World Health Organization

Collaborating Centres
ANNUAL REPORT

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Name of the University, Hospital, Research Institute, Academy or Ministry

Regional Central Health Directorate

Name of the Division, Department, Unit, Section or Area

Classification Area, General Directorate

City	Udine	**Reference Number**	ITA-85
Title	WHO Collaborating Centre for Family of International Classifications		
Report Year	07-2017 to 07-2018		

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1. Annual report on the agreed workplan

Describe progress made on the agreed workplan. For each activity, detail (1) the actions taken, (2) the outputs delivered, as well as (3) any difficulties that may have been encountered. Three responses are expected. [maximum 200 words per activity]. Indicate, if an activity has been completed previously, has not yet started or has been placed on hold.

Activity 1

Title: Revision of International Classification of Diseases (ICD-11)
Description: Provision of technical expertise and implementation of the following ICD-11 revision related activities:
1. Review and enhancement of ICD-11 Beta draft, ICD-11 Reference Guide and ICD-11 Index
  a. To work on the mortality and morbidity review of the Beta draft through participation in the MTAG and MbTAG
  b. To work on the coding rules for morbidity and mortality
  c. To support the population of the ICD-11 content model and the development of IT tools for ICD-11

2. Prepare and implement field tests of ICD-11 Beta draft in Italy
  a. Italian translation of ICD-11 Beta draft on WHO Translation platform
  b. Italian translation of FT material (including FT manual, FT instrument, case summaries and training material)
  c. Preparation and piloting of Italian ICD FIT version (web-based platform for data entry)
  d. Conduct FT familiarization and training
  e. Implementation of FT protocols as part of the Beta testing phase in 2015/2016 and usage validation phase in 2016/2017

3. Work on the transition from ICD-10 to ICD-11 in Italy
  a. Identify and analyze transition requirements in Italy
  b. Prepare and guide the transition process in Italy

Status: ongoing

1a) Italian CC supported WHO on the Joint Task Force on ICD-11 MMS, thanks to Vincenzo Della Mea, who continued his work as a member of this Task Force, including participation to monthly teleconferences and, twice a year, to in-person meetings.

During the last year, a novel application, spinoff of ICD-FiT, has been designed and released, aimed no more at field testing, but at self-learning and implementation of ICD-11. While maintaining the same acronym and inheriting most of the interface features, the new version is a different application that allows users to register to centers delivering learning modules to be completed to obtain a performance score.

Furthermore, initial steps towards migration of the ICD-FiT systems to the WHO cloud servers have been started, involving also some partial reconfiguration of the web platforms to enable them to run on a different platform. The same steps will be made also for the ICHI Platform.

1b) At the same time, Italian CC participated in the Joint task Force on ICD-11 MMS thanks to the Italian MRG Co-Chair, Francesco Grippo. In such context he attended monthly teleconferences and face to face meetings held in Mexico city (October 2017) and Geneva (April 2018), contributing to identify priority issues to be solved for ICD-11 in mortality coding. In December 2017 (12-14) Francesco Grippo participated to the Mortality Rule Editing workshop meeting held in Geneva contributing to highlight possible modifications to the codding algorithm and actualization of the rules in view of ICD-11 structure. In occasion of the statistical stakeholder meeting held in Geneva in April 2018, a statistical analysis of the relevance of the coding rules was presented as a possible approach for quantitative verification of the impact of rules updates (see Dissemination of results). Two experts from Istat (Simone Navarra and Francesco Grippo) contributed to mortality coding field test both including line coding and death certificates coding.

1c) The process of ICD-11 maintenance started. It will be a different process compared to that of ICD-10 due to the novelties of ICD-11. The dagger-asterisk system is not used in ICD-11. However, ICD-10 allows the use of this system in several cases. A study was carried out by Lucilla Frattura, Carlo Zavaroni and Antonia Fanzutto aimed at verifying whether the concepts expressed using the ICD-10 dagger-asterisk system can be found in ICD-11, whether ICD-10 dagger-asterisk pairs can be mapped to ICD-11 MMS, and whether the ICD-11 coding tool allows the transcoding of ICD-10 dagger-asterisk pairs. A previous work carried out in Italy was used that aimed at pre-preparing dagger-asterisk strings with a unique title for each nosological entity (as it appears in Volume 3) to facilitate their use in morbidity coding. More than 3500 dagger-asterisk strings were identified. A selected setting was chosen to carry out the analysis. Two hundred strings codified "pericarditis, myocarditis, endocarditis and heart valve disorders in diseases classified elsewhere". ICD-10 dagger-asterisk strings were transcoded in ICD-11 MMS codes and in ICD-11 post-coordination strings; a mapping analysis was made. Results: ICD-11 MMS allows to directly map only 36 ICD-10 strings, of which 8 exact mappings if MMS inclusions (or description) were considered and 28 approximate mappings if coding tool narrower terms (or inclusions) were considered. The analysis highlights various ICD-11 post-coordination problems: a) antithetical cases with respect to the possibility of constructing ICD-11 strings (e.g. hundreds strings for valve disorders in late syphilis, no strings for valve disorders in rheumatoid arthritis); b) association of the infectious agent only at the parent code level and not at the leaf code level (e.g. 1D85 vs 1D85.0-1-2); c) failure to block post-coordination with incompatible stems codes (e.g. unspecified codes can be added to specified codes and/or to "other specified" codes); d) the possible post-coordination axes are not similarly shown if the starting point changes while maintaining clinical consistency.

Conclusions: Improvements and updates are needed at both MMS and post-coordination level.

DISSEMINATION OF RESULTS:

Donada M, Kostanjsek N, Della Mea V, Celik C, Jakob R. Piloting a Collaborative Web-Based System for Testing ICD-11. Stud Health Technol Inform. 2017;235:466-470.

Donada M, Kostanjsek N, Celik C, Della Mea V. ICDfit: Current Status. WHO-FIC Network Annual Meeting 2017 Booklet

V.Della Mea. Syntax for ICD-11 postcoordination and clustering.
http://www.who.int/classifications/icd/revision/2016.06.16_ICD-11InternationalReportingClusteringSyntaxDecision.pdfActivity 2

Frattura L., Zavaroni C., Fanzutto A.. Suggestions on how to update ICD-11 considering morbidity coding: the case of pericarditis, myocarditis, endocarditis and heart valve disorders in diseases classified elsewhere. Submitted at WHO-FIC Network Annual Meeting 2018.

Activity 2

Title: Development of a case mix application for ICD-11
Description: The activity aims to develop and validate a case mix application of ICD-11, starting from the analysis of the current Italian ICD-9CM DRG system and its possible translation to other case mix systems, and load the corresponding groupings into iCAT also considering ICF for continuity of care applications. Those groupings should be then validated in suitable field trials. This activity not only leads to the development of a case mix use case of ICD-11 but potentially leads to the development of ICHI in case of a strong request coming from interested Countries.

Status: ongoing
2a) ICD-11 FOR CASE-MIX
DRGs are secondary patient classification systems based on primary classified medical data, in which single events of care are grouped into larger, economically and medically consistent groups. The main primary classified medical data are diagnoses and interventions codes. The current lists of health conditions that guide the DRG assignment in Italy are composed of single ICD-9-CM codes, as in the US DRGs system. The conversion of these lists to ICD-10 WHO poses the issue of combined codes for the «primary (and secondary) diagnosis», suggesting some solutions useful in defining coding rules.

2a) Rules for morbidity coding. In 2018 an Italian WHOFOC CC working group was organized to provide a decision tree to support the morbidity coders decision-making process. The goal was focused on the organisation of the available WHO rules for morbidity coding in computer algorithms. We considered:
a) ICD-10 rules and guidelines for morbidity coding, waiting for others;
b) definition of the main condition "as the condition, diagnosed at the end of the episode of health care, primarily responsible for the patient's need for treatment or investigation";
c) grouping of interventions and procedures in three sets:
• "relevant surgery", i.e. interventions or procedures that typically involve the use of an operating room or a hybrid operating room, or interventions or procedures that, while not normally requiring the use of the operating room, present an estimated level of resources consumption comparable to operating room costs;
• "selected non-relevant surgical interventions", i.e. interventions or procedures, other than relevant surgery, that require significant absorption of resources, mostly superior to the non-surgical treatment of a condition;
• "residual non-relevant surgical interventions", i.e. interventions or procedures, other than relevant surgery and selected non-relevant surgical intervention, that require an absorption of resources usually lower than that of the non-surgical treatment of a condition.
We developed Health Information Technology rules. Results: The problem-solving steps concerned the identification of the main condition treated or investigated during the relevant episode of care, taking into account the procedures and interventions. The decision tree identified the main condition, i.e. a disease or an injury or, if no diagnosis was made, the main symptom, abnormal finding or problem. The diagnostic groupings were made taking into account ICD-9-CM, ICD-10 and ICD-11; the surgical groupings were made taking into account ICD-9-CM and ICHI. Conclusions: The decision tree can be used whatever the versions of the classification of diseases and interventions.

2b) The poster on ICD-10 updates looking at ICD-11 was accepted at the 2017 WHOFIC Network annual meeting in which the Italian CC proposed ICD-10 updates thaking into account ICD-11 Beta Draft classification, formal international classifications of some nosological entities, standardized (but not formal) classification systems of some nosological entities, universally accepted in the international scientific community, state of the art on each issue. Moreover, they consider the limited possibilities to extend ICD-10 codes to completely follow ICD-11.
Concrete outcomes: updates proposals on ICD-10 update platform considering ICD-11; a decisioni tree to code the main condition.

DISSEMINATION OF RESULTS:
Zavaroni C., Fanzutto A., Nardo E., Della Mea V., Frattura L. Morbididy coding in ICD-11 (and ICHI): a decision tree to identify the main condition. Submitted at 2018 WHO-FIC Network Annual Meeting
Zavaroni C., Tonel P., Frattura L. ICD-10 updates looking at ICD-11: nosological entities limitations. 2017 WHO-FIC Network Annual Meeting Booklet
Zavaroni C., Tonel P., Frattura L. ICD-10 coders' difficulties: "clinical manifestations and differential diagnosis" update proposals looking at ICD-11. 2017 WHO-FIC Network Annual Meeting Booklet

Activity 3

Title: Management of the ICD-10 and ICF update process.

Description: Provision of URC secretariat functions for 2015-2019. To ensure, with cross sectional competence both in ICD and ICF, an integrated approach to the update of the WHO-FIC members. More in detail this activity consists of the overall coordination of the update process done by the co-chair together with the secretariat and in other activities such as refinement of the workflow, clarification of membership and further elaboration of the user guide for the update platform, production of documentation such as desiderata and practical guidance for submission of updated proposal, and in the development and maintenance of policies of update in the perspective of the transition from ICD-10 to ICD-11.

Status: ongoing

Lucilla Frattura was elected for a first term as URC Co-Chair for ICF at the Tokyo meeting (Oct. 2016 -Oct.2018).During the last year Paula Tonel served as URC Secretariat. Lucilla Frattura and Francesco Grippo worked as voting members.

From the end of the 2017 Mexico City WHO-FIC network annual meeting, the Update and Revision Committee (URC) has been replaced by the Classification and Statistics Advisory Committee (CSAC). The purpose of CSAC is to provide strategic and technical advice to WHO in keeping its Family of International Classifications up to date in line with current knowledge and relevant to the purpose for which they were designed. The functions of the CSAC include maintenance policy and maintenance work of CSAC. The CSAC work is mainly conducted through the update platform for ICD-10 (until finalization of the last ICD-10 updates), the update platform for ICF, and the maintenance platform for ICD-11, which are workflow engines designed to facilitate communication within expert workgroups and ensure transparency of the processes. Work and communications are also carried out via e-mail, conference calls and meetings, including an annual meeting during the WHO-FIC annual meeting. Activities of CSAC are carried out according to the WHO-FIC Strategic Work Plan.

ICD-10 UPDATES 2017: At the 2017 WHO-FIC Network annual meeting held in Mexico City, the URC ratified 88 recommendations for updating the ICD-10. The 2017 updates were the last ones for ICD-10. If necessary there will be corrections for important errors, and amendments only to rules related to mortality (where they would apply for ICD-11 as well). The 2019 version of ICD-10 will be the last to be published.

ICF UPDATES 2017: At the 2017 WHO-FIC Network annual meeting held in Mexico City, the URC ratified 24 recommendations for updating the ICF.

ANNUAL AND CUMULATIVE UPDATES DOCUMENTS for ICD-10 and ICF - 2017: The CSAC continued URC work by preparing and delivering to WHO the annual and cumulative update documents for ICD-10 and the annual update documents for ICF. The updates documents are available at http://www.who.int/classifications/en/ (see: History of updates).

ICD-11 UPDATE PROCESS FOR 2018: The CSAC Secretariat have commenced work on updates, following the release in May 2018 of ICD-11 for planning implementation. Initially, the change proposals that are on the maintenance platform are being sorted so, as required, they can be referred to the Medical and Scientific Advisory Committee or other processes before they are considered by CSAC. This is in line with agreed processes for ICD-11 updating, which will be further discussed at the Seoul meeting.

ICF UPDATE PROCESS FOR 2018: In April 2018, the CSAC Co-Chair for ICF participated in the 2018 FDRG mid-year meeting in Hamburg. A presentation was given on the following issues: need of major involvement of CSAC members in the ICF update process, need to optimize the ICF update proposals life cycle, need of collaborative and comprehensive ICF update proposals, examples of some 2018 comprehensive ICF update proposals. Concerning the ICF update process, in 2018, 41 new update proposals were submitted on the update platform. After a review by IRG and FDRG members, these were discussed together with other 14 update proposals that had been held over from last year. Of all update proposals for 2018, 47 have been put to vote by CSAC members.

IMPROVING ICF: UPDATES FOR DISCUSSION AND VOTING IN 2018

Lucilla Frattura proposed new comprehensive ICF updates on four ICF chapters for being discussed and voted in 2018: e3, d7, d8, d9. She also proposed two options to update the body functions, submitting new proposals on all the eight body function chapters aimed at solving the problems regarding the deletion of

impaiments from the inclusions.
- The ICF AP Chapter 7 "Interpersonal interactions and relationships", Chapter 8 "Major life areas" and Chapter 9 "Community, social and civic life" are about carrying out the actions and tasks required for: basic and complex interactions with people (strangers, friends, relatives, family members and lovers) in a contextually and socially appropriate manner; to engage in education, work and employment and to conduct economic transactions; to engage in organized social life outside the family, in community, social and civic areas of life. In this explanations we find an indication to keep in mind: the d7, d8, and d9 activities are about "actions and tasks required for interactions in appropriate manner", but the activities descriptions (or titles) are not about actions and tasks, but are defined using nouns. Several updates were submitted in 2018 ICf update platform aiming at reducing ambiguity in the d7, d8 and d9 code descriptions, and facilitating their understanding. They also aim to to harmonizes the classification, using a verbal form for each listed activity, as done in the Chapters 1-6. The addition of exclusions have different advantages for the users, minimizing uncertainties and doubts in practical use. Some case vignettes are also added to demonstrate how practically helps to use activities with a verbal forms instead of nouns. The analysis affects all activities classified at the ICF Chapter 7, 8, 9 of the Activities and Participation component and proposes some solutions for code definitions and addition of exclusions and discuss the impact on the ICF Chapters 1 and 2 of the Activities and Participation component.
- The ICF EF chapter 3 "Support and relationships" is about people or animals that provide practical physical or emotional support, nurturing, protection, assistance and relationships to other persons, in their home, place of work, school or at play or in other aspects of their daily activities. The chapter does not encompass the attitudes of the person or people that are providing the support. The environmental factor being described is not the person or animal, but the amount of physical and emotional support the person or animal provides". In this explanation we find two indications to keep in mind: the EF is about "support provided by", and the evaluation is about the "amount of physical and emotional support".Nevertheless a real definition of support is not present, but a "dimension" (amount of support) to evaluate the facilitator or barrier role of the support provided by different persons and animals is suggested. Taking into account these indications, the e3 code descriptions result not coherent with the clarification at the beginning of the chapter and each single category results ambiguous. Two comprehensive update proposals were submitted in the ICF update platform for voting in 2018 aimed at reducing ambiguity in the e3 code description, facilitating the understanding of these environmental factor in order to assess the facilitator or barrier role of the "support provided by".
- A poster were also submitted at the 2018 WHOFIC Annual Meeting aimed at presenting the analysis made to reduce ambiguity in the e3 code description.

- In 2017, several update proposals of the BF chapters were made taking into account previous discussion on the ICF update platform and at WHO-FIC Network meetings. In particular, comments made to the proposal ID59 From ICF-CY –Modification in the note and inclusion of code b122, and jointed comments in several voting rounds and following discussion at the meetings. Lucilla Frattura and Marie Cuenot (URC and FDRG members) prepared a list of BF codes to be updated in order to delete impairments, signs, symptoms, and diseases from the BF descriptions at any hierarchical level. The idea is to proceed step by step also considering some suggestions by Kumar and Smith who criticized the ICF Body Functions component and recognized seven problems: 1. incongruent classification; 2. confusion between classes of activities and their qualities or feature; 3. alignment of function with loss of function; 4. incorrect classification; 5. incomplete classification; 6. oversimplification; 7. overemphasis on subsumption. The proponents were aware that this first step of revision is not sufficient to reduce ambiguity or revise the parent-child relationships in some cases, but it is relevant to peel the classification in order to organize a second step of updates to be submitted. Following the discussion made during the 2018 FDRG mid-year meeting on the proposal made by Lucilla Frattura to modify the Functions of the skin (ID357), the rationale for deleting impairments from inclusions of body functions was accepted. In order not to miss details about impairments, a suggestion was accepted to maintain impairments in the text, but not in the list of inclusions. Two different opinions were formulated: to maintain impairments in a new position and to add a new attribute. Lucilla Frattura (as Author of this new revision) suggested on the ICF update platform a compromise in order to delete impairments from inclusions but to maintain them as examples in a note. This compromise does not change the classification hierarchy, is conservative and does not miss information. Why do we use a note? The addition of a note was approved in 2015 for the first time in proposal ID 74 (b761 Spontaneous movements). In general term, inside a classification (see ICD-10) a note provides an instruction. In this case, we could use a note to help ICF users in understanding the content of a category, providing some examples of manifestations of impairments of

body functions, the extent of which a coder has to qualify using the generic qualifier (extent of impairment). Impairments of body functions are at the basis of clinical manifestations. In ICF we do not have examples of impairments but examples of manifestations of body functions impairments. NO CHANGES IN THE WORDING OF IMPAIRMENTS WERE MADE IN THIS OPTION. The chosen wording was "impairments of these body functions are present in". IN GENERAL, THE NOTE FOLLOWS THE DEFINITION AND LISTS ALL THE IMPAIRMENTS ORIGINALLY PRESENT AT THE THIRD AND FORTH LEVELS. The CSAC voting member can vote for one of the two options: the first takes into account the discussion above summarized; the second is the same as the one voted in 2017. THE FIRST OPTION ALLOWS TO REACH THREE AIMS: 1. to delete impairments from inclusions; 2. to maintain them in a note; 3. to clarify that examples of signs, symptoms and health conditions are not impairments in themselves, but clinical manifestations of body functions impairments.

3c) Improving WHODAS 2.0 Manual and questionnaires

WHO decided to implement WHODAS 2.0 to measure disability taking into account that ICF is not a measuring tool and is complex to use. The translation into Italian of the WHODAS 2.0 Manual has arisen some issues that require a consensual solution. Lucilla Frattura, Paula Tonel, Carlo Zavaroni, and Caterina Morassutto provided a document with some changes to suggest for improving WHODAS 2.0 Manual and questionnaires, A poster was also submitted at the 2018 WHOFIC Network Annual Meeting. They have analyzed:

1. Differences between some "ICF concepts" and some "WHODAS 2.0 concepts"
2. Differences between questionnaires and manual
3. Differences among the questionnaires
4. Differences among translations
5. Problems in translating some English terms

Five types of problems were found: conceptual, problems in the questionnaires, problems between manual and questionnaires, SPSS syntax, typo. The poster presents some examples of these problems. A document with the full list of problems and their possible solutions was prepared. Some of these problems were submitted to WHO attention in order to ask for clarifications and to agree on translation issues and possible corrections. The full "WHODAS 2.0 updates document" will be made available to WHO.

3d) STUDIES ON ICF UPDATES accepted in the ICF voting rounds for 2017. The results of the study on water classification in ICF which was useful to discuss 2017 proposals on the ICF update platform. Since ICF publication in 2001 no updates have been made relative to Chapter 2 of the EF component. The ICF-CY, published in 2007, shows no changes in this Chapter compared to ICF (2001). For the first time, in 2016, a proposal was submitted regarding Chapter 2 of the EF component. The proposal was initially the addition of a new code for "water quality". In 2017 another proposal for adding "drinking water" in Chapter 1 of the EF Component was added. Both the proposals open a "water issue" inside the ICF. The "ICF water issue" is very similar to a Pandora's box, which, once opened, asks for a lot of different decisions in many ICF EF parts. Some policy sources published by WHO and UN around the «water issue» were considered. Web pages of international bodies active on substainable environment were also considered. In order to harmoniously improve ICF, attention was paid to the classification coherence with regard to parent-child relationships and among different chapters. Relationships with ICHI were also considered with regard to the section of public health interventions. ICF EF definition and the coding rules for facilitators and barriers were considered. A lot of suggestions were found for improving the current classification of water in ICF and for reviewing some other ICF concepts linked to the "water issue". The possible updates would concern three different EF chapters: 1, 2, 5 (see a summary in the ICF update platform, Open Discussion layer, proposal ID 306).

CONCRETE OUTCOMES:
ICF and ICD-10 updates documents are available at http://www.who.int/classifications/en/ (see: History of updates);
ICF update proposals on ICF update platform for voting in 2018 are available at
https://extranet.who.int/icfrevision/nr/loginICF.aspx

DISSEMINATION OF RESULTS:
Frattura L., Hargreaves J., Tonel P., Katte J. Classification and Statistics Advisory Committee (CSAC) annual report. Submitted at 2018 WHO-FIC Network Annual Meeting
Hargreaves J., Frattura L., Tonel P. Update and Revision Committee (URC) Annual Report. 2017 WHO-FIC Network Annual Meeting Booklet

Frattura L., Tonel P. The ICF update process: suggestions for improving outcomes. 2017 WHO-FIC Network Annual Meeting Booklet

Frattura L. The ICF water issue: analysis and proposals looking at SDGs and ICHI. 2017 WHO-FIC Network Annual Meeting Booklet

Frattura L. Support and relationships as environmental factors: proposals to improve the ICF. Submitted at 2018 WHO FIC Network Annual Meeting

Frattura L., Tonel P., Zavaroni C., Morassutto C. Suggestions for updating WHODAS 2.0 Submitted at 2018 WHO FIC Network Annual Meeting

Frattura L. ICF Activities and Participations dilemma: effects of some update proposals on understanding and using activities classified at Chapters d7, d8, d9. Submitted at 2018 WHO FIC Network Annual Meeting

Activity 4

Title: IT and Ontological developments for WHO-FIC.

Description: Provision of technical expertise and implementation of the following WHO-FIC IT and ontology related activities:

1. ICD-11 ontology development;

a. Harmonization between ICD-11 and SNOMED-CT, with development of methods and tools for enabling harmonization and gap analysis; common ontology study implication on relationships in the foundation layer

b. Development of IT tools related to ICD-11 quality assurance, enhancement, and usage, and experimentation of prototypes developed by WHO;

c. Participation in the joint WHO/IHTSDO table for the development of a common ontology.

2. Contribute to ICHI related ontology work

a. Maintenance of the provisional ICHI browser, and eventually participation in the development of the ICHI content model

b. development and enrichment of the functioning ICHI rubric

3. Explore ICF related ontology work

a. Updating of the analysis of the current status of ICF and discover underlying ontological principles on which is founded, starting from use-cases and term beating;

b. Continuity of the Mapping of ICF to other knowledge bases and terminologies (SNOMED CT, FMA, upper ontologies) and represent mappings in formal languages like OWL;

c. Representation, by using formal languages, of the links between measurement scales and ICF;

d. Exploