - 6 were held over
- Thus 15 will be returned to the Open Discussion Layer for consideration in 2015.
- The URC agreed on the following recommendations to the WHO-FIC council:
    - a recommendation to update the on-line version of ICF

- a recommendation to produce and make available a PDF version of ICF reflecting all accepted proposals up to the end of 2014.

The details of the work of URC can be found in appendix 8.

## Mortality Reference Group

The Mortality Reference Group (MRG) met during sessions of the WHO-FIC Network meeting on October 11 and 15. About 50 issues were discussed, representing a range of kinds of issues and stages of development from those being presented for the first time to those that just needed confirmation that they were ready to be submitted to the URC. The MRG reviewed work completed since the mid-year meeting, continued ongoing discussions, and discussed new issues. A subgroup, the **Decision Tables group**, met on 10 October and discussed 50 issues mainly focused on the tables that are used in automated systems. Many of the decision tables are related to issues previously discussed in the MRG proper but other issues have been identified during work done in preparation for ICD-11. The MRG also met with the m-TAG during the WHO-FIC Network meeting sessions this year. In these sessions, topics focused on defining the way forward to address the tasks before the mTAG.

Highlights of the discussion were:

- ICD revision:
  - o Joint session with mTAG to discuss ICD-11 developments
  - o Discussion about what to use as an index
- Ongoing issues:
  - o Core international plausibility checks; assignment of code for failure to thrive; review if need to expand the trivial list
  - o International coordination (maintenance of automated software decision tables)
- Elections
  - o Lars Age Johansson and Francesco Grippo were elected as co-chairs
  - o Donna Hoyert will continue as secretariat
- Next meeting: mid-March 2015 Budapest, Hungary

The detail of the work of MRG is in appendix 9.

## Mortality TAG Work

The WHO-FIC 2014 meeting included three official mTAG sessions, two of which were combined with the morbidity TAG (MbTAG), and one with the Mortality Reference Group (MRG). All were attended widely with approximately 100 participants, highlighting the strong interest in the work of the horizontal TAGs from WHO FIC members and the WHO. The meetings focused on the **current status of the JLMMS**, key issues identified through chapter reviews and early trials, and the development of a road map for future mTAG (and MbTAG) work.

Major contributions to the development of the JLMMS were presented in the joint sessions by members of the mTAG and MbTAG. ICD11 chapter reviews by the mTAG and MbTAG were summarized by Kaori Yokoyama for the mTAG and Donna Pickett for the MbTAG. These were followed by Lars Age Johansson's presentation of the Nordic Centre's attempt to code a small sample of death certificates using the initial frozen version of the linearization. This presentation illustrated problems with coding for mortality purposes using the joint linearization. Bob Anderson outlined the time and work required to update the decision tables, an essential element for bridge coding.

In addition, the various mTAG and WHO-FIC meetings identified operational issues needed to improve operational efficiency of the mTAG, as well as activities to be undertaken as part of the

work program and recommendations on how this work can be progressed. These issues and activities, along with a rationale for each, are included in the document in the appendix.

To address the short time remaining before ICD11 is finalized and the magnitude of work remaining, the mTAG co-chairs proposed some basic operational principles to enhance future mTAG work. Implementing these principles will require additional support from WHO, including enhancing and structuring the overall work program to align with the ICD-11 revision plan, investigating options to advance the more challenging elements of the work program, and communicating results to the broader network.

The TAG suggested ICD-11 project plan should be enhanced to incorporate key tasks identified by the mTAG as part of finalizing the JLMMS. Improving the project plan will serve to highlight remaining tasks, manage/mitigate key risks or concerns, improve transparency of work being undertaken by various groups, and improve communication across key stakeholder groups.

The mTAG, MbTAG and WHO should work together on enhancing elements of the ICD-11 revision project plan to more fully capture the future work programs of the horizontal TAGs.

Given the significant resources required to address numerous elements of the future work plan, innovative and efficient approaches will be required to resolve issues and find solutions. Discussing these issues across the various work groups and WHO will help to identify new approaches or at least to fully document the tasks so additional resources can be sought.

Key elements of the mTAG work program should be discussed by relevant experts (mTAG, MbTAG, WHO and potentially others) to identify key requirements or outcomes sought, and then seek mutually acceptable solutions.

That the WHO collaborate with the horizontal TAGs to promote more widely across the network the participation in the work which is undertaken and the positive impacts this work has had on either the classification or the JLMMS.

There were some ideas raised during the WHO-FIC meeting regarding enhancements to mortality coding which can be made through the implementation of ICD-11. While the focus of the TAGs at this stage is on the basics of making the JLMMS fit for purpose for the production of statistics, ideas for improvements should be considered and documented. These ideas may impact on review or development work, and they may serve as a catalyst to increase engagement from the mortality data community.

The TAG recommended that a register of ideas/suggestions for enhancements to mortality coding and production of statistics be established to ensure that future ICD-11 revision work capitalizes on these opportunities wherever possible.

The detail of the work of mTAG is in appendix 11.

## Informatics and Terminologies Committee

The Informatics and Terminologies Committee had its annual meetings and reported its work in 2014.

Maintain platforms for WHO Classifications

- Maintenance of the ICD-11 browser which is used to browse and search the ICD-11 as it is being developed.
  - Addition of the proposal system
- Maintenance of the tooling that enables translation of the content of WHO classifications.
- Maintenance of the ICD-10, ICF browsers

Enhancement of the formal knowledge representation of WHO classifications and their linkages to related terminologies, including:

- ICD-11 content model and post-coordination
- WHO IHTSDO harmonization is continuing
- ICHI content model

Enable the electronic exchange of WHO classifications by providing necessary technical standards.

- ICD URI API and possible extension to other classifications

The detail of the work of ITC is in appendix 6.

## Functioning and Disability Reference Group

1. ICF Update and Revision Process
  - a. 84 proposals carried forward from 2013 were clustered into 26 proposals for more efficient review, with an additional 6 new proposals being added via the platform.
    - i) In the open discussion layer, only 11 proposals now remain
    - ii) Jennifer Jelsma will continue in her role of Update Proposal Moderator, and will be joined by Janice Miller. Janice replaces Marie Cuenot, who has successfully and very productively served as a moderator for the last several years, and who will remain a member of the IRG.
  - b. A suggestion was heard to immediately reject all incomplete proposals in order to streamline the process even further. Discussion was held and it was agreed that the role of the IRG includes verifying completeness and either recommending rejection or requesting further information, therefore the automatic rejection policy would not be adopted.
  - c. There was discussion about the fact that neither the browser nor the ICF text has been updated since 2001, despite 5 years of approved proposals. Everyone agreed, in principle, that an updated browser and text is highly desirable, while acknowledging the limitations that created this situation in the first place. A decision was taken that WHO will investigate if and how this can be done with the goal of having the updates by next year (an ICF 2015 draft), with Huib ten Napel, Lucilla Frattura, and Vincenzo della Mea.
  - d. Issues that could not be handled via the current update mechanism, but which may contribute to the eventual development of an ICF ontology were identified and quantified. These issues include:
    - i) Placement of codes- multi-parenting of codes
    - ii) Developmental sequencing – related to insertion of codes within existing codes
    - iii) Basic/complex: parent codes
    - iv) Function/expression of that functioning
    - v) Granularity
    - vi) Boundaries
    - vii) Temporality
    - viii) Special groups
2. ICF Education
  - a. FDRG completed a survey during 2014 to identify specific needs in terms of education about ICF. These results were presented to EIC with requests for action. FDRG is very happy to provide reference support to EIC in the development of education tools.
3. ICF Literature Review Criteria
  - a. Additional work was completed on the development of review criteria to determine quality when evaluating literature about or including ICF.
  - b. Testing of the criteria identified a need to improve the quality of the literature base on ICF topics, and it is hoped that the development of assessment criteria would encourage this improvement.
4. Electronic Data Capture using ICF
  - a. A two-day pre-Meeting workshop was held to determine the next steps which emphasized the need to collect data from frontline service providers to better inform development.
  - b. Work completed over the last year included collection of interim results of an ongoing, international, multi-lingual survey determining user requirements for the mobile app, among other things
  - c. Workgroups on future tasks include:
    - i) Finalizing specification for MVP [Stefanus Snyman]
    - ii) Research facilitation team [Olaf Kraus de Camargo]
    - iii) Literature review and ‘environmental scan [Trish Saleeby]

