

**WHO-FIC Network Annual Meeting 2017**  
**Education and Implementation Committee (EIC)**  
**The World Trade Center, Mexico City, Mexico**  
**Thursday, October 19, 2017**

**Session 1: 9:30-11:00**

1- Welcome and Introductions

Huib Ten Napel and Yukiko Yokobori, the EIC Co-Chairs, welcomed participants to the first session of the EIC. All participants briefly introduced themselves.

2- Review of agenda

The proposed agenda was accepted without modification.

3- Minutes of EIC teleconference on September 4, 2017

The minutes of the EIC teleconference on September 4, 2017, were briefly reviewed and approved.

4- Update on EIC Strategic Work Plan (SWP)

Yukiko highlighted the latest proposed changes to the EIC SWP based on a digest version of the SWP, as follows:

EIC SWP-01 WHO-FIC Implementation Database – Tasks added to make the questions in the database simpler, clearer, and more user-friendly, and to create a list of focal points and persons actually entering data in the database.

EIC SWP-02 ICD-11 – Tasks added to support development of ICD-11 education and training materials and a transition and implementation guidance package.

EIC SWP-03 Education in general – There is no proposed changes for this task.

EIC SWP-04A WHO-FIC training tools – Pilot testing of the ICF e-learning tool added as a new task.

EIC SWP-04B international exam for morbidity (mortality) coders – A survey of recertification systems added to the tasks.

The EIC SWP will be further updated after this and the next session of the EIC and submitted to the Council for approval.

5- EIC SWP-01 WHO-FIC Implementation Database

5.1 Update on WHO-FIC Implementation Database

Huib gave an update on the WHO-FIC Implementation Database. The EIC makes annual calls on WHO Regional Offices (ROs), WHO-FIC Collaborating Centres, EIC members, and other focal points to enter or update their data in the database, with a goal to gradually expand regional coverage. The User Guide is also continuously improved based on user feedback.

For the 2017 update cycle, 23 countries and regions updated their data in response to three calls made between June and September 2017, and three new focal points were identified in three countries.

Updates: Australia, Bermuda, Canada, Cyprus, Dominica, Ethiopia, France, Grenada, Iceland, India, Italy, Japan, South Korea, Mozambique, the Netherlands, Norway, South Africa, Spain, St. Maarten (NL), Sweden, Thailand, Turks and Caicos, U.S.A.

New focal points: Benin, Congo, and Kenya

Considering that the old ICD implementation database contained varying levels of data of 145 countries and that focal points have been identified in 106 countries, the current status of updating is viewed as inadequate. Recognizing that complexity of the questions in the database may be deterring countries to enter their data, EIC is working on making the questions simpler and clearer. A workshop in the next EIC session will also address this issue.

Huib requested all Collaborating Centres and other focal points to log into the database at least once even if last year's information remains current, so that he can see from the log-in data that the information in the database has been checked.

### Discussion

Sue Walker suggested distributing a list of focal points to EIC members so that they can advise EIC about focal points who are no longer active in their countries from job transfers and other reasons. It was agreed to distribute the list of focal points to EIC members when distributing these minutes.

Matilde Leonardi, the Co-Chair of the Functioning and Disability Reference Group (FDRG), asked how FDRG might support population of information on ICF implementation through its own efforts to collect information on the use of ICF and WHODAS through a bottom-up approach. Huib suggested reviving the now defunct ICF-INFO platform to collect ICF implementation data directly from the people active in ICF implementation.

Action Point: EIC Secretariat to distribute to EIC members a list of WHO-FIC Implementation Database focal points together with these minutes.

AP: EIC to explore collaboration with FDRG on better ways to collect ICF implementation data.

## 6- EIC SWP-02 ICD-11

### 6.1 Update on ICD-11 field testing and implications for ICD-11 education work

Nenad Kostanjsek, of WHO, provided an overview of the status of the ICD-11 field trials (FTs) as follows:

- Generic line coding for morbidity: conducted in 21 countries with more than 600 raters providing 60,000 code assignments. The field trials have also been conducted in Spanish-speaking countries using ICD-11 translated into Spanish.
- Generic case coding for morbidity: conducted in 20 countries with more than 200 raters providing nearly 5,000 code assignments. Case coding will also start in Spanish-speaking countries.
- Specialty areas: Field trials have been conducted in such specialty areas as dermatology, quality and safety, and traditional medicine. A number of German medical associations have also organized field trials in specialty areas.
- Line coding for mortality: Line coding conducted for mortality. Field trial involving underlying causes of deaths will start in collaboration with the Mortality Reference

Group (MRG).

The ICD-FiT platform for the FT has been improved, including development of a better case coding interface, integration of modules on statistical evaluation and reporting, and customization for specific testing protocols.

Issues identified from the field trials have led to improvement of the classification and the ICD-11 tooling environment, including incorporation of missing index terms and post-coordination axes, tooling facility to enable greater specificity in coding, a coding tool facility to automatically switch a post-coordinated concept into a pre-coordinated concept where a pre-coordinated concept is available and more preferable for coding, and a search function for post-coordinated terms in the coding tool.

An issue identified from the FT was a need for education and training to address disparity in code assignments due to coder oversight of instructions that could not have been prevented despite the tooling environment. Nenad explained that the feedback from Collaborating Centres and the working group on ICD-11 education materials in this and the next EIC session will inform development of WHO's training strategy for ICD-11 and the preparation of ICD-11 training materials.

EIC will also be expected to take part in reviewing the ICD-11 training materials. Another activity envisaged is the transformation of ICD-FiT into an implementation and quality assurance self-coding platform.

### Discussion

Matilde suggested that the FTs should also cover testing of the functioning patterns of ICD-11 and training in the use of the functioning patterns.

Hude Quan asked whether the FT results have been analyzed in relation to language competency and other coder attributes. Nenad replied that language competency was certainly an issue when non-English speaking countries are using the English version of ICD-11 for the FT, and suggested that cross-tabulation analyses could be performed using coder profiles and language competencies.

### 6.2 Feedback from FT on training issues encountered and recommendations for development of ICD-11 education materials

Collaborating Centres that took part in the field trials for ICD-11 provided feedback on key education and training issues and recommendations for development of ICD-11 training materials.

#### (1) Canada (Denise Cullen)

Scope: Eight classification experts provided more than 3,000 code assignments on the ICD-FiT platform.

Preliminary training: No formal training was provided. The FT was taken as an opportunity to increase the specialists' capacity in ICD-11.

Issues: Positive overall experience. There was general agreement in code assignment, but clustering and post-coordination proved to be a challenge. Raters began to improve over time after gaining familiarity with the browser and coding tool. While the Reference Guide was found to be a comprehensive, informative document, it could have more specific examples for more complex coding scenarios. The coding tool opens a new window for displaying search results, which could become cumbersome when too many windows are open at the

same time.

Recommendations on training materials: Video and other interactive materials would be a plus. Canada will benefit from more formal and comprehensive ICD-11 training.

(2) Australia (Brooke Macpherson, Sue Walker)

### *Morbidity*

Scope: Australia participated in the FT line coding for morbidity, with 49 raters providing 4,227 code assignments in ICD-10 and ICD-11 for Mortality and Morbidity Statistics (ICD-11-MMS).

Preliminary training: Modified education modules on ICD-11 overview, the tooling environment, and post-coordination/clustering mechanism; a mandatory 1-hour education webinar; and mandatory completion of practice cases on ICD-FiT demo site. It was particularly important for raters to take as many practice cases to demonstrate competent understanding and use of post-coordination and clustering in advance.

Issues:

- Post-coordination and clustering requires careful explanation and practice to be used correctly, and to its full potential (huge safety and quality use case).
- Rules for ordering codes would be useful and whether any code limits apply.
- Coding guidance is crucial.
- Injury and external cause coding needs clarification as to changes between ICD-10 and ICD-11.
- More practice examples required.

Recommendations on training materials:

- Practice cases from each chapter, with agreed answers and rationale as to the answers.
- Development of coding guidelines or standards – minimum standard for international use.
- Very carefully worded education on:
  - ✧ The difference between stem and extension codes and their applications, especially each type of extension code;
  - ✧ Post-coordination, especially when the browser does not have this function – and whether this means post-coordination should be used with this code or not;
  - ✧ Coding harm and how this differs from external cause coding; and
  - ✧ Coding functioning and examples of how and why this may be applied.

### *Mortality*

Scope: Seventeen raters from 10 countries participated in the mortality line coding, using an international test deck of 1,000 most common cause-of-death terms in death certificates.

Issues:

- Most issues raised are minor (easily addressed) but important.
- Several issues related to the lack of specificity in mortality terms and unclear placement for NOS categories.
- Issues finding an appropriate code using the coding tool; ambiguity in code selected (inclusions/exclusions/overlaps); appropriateness of code (placement/implications for sequencing).

Recommendations on training materials:

- In operationalizing ICD-11, need to use field trials to build experience with ICD-11, highlighting how structural changes impact on existing practices and opportunities to use extended capabilities and guiding decisions on potential changes to coding rules or alternatively opportunities to extend data use through better tabulation or data analysis.
- The experience will feed into future development of educational materials.

### (3) PAHO countries (Vilma Gawryszewski)

Scope: Forty three experienced morbidity coders from six Latin American countries and Barcelona participated in coding all three batches. It was the first FT conducted using a translated version of ICD-11.

Preliminary training: Three virtual sessions to familiarize participants on (1) new features, (2) ICD-11 web tools, and (3) how to code in ICD-11. Collaborating Centres provided additional training in their countries as needed. For the third batch, one virtual session using the Guidance for coding post-coordinated categories and WHO training material. FT training materials were translated into Spanish. Collaborating Centres also provided their own training materials.

Issues: It was sometimes uncertain as to whether coding errors were due to ICD-11 or to the translation.

### (4) CARPHA - Caribbean Public Health Agency (Angela Hinds)

Scope: Twenty two raters from seven English-speaking Caribbean countries participated and provided 5,617 and 915 code assignments for Study 1 and 2, respectively.

Preliminary training: Virtual session on (1) overview of ICD-FiT system, (2) ICD coding, and (3) FT requirements.

Issues: (1) Technical problems associated with accessing the virtual training sessions; (2) high dropout rate between Study 1 and 2.

Recommendations on training materials:

- Blend of face-to-face with virtual sessions to discuss case studies or any other issues.
- Guidance to Trainers for replicating training in-country.
- Create a local and international Users Group forum to discuss hard to code scenarios.
- Platform for sharing learning materials developed by various institutions.
- Morbidity and Mortality Coding certification in an effort to stem job turnaround of coders.

(5) Japan (Hiroshi Mizushima, Yukiko Yokobori)

Scope: In Japan, 378 raters provided 37,190 and 3,284 code assignments for line coding and case coding, respectively.

Preliminary training: Basic video training and two face-to-face training sessions. The number of raters participating in the face-to-face sessions, however, was small.

Issues: As Japanese coders were not used to working in English, language was an issue. Japanese translation of ICD-11 and the coding tool should improve coding. More training is needed before entering into the second round of FT.

(6) Korea (Seolkyung Baek)

Scope: Eleven raters (six coding experts and five traditional medicine (TM) physicians) participated to provide 368 code assignments for the line coding, case coding, and TM chapter coding.

Preliminary training: Offline and online training sessions were provided. In addition, teleconference was organized for the TM physicians.

Recommendations on training materials:

- Precise, detailed training manual and coding guide needed for understanding new features and concepts of ICD-11.
- More case examples should be added to the training manual for consistent coding.
- PowerPoint and video training materials beneficial to increase effectiveness of education.

(7) Calgary (Cathy Eastwood, Hude Quan)

Scope: Six certified coders in Canada participated in coding 3,000 charts already coded in ICD-10 with an aim of looking at quality of coding in ICD-11 compared with ICD-10.

Preliminary training: 20-hour classroom instructions and four assignments of coding scenarios. Training materials, test bank questions with answer keys, guidelines to augment the Reference Guide, and a decision tree were provided.

Issues and recommendations:

- Need updated coding standards, guidelines, and rules.
- More clear explanation in the definition on what is included and excluded would be helpful to guide coding decisions.
- Too many hits on the coding tools – need more precision.
- Develop automated system of coding scenarios to provide instant feedback of correct codes so that coders can learn as they go.
- Start with simple coding scenarios with increasing complexity.
- Develop decision-support software on when a condition is a harm or not.
- Have a shared network, online forums – being able to discuss with other coders is invaluable.

#### (8) Germany (Ulrich Vogel)

Scope: Testing of ICD-11 in multiple disciplines with support of multiple German medical associations with funding from the government.

Preliminary training: 1-day general familiarization with ICD-11 provided in a train-the-trainer approach. The trainers became consultants for coders.

Issues: Positive overall experience. No need for general revision of the ICD-11 beta version, but room for further corrections and modification along medical knowledge.

Recommendations on training materials:

- Substantial training required on the new structure and architecture of ICD-11 and major changes within chapters.
- More worked-out guidelines needed, particularly for post-coordination and cluster coding.
- Should have both electronic training material and printouts.

#### (9) Nordic (Olafur Steinum)

Scope: Twenty eight raters from Australia, Canada, and Nordic countries participated in the first part of line coding, providing 6,184 code assignments to date out of 8,624 assigned.

Issues:

- Shares the same enthusiasm for ICD-11 and positive experience as other countries.
- The line coding exercise showed marginally better coding agreement for ICD-11-MMS than for ICD-10.
- No systematic differences between countries detected. No systematic difference between doctors and coders detected.
- Short line text is an artificial environment for morbidity coding. Normally there is access to more information. Many assumptions were made by raters.
- Creating unambiguous line texts for testing is difficult (ex. hemoglobin low, throat chlamydia, drug abuse).

#### (10) United Kingdom (Lynn Bracewell)

Scope: Fifty nine raters participated. Twenty four completed all 298 line coding exercises resulting in 11,141 lines of data for analysis.

Preliminary training: Used supplementary training materials on ICD-11 overview, recorded WebEx session on browser / use of the coding tool, instructions on use of the ICD-FiT platform, recorded demonstrations on completion of line and case coding, dedicated collaborative platform for participants

Issues:

- The WHO Gold Standard was not available for the line code exercise
- Final Field Trial Training Guide or an ICD-11 Reference Guide needed

- More in depth training was needed in order to fully utilize the ICD-11 Coding Tool / Browser and in manually assigning extension codes.
- Lack of coding standards/instructions at the time made the work time consuming.
- More guidance required on post-op complication codes, how to sequence multiple post-coordinated codes, when a number of concepts may have been searched for against a diagnostic term and lack of chapter specific guidance.

Recommendations for training materials:

- Five step coding process
- Specific instructions in the ICD-11 training manual and training materials on the structure of post-coordination and how to use post-coordination
- The UK also has the challenge of making changes to its national written exam to accommodate ICD-11 in an electronic environment.

### 6.3 ICD-11 education material: Analysis of ICD-10 material

To inform development of ICD-11 training materials, Sue pointed to some of the lessons learned from the experience of developing the ICD-10 online training tool:

- It was constructive to appoint a lead who was responsible for coordinating the work of other development team members and maintaining consistent look and feel of the tool. It was also helpful that Sue was allowed to take time off from her regular work to focus on the development of the tool.
- While some of the exercises in the ICD-10 online tool could be reused in ICD-11 training materials after recoding, most of other materials in the online tool would not be reusable because of significant difference between ICD-10 and ICD-11.
- The task of collecting existing training materials benefitted from having a minimum set of educational requirements against which the collected materials could be assessed.
- The development team, however, could not fully utilize existing training materials provided in non-English languages. There may also have been many other existing training materials around the world that the team was uninformed about.
- The ICD-10 online training tool has a support group that responds to questions from users. The team developing ICD-11 training tools will need to consider how to support countries without a Collaborating Centre on coding issues.

### 6.4 Transition and Implementation Guidance Package

Vera Dimitropoulos presented some of the requirements for successful transition and implementation based on her experience of past transitions in Australia:

- It is necessary to have advance planning and set a considerable transition period, possibly from three to five years, ahead of implementation of a new classification, to address issues around the IT infrastructure and patient administration systems and maintain consistency of longitudinal mortality and morbidity data.

- There is a need to measure coding time and assess the required workforce, keeping in mind that a transitioning country will be moving into a new system while still maintaining the old one during the transition phase.
- Education, awareness, and advocacy for stakeholder buy-in are also important, and cost-benefit analysis should be conducted to inform decisions.

Vera informed that the Joint Task Force (JTF) on ICD-11-MMS was also engaged in ongoing discussions around a discussion paper on the transition package, which covers such topics as preparation of a transition guide and an issues paper for countries transitioning to ICD-11.

## **Session 2: 11:20-13:10**

### 7- EIC SWP-02 ICD-11 Group Workshop

Participants joined either one of the breakout group workshops on improving the questions in the WHO-FIC Implementation Database or EIC's support for preparation of ICD-11 training materials.

After 30 minutes of breakout discussions, each group reported back outcomes of the discussions.

#### 7.1 Group 1 on Implementation Database

The group came to a conclusion that the length (30 pages), complexity, and unclear terminology of the questions used in the database were hindering countries to enter their data, and agreed that the questions should be made simpler and clearer, and possibly reduced in number, to enable more countries to input data.

For this purpose, a workgroup of 12 volunteers was established with Carol Lewis and Joon Hong as co-chairs, who will keep EIC Co-Chair updated on progress. The group will first focus on cleaning up the existing terminology, glossary, and use of percentages, with group members contributing comments to the workgroup co-chairs. It was also agreed that there should at least be a Spanish version of the questions. The group will report the progress of work at the EIC mid-year meeting in 2018.

AP: The workgroup to clean up the existing terminology, glossary, and use of percentages by contributing comments to the workgroup co-chairs.

#### 7.2 Group 2 on ICD-11 training materials

The group was in agreement that most people were unaware of the existence of training materials other than those available for the Field Trials. To address this issue, the group proposed to set up a repository of ICD-11 training materials that countries can access and use to suit their needs. A distinction could be made within the repository between materials already endorsed by WHO and those not yet endorsed. Further discussion with WHO is needed.

The group further examined the needs for ICD-11 training materials in the three areas of (1) functioning patterns in Chapter V of ICD-11, (2) mortality coding needs, and (3) morbidity coding needs.

For the functioning patterns, the group proposes to develop five or six case scenarios for coding of cases involving functional issues in acute care settings for training purposes through collaboration between FDRG and Morbidity Reference Group (MbrG), with Solvejg Bang and Olaf Kraus de Camargo of FDRG, and Vera of EIC and MbrG as lead persons.

After the case scenarios have been prepared, the scenarios and answers would be sent to MbRG and FDRG for feedback from their respective perspectives.

In the area of mortality and morbidity coding needs, the group was again in consensus that there are already sufficient training materials for clinical coders to understand how ICD-11 works and find the ICD-11 codes, but there may be room for improvement of training materials around the mortality and morbidity coding rules.

Another comment coming out of the group on training needs was that short materials would reduce the burden of translation for non-English speaking countries.

AP: Vera to discuss the idea of setting up a repository of ICD-11 training materials and disseminating information about the repository with WHO and report back to EIC.

AP: The workgroup to develop case scenarios for coding of cases involving functional issues in acute care setting for training on ICD-11 Chapter V in collaboration with FDRG and MbRG.

## 8- EIC SWP-03 Education in general

### 8.1 Database of WHO-FIC advisors and educators

Huib read out a written report submitted by Catherine Sykes on the database of ICF advisors and educations. A summary is as follows:

After the mid-year meeting in Stellenbosch, South Africa, in June 2017, the ICF Education website has been refurbished and is up and running. It incorporates new features requested by WHO. In addition to existing facility to search and share education resources on ICF, the site now includes a discussion forum on ICF, a register of ICF advisors and educators, and a news page where registered users can submit information about workshops, presentations, and projects of interest.

EIC members are invited to submit new ICF education materials, which can be in any language and topic concerning ICF education, as well as to provide feedback on the website's functionality. Those qualified and willing are requested to post their profiles in the register of ICF advisors and educators.

The site requires funding of \$2,000 per year for licensing and technical maintenance, but funding is expected to run out in 2018. EIC members are requested to promote the site to sponsors and can also donate funding directly from the site. Collaborating Centres are requested to consider providing additional funding in 2018 and beyond.

EIC members who have registered on the site but have not submitted education materials are advised that they will need to register again on the refurbished site.

Olaf Kraus de Camargo then presented some slides to show the online address of the ICF Education website, and invited EIC members to the 3<sup>rd</sup> International Symposium on ICF Education held in Hamburg, Germany, on April 13, 2018.

AP: EIC members qualified in ICF education can submit their profiles in the register of ICF advisors and educators.

## 9- EIC SWP-04 WHO-FIC training tools

### 9.1 ICF e-learning tool (\*from the point of view of Implementation and Education)

Michaela Coenen reported on the finalization and launch of the ICF e-learning tool. In the last year, work was conducted to address copyright issues over the slides used in the tool, revise the quizzes provided at the end of each chapter, and develop an automatic scoring system for the quizzes, which were finalized based on feedback from EIC, FDRG, and the ICF e-learning tool Core Group. The tool was then set up in the Articulate Storyline software and finalized based on feedback from EIC, FDRG, and the Core Group.

An international FT of the tool was launched in September 24, 2017, with 45 persons participating from around the world. Most rated the tool positively in terms of interactivity, ease of use, intuitive navigation, and appropriateness of the contents and examples.

The tool has now been launched at <https://www.icf-elearning.com/>. Michaela and her team will further optimize the tool based on feedback and recommendations from the FT, which will close on October 31, 2017, provide a report on the FT to EIC and FDRG, and finalize the Excel file to support translation of the contents of the tool into other languages.

The tool is composed of seven chapters. Each chapter begins with an overview of topics and learning objectives and ends with a summary and a quiz with an automatic scoring system. There is also a glossary of important ICF terms.

The next steps will include putting the tool on the WHO website and starting the translation process for those countries interested. A manual to facilitate the translation process will be provided.

### Discussion

There was a round of applause for Michaela for finalizing the ICF e-learning tool over the last year and for Melissa Selb for leading the work since 2014.

Michaela further reported that a report on the contents and aims of the e-learning tool and FT results could be published in a scientific journal.

AP: EIC to discuss with WHO details about putting the tool on WHO website.

AP: Michaela to complete the FT and report the results to EIC and FDRG and finalize the Excel file to support translation. EIC to move into the translation phase for the ICF e-learning tool.

### 9.2 International exam for morbidity (mortality) coders: Report on the certification and recertification systems in countries

Joon reported on the surveys of the National Directors of the International Federation of Health Information Management Associations (IFHIMA) and EIC members on the subject of recertification systems. The surveys were conducted to explore the feasibility of recertifying mortality coders who were certified in 2007 under a joint project between the WHO-FIC Education Committee (later integrated into the EIC) and the IFHRO (today's IFHIMA) and coders later certified by IFHIMA, with the purpose of improving the quality of mortality coding.

Results of the IFHIMA survey showed that six of the 15 countries responding to the survey had exam-based coder certification systems (Canada, the U.S., Japan, Korea, the Philippines, and the UK). In the U.S. coders are required to meet continuing education requirements and successfully complete an examination in order to maintain their certification. Australia, Canada, and South Korea provide continuing education.

Nine countries responded to the EIC survey on the type of recertification exam desired,

interval between recertification, desired managing organizations, and roles of EIC and IFHIMA.

Joon proposed EIC to examine the needs for a recertification system and if deemed necessary, to set up a small group tasked with developing the system. Joon sees possible EIC roles in developing the system and setting questions and answers for the recertification exams with IFHIMA providing technical support and organizational expertise.

AP: EIC to examine needs for a recertification system and feasibility of it developing a system if needs are valid.

#### 10- Reorganization of EIC SWP

Huib explained that EIC will be promoting more task-focused, cross-cutting work with other committees and reference groups in its SWP for 2017-2018.

#### 11- EIC membership

Huib informed that the EIC membership list will be updated and circulated to members, identifying members and observers.

AP: EIC secretariat to distribute updated EIC membership list.

#### 12- Other business

EIC plans to have a joint mid-year meeting with FDRG in Hamburg, Germany, in April 2018, to coincide with the 3<sup>rd</sup> International Symposium on ICF Education.

#### 13- Closure

Huib thanked all for their participation and expressed hopes for continuation of future work. He declared the meeting closed at 13:10.