- iv) Pilot testing team (Round 1) [Brazil, Canada, Australia, South Africa]
  - v) Technical team [Stefanus Snyman & Olaf Kraus de Camargo]
  - vi) Facilitation Team [Stefanus Snyman]
5. International Classification of Health Interventions
- a. Progress has been made on ICHI including contributions from FDRG members in the development of functioning interventions
  - b. There are ongoing discussions about the future of ICHI development, including a potential partnership between WHO and the American Medical Association (AMA).
6. Additional Items
- a. Dr Andrea Martinuzzi and Ms Catherine Sykes were re-elected for another 2 year term as the co-Chairs of FDRG, and Mr Stefanus Snyman has graciously agreed to continue in his function as the FDRG secretariat.
  - b. The Strategic WorkPlan was again reviewed and updated.
  - c. A midyear meeting for FDRG is planned, though specific dates and the location are being confirmed. Options include May in Helsinki, Finland or Honolulu, Hawaii, USA, or June in Kigali, Rwanda or Budapest, Hungary. The dates and location are expected to be confirmed shortly.

The detail of the work of FDRG is in appendix 10.

## Functioning Topic Advisory Group (f-TAG) work

7. Mirror Coding
  - a. Work completed by Cille Kennedy and Haejung Lee was presented back to the group, with explanations of the methodology used and the outcomes.
  - b. The meeting broke into four work groups to address each one of the sections of mirror coding work done (e.g. paraplegia/tetraplegia, Intellectual development disorder, blindness, and deafness) so that additional opinions and feedbacks on the mirroring could be obtained.
  - c. Outcomes of the work group efforts were collected by Melissa Selb for collation and re-presentation back to C. Kennedy and H. Lee to continue to the next steps.
8. Former Z-codes
  - a. A reorganization was done of the former Z-codes which incorporated the feedback from the fTAG and the identified work group together with feedback from ICPC2 and new requirements for ICD-11.
  - b. This work was presented with a brief explanation of the outcome and goals for the new reorganization.
  - c. The meeting broke into four work groups to review the reorganization, give feedback, and to make specific proposals for changes and improvements to the reorganization.
  - d. Outcomes of the work group efforts were collected by Melissa Selb for organization and eventual submission via the ICD-11 Beta Proposal Platform.
9. Use Case Documentation
  - a. No feedback on the proposed Use Case Document was received following the Beijing meeting this year, so the document was re-presented with an additional call for feedback.
  - b. Feedback was received indicating that additional examples from presently un-represented areas could be incorporated, with a call for such examples to be provided by experts within the group with the appropriate knowledge.
10. Populating Functioning Properties (FP) in ICD-11
  - a. The 100 codes that were a priority given their “rehab relevance” have been fully populated using a combination of existing ICF Core Sets, clinical other expertise, reviews of exiting literature and assessment instruments, and, as a default, the Disability Set.
  - b. The populated FPs are visible in the ICD-11 Beta Browser, though there was feedback about how to make the representation and the search functionality more “user friendly”.
  - c. There was a call to develop coding rules for FPs which could be incorporated into the ICD-11 Reference Guide (formerly called Volume II) and a work group has been proposed to develop these rules over the next year.
  - d. Additional discussion related to the possibility of post-coordinating functioning properties as a way to allow for more detail and flexibility in the environments where such detail is desired was also held, with positive feedback. It will be necessary to discuss the potential for this with WHO before the next WHOFIC meeting with, ideally, a plan of work for how to implement in place if the decision is made to go ahead with the current suggestion.

The detail of the work of fTAG is in appendix 13.

## Family Development Committee

FDC made the elections for the co-chairs and Ms. Jenny Hargreaves and Ms. Lyn Hanmer were elected as co-chairs. The committee members and WHO thanked Mr. Huib ten Napel for his dedicated services as co-chair over the last four years.

FDC discussed the following issues:

- 1. Family development paper :** This item discussions on: Family of International Classifications: an updated definition, foundation and structure (Poster C702); Shared ontologies for the Family of International Classifications (Poster C704); Changing place of the International Classification of External Causes of Injury (ICECI) in the Family – by James Harrison. It was noted that the use of foundation component and logically derived linearizations will assist in the standardization and data exchange across classifications. For this purpose use and sharing of ontologies will assist greatly. WHO and the WHO-FIC Advisory Council agreed to formulate a framework for a common ontology as a common foundation for the member classifications of the Family. The relevant principles and their application will be formulated by FDC and ITC, in collaboration with the SEG and WHO. The approach will be complemented by a framework for the development of the family of classifications, developed by the FDC.
- 2. Principles for an international casemix classification system:** This item included presentations, selected posters and group discussion on: Principles for an international casemix classification system (Poster C405); ICHI- UNI-CBG International Casemix Grouper Feasibility test (Poster C608) and ICF use in casemix in Sweden by Ann-Helene Almborg and Lars Berg. It was stated that joint use of ICD and future ICHI will enhance the comparability of data for international case-mix systems.
- 3. Joint uses of classifications:** This item included discussion on “A first step toward ICD-ICF joint use” (Poster C502) – and consideration of future work. It was noteworthy that the additional explanatory power brought by ICF would enhance the utility of case-mix groupings.
- 4. ICPC and the Family of Classifications** (Posters C410, C411, and C438): In particular the collaboration with WONCA in the ICD Revision Process was addressed. Currently there are two members of WICC have been actively involved in the primary care working group together with the representatives of Sweden, South Africa and Thailand and have reviewed the two linearizations: (1) SHORT: for low resource settings; (2) INTERMEDIATE: for medium resource settings. The requirements set by WHOFIC network were: (a) ICD11 full version (JLMMS) and the primary care versions should be fully compatible so that the data between the primary care and other levels of care could be exchanged meaningfully; (b) the ICPC and ICD-11 PC versions should be compatible to the extent possible. The working group will continue to provide input in these directions. The contributions of WONCA and primary care national associations were greatly acknowledged by WHO.
- 5. WHO-FIC support for Universal Health Coverage (UHC):** Based on last year’s Annual Network Meeting theme FDC continued to discuss the Use of the Family of International Classifications to support performance reporting for Universal Health Coverage (Poster C703) together with the WHO paper “Monitoring Intervention Coverage in the Context of Universal Health Coverage” Ties Boerma et al, 2014. This session consisted of a series of short presentations from several WHO-FIC CC countries, each of which discussed UHC and the existing data collection activities available in that country, including the benefits of such activities and any limitations. These

presentations served to guide the discussion on how the WHO-FIC can best support UHC in the future.

#### **6. ICHI Development:**

ICHI work has been carried forward in previous years through huge efforts within FDC. A resolution was adopted in 2012 stating that ICHI, as a WHO-FIC reference classification, should be developed with full international collaboration, similar to ICD Revision, and with scientific review and field trials. The intellectual property rights of ICHI will be vested in WHO and should be freely available worldwide for non-commercial purposes. In the final stage, ICHI should be submitted to the WHO Governing Bodies to be endorsed as an international standard. FDC reviewed the following areas of ICHI development, updating progress since the midyear meeting in Chicago, USA, June 2014:

- Report from WHO/AMA Collaboration Groups ( Plenary presentation)
- Presentation on the ICHI Content Model ( Joint session with the ITC)
- Draft Paper on the relations of FDC and WHO-FIC Network to the ICHI development process.

#### **7. Other FDC discussions** included:

- Adaptation of the definition of ‘assistive product’ from a ‘health’ perspective (Poster C536)
- How to expand ICF Environmental Factors (EF) starting from ISO-9999 Classification: toward a “hybrid” standard terminology (Poster C528)
- Classifying disability services activities and workforce in the 21st Century: applying ICF to ISIC and ISCO (Poster C537)
- Harmonizing Healthcare Terminologies with the ICNP (Poster C708)

The detail of the work of FDC is in appendix 7.

## Morbidity Topic Advisory Group (MbTAG)

Mb TAG discussed the following issues:

### **Review of the Joint Linearization for Mortality and Morbidity Statistics:**

Mortality and Morbidity TAG have reviewed 13 out of 23 ICD Chapters for overall structure and general issues that has pertained since the revision process started which were communicated to WHO and Topic Advisory Groups to consider in their revision process.

Following the 2013 Annual Network Meeting in Beijing, WHO had organized another meeting with the mortality and morbidity TAG representatives to build the “Joint Linearization for Mortality and Morbidity Statistics” (**JLMMS**). JLMMS consist of “stem codes” which are necessary for mortality and morbidity statistics. Some stem codes may never be used for mortality but for the benefit of a common code-set this is an accepted feature. In addition, mortality coding will remain only at stem code level (equivalent to 4 character codes in ICD10, all pre-coordinated, without post-coordination). Morbidity coding, however, may utilize post coordination where needed such as laterality, further anatomic detail, temporality, severity etc. Some former ICD codes can only be expressed as post-coordination in ICD-11 and for ICD-10 to ICD-11 equivalence WHO focuses on these to maintain the stability between 10 and 11.

WHO presented the **stability program** in two output formats: excel format transcoding between 10 and 11 and detailed cross-walk (correspondence) at the foundation level. Using these two different users may convert their data sets between 10 and 11 to test the stability. Mortality and morbidity groups will check the accuracy and relevance of these stability tools.

Review of **national linearizations** to ensure content coverage in ICD-11 was discussed. WHO had contracted Australian and Canadian Collaborating Centers to carry out “stability analyses” between the ICD-11 and their corresponding national modifications/adaptations. Other national modifications (e.g. USA, Germany, Thailand) could also be testing in the same way. The coverage and gaps were discussed and recommendations were made to have the full compatibility.

The **architecture of the ICD11 Foundation** and linearizations allows “telescopic principle” such that various more detailed classifications such as “specialty linearizations” or “national modifications” could be rolled up to the JLMMS. This is seen as a useful feature for exchange of data. If possible the same principle for Primary care short and intermediate linearizations will be implemented.

The work on the **extension codes (X chapter)** was presented both in terms of concepts included and the iCAT tool to use it in post-coordination in the ITC session. While it was seen as an improvement in principle, the use of extension codes needs more clear work and guidance. Current incorporation in the browser and the tooling for selection of codes for multiple aspects being added to the same stem code needs to be specified.

**Morbidity coding rules** also need to be updated. The group had already agreed that the main condition should be the reason for admission after study. The currently written rules in the reference guide were discussed: When the patient has multiple reasons for admission, how should the main condition be selected? Most resource intensive? Most clinically important? Whichever one the healthcare practitioner wants to select? The group felt consensus on a single approach when there are multiple reasons for admission might not be able to be reached. Perhaps the definition in volume 2 should identify the various possible approaches if there are multiple reasons for admission, and the definition that was used could be identified by Type II extension codes (flags for the diagnosis type) in X chapter.

In the **field trials**, the definition of main condition could potentially be tested, to see if it is true that 90% of the time reason for admission and most resource consumptive are the same. Additional questions the Quality and Patient Safety TAG have raised include lack of consistent definitions around provisional diagnosis, differential diagnosis, rule out diagnosis – and the fact that these diagnoses are defined differently in different countries. This TAG would also like to see identification of diagnoses confirmed by different methodologies.

The detail of the work of MbTAG is in appendix 12.

## 4. Plenary Key Theme: “Driving improvement in healthcare: from data to eHealth tools”

The special theme of the Annual Meeting was “Driving improvement in healthcare: from data to eHealth tools”. Accordingly, the participants presented and discussed the various aspects of digitalization of health care using WHO Family of International Classifications. The coding practice is increasingly automated and digital applications are increasing their accuracy, quality and analytical potential.

In particular the local applications from Barcelona, Spain included various concrete uses of digital health tools in a Plenary session chaired by **Jordi Martínez-Roldán** Head of Innovation, Fundació TICSalut, Catalan Health Department, Spain; followed by a key note by: **Ferran Sanz** Head of Integrative Biomedical Informatics, GRIB, IMIM- Professor of Biomedical Informatics. The presentations included:

- **Ariadna Rius** – “Clinical Dictionary for iSalut”
- **Lluís Cirera Suárez** – “Medical self-training in Death Certification – The Certifica website”
- **Xavier Pastor** – “Automatic diagnosis coding over natural language processing over the emergency discharge reports of a University Hospital in Barcelona”
- **Mireia Fàbregas** – “EQA: indicators to improve quality of care in primary health care”
- **Sara Laxe** – “Case of use implementation of the International Classification of Function, Disability and Health (ICF) core sets for Traumatic Brain Injury (TBI), stroke, and Spinal Cord Injury (SCI), in comprehensive management of neurological disability”

All the meeting presentations are available on the meeting web site.

## 5. ICD Revision Sessions

The WHO-FIC network discussed the ICD Revision in terms of (1) Work in Progress, and (2) Future Work. The first session (Chairs: Jenny Hargreaves, Chris Chute) included presentations on the **current state of ICD Revision:**

- The ICD-11 Joint Linearization for Mortality and Morbidity Statistics (*Volume I*)
- The Reference Guide: Coding rules for mortality and morbidity (*Volume II*)
- The work on Index (*Volume III*)
- Comparability of ICD-10 and ICD-11: the stability programme
- Reviews for the ICD-11 JLMMS
- Preparing Field Trial core study protocols (i.e. feasibility and reliability, special bridge-coding studies between ICD-10 and ICD-11, basic questions)
- Mechanisms for producing ICD-11 in multiple languages as an international standard.

The **remaining tasks** for the Revision Process were outlined as:

- Review mechanism: Checking linearizations, errors, omissions, accuracy, etc.
- Handling conflicts between horizontal and vertical TAGs
- Finalization of the Volume II
- Production of the Index, both print and digital and development of a CODING TOOL
- Transition preparations in WHO Member States, including transcoding tables and tools
- Piloting and implementing Field Tests, including tests for bridge-coding for JLMMS

- Using the Post-coordination and finalizing the sanctioning tables
- Harmonization of ICD-10 updates and the ICD-11 revision process, timelines, etc.
- Arrangements for country-specific National Linearizations and other Specialty Linearizations

**Discussions from the WHO-FIC Network** addressed the overall status of the ICD Revision Process: the creation of JLMMS was seen as a positive step however there remained some unresolved issues:

- **The current index** had **critical omissions** in terms of ICD-10 content, in particular, unspecified codes, hence was not seen as ready for use in field trials;
- WHO should provide the complete list of **extension codes**.
- A **stable version** of ICD-11 is needed for review. Version control for successive changes in the ICD Beta platform is needed
- A review of the **transition requirements** in Member States is advisable to support implementation
- **Coding rules** should be finalized: main diagnosis, timing, and clustering are essential
- Inclusion of **functioning properties** and **joint use of ICD and ICF** is of large benefit to end users

Many participants who needed to translate the ICD into their languages stated that the time for the remaining tasks is not sufficient to finalize the content, translations, and field tests, even with the **extension to 2017**.

- **Collaborating Centers** should be actively engaged in reviewing and testing the classification, as well as in support for training, implementation rules, and applications using this classification
- **Multi-lingual** presentation of the ICD is essential.
- A **Primary Care Linearization** will be required for wide scale application
- **Compatibility** between different USES of the classification should be assured, such as mortality, morbidity, primary care and research versions.
- Stressing the need to give countries currently not involved in the development of the ICD-11

WHO Secretariat announced that there will be an external team of selected consultants to make an interim review of the ICD Revision Process to address these concerns and others stated by different stakeholders to gather the input from all stakeholders and to sort out the basic issues before WHA approval. The external consultants were Rosemary Roberts, Marjorie Greenberg and Helene Richardsson. They will conduct more detailed interviews with the stakeholders and report back to WHO. Their report is expected by April 2015.

## 6. Plenary Session on ICHI

To inform the WHOFIC Network about the ongoing proposed collaboration plan between AMA and WHO to further develop the ICHI as an international reference classification within the WHOFIC a plenary session was organized:

- |                                   |             |
|-----------------------------------|-------------|
| 1. WHO perspective                | Ustun       |
| 2. AMA perspective                | Musacchio   |
| 3. ICHI work to date              | Madden      |
| 4. Computer requirements          | Musen       |
| 5. Content Model                  | Tu & Nyulas |
| 6. Conclusions Question & Answers | All         |

There are well established international classifications for diseases, and disability and functioning, but not for health interventions. An International Classification of Procedures in Medicine (ICPM) was published by WHO in 1978<sup>1</sup>, but was not maintained. Various countries and organizations have since developed their own classifications of health interventions for use in health statistics, national casemix financing systems, as well as in research, quality improvement, and broader health system financing. Heterogeneous national classifications result in duplication of effort and lack of comparability. Countries need a comprehensive and scientifically credible classification of health interventions in order to adequately measure the quality and financing of their health systems, or equitability of access to health services. Furthermore, many countries have no classification available. ICHI will fill this gap, and complement WHO's existing reference classifications.

In 2007, the WHO-FIC Network of WHO Collaborating Centers began developing ICHI, under the coordination of WHO. The ICHI-Alpha version was produced in October 2012 after which the WHO has entered into a collaborative process with American Medical Association (AMA).

The scope of ICHI is encompassing all types of health interventions. Therefore, ICHI includes interventions across all sectors of the health system, covering acute care, primary care, rehabilitation, assistance with functioning, prevention, public health and ancillary services. Interventions by all types of health care providers are intended for inclusion.

A health intervention is defined as an activity performed for, with or on behalf of a person or a population whose purpose is to improve, assess or modify health, functioning or health conditions. Practical applications of ICHI (i.e. use cases) may include:

- Capturing health interventions at individual and population level
- Billing and reimbursement for health interventions
- Casemix ( combination of diagnosis and intervention) applications
- Patient safety and quality indicators
- Outcome studies
- International comparisons
- Monitor progress in achieving WHO's Universal Health Coverage initiative

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<sup>1</sup> World Health Organization. International Classification of Procedures in Medicine. Geneva: World Health Organization; 1978.

WHO and AMA intend to collaborate to develop ICHI in order to show global leadership in healthcare information innovation through the development and distribution of integrated, ontology-based terminologies to expand interoperability and analytical applications of clinical data.

WHO and AMA are planning to work together in the development of computerized representations of health intervention code sets. ICHI development project would encompass:

- a. Development of the ICHI Ontology Structure; which is defined as any health information organization model which identifies the parameters with their relevant attributes and standard value sets for purposes of establishing the Ontology Content. Ontology Structure, also named as Content Model, will contain parameters and value sets such as Name, inclusion, exclusion, definition, Target, Axis and Means.
- b. Development of the ICHI Ontology Content, organized in conformance with the ICHI Ontology Structure. Ontology Content refers to any health information code set or portions thereof consisting of concepts, terms and definitions that has been particularly organized in reference to an Ontology Structure.
- c. Creation of the Foundation Component to serve as the database for the ICHI Ontology Content.
- d. Field-testing the ICHI Ontology Content in real health care settings for its applicability, reliability, and utility.
- e. Development and provision of the Collaborative Authoring Tool and Foundation Component, for the creation, maintenance and continuous updates of Linearizations, including ICHI Final and ICPT. Collaborative Authoring Tool is a software application operating on the related web-based platform which is to be created by the Ontology Contractor. WHO shall enter into an agreement with an Ontology Contractor who will develop the ICHI Ontology Structure and the Collaborative Authoring Tool, and will configure ICHI Ontology Content which will be hosted in the Foundation Component.

WHO's prior work on the development of ICHI Alpha and AMA's prior work on the development of CPT will be leveraged in building the ICHI Ontology Structure and will be included in the ICHI Ontology Content to support the future Linearizations, such as ICHI Final and potentially ICPT. ICHI code sets can be linked to other classification systems, such as ICD and ICF, providing a fully integrated international healthcare classification system.

The project plan defines all project phases and their corresponding timeframes, with activities to be performed in order to meet the objectives. It hereby provides a calendar for the stream of work with its tasks, milestones and deliverables throughout the project period. The scope of the Project Plan will be reviewed and assessed by the Expert Consultation Group (ECG) and the Joint Coordination Group (JCG) annually.

A draft budget was presented. During the Project Period, AMA shall provide WHO with certain funding in support of WHO's actual expenses in the development of the Collaborative Authoring tool, ICHI Ontology Structure and organization of the ICHI Ontology Content in the Foundation Component.

## 7. Closure of the Meeting

The WHO-FIC Network Annual Meeting 2014 proved effective and useful in bringing together the different aspects of the WHO-Family of Classifications and its Network. WHO and the WHO-FIC Advisory Council thanked the Agency for Health Quality and Assessment (AQuAS) for the excellent organization of the meeting.

The 2013 meeting continued to be more efficient with clear mechanisms, evidencing the graceful evolution of the Network and the Annual Meeting over the years. Participation of Regional Advisors is greatly appreciated, and adds significant value to the discussion about implementation of the WHO-FIC.

Focus and emphasis on the Strategic Work Plan has shown itself to be an essential tool for monitoring and evaluation of the work of WHO-FIC Network. The WHO-FIC Advisory Council and WHO would like to discuss, individually, with each Committee and Reference Group before the mid-year Council Meeting ways to improve the Strategic Work Plan and to identify a streamlined list of priorities (3-5 in each area). This review will focus on alignment of the objectives and identification of the concrete targets, deliverables, and resources, while providing a results-oriented framework for continuous evaluation.

The posters have proven to be a very useful way of presenting various topics and they have clearly improved the reporting on the multiple streams of work. The provision of the electronic submission platform was extremely useful. WHO and all participants thanked the ITC and the Italian Collaborating Centre for this work.

All Committees and Reference Groups were asked to submit their plans for mid-year meetings with the following results:

- MRG and mTAG will meet on 15-20 March in Budapest.
- EIC and FDRG will meet from 3 to 7 June 2014 in Helsinki
- URC and ITC will not organize mid-year meetings in 2015.

The Advisory Council will meet in May 2015 via a Net Meeting (WebEx) with the Network Co-Chairs in Geneva. Other WHO-FIC Council Small Executive Group Members and Chairs of the Committee and Reference Groups are welcome to join in person at their own cost.

In 2015, the WHO-FIC Network will meet from 16 to 22 October in Manchester United Kingdom. The meeting will be hosted by the WHO Collaborating Centre in collaboration with WHO/CTS.

The WHO-FIC Network Annual Meetings for 2016 and 2017 are scheduled to take place in Tokyo, Japan, and Mexico respectively.

All References to committee reports are published on the website of the 2014 Annual Meeting of the WHO-FIC Network: [www.who.int/classifications/meeting2014](http://www.who.int/classifications/meeting2014)

## **WHO-FIC Network Annual Meeting 2014 Report Annexes**

- **A001 - WHOFIC Network Annual Meeting – Agenda**
- **A002 - WHOFIC Network Annual Meeting – List of Participants**
- **A003 - Committee and Reference Group Membership**
- **A004 - WHO-FIC Network Strategic Work Plan**
  
- **A005 - Education and Implementation Committee**
- **A006 - Informatics and Terminologies Committee**
- **A007 - Family Development Committee**
- **A008 - Update, and Revision Committee**
- **A009 - Mortality Reference Group**
- **A010 - Functioning and Disability Reference Group**
- **A011 - Morbidity TAG Report**
- **A012 - Functioning TAG Report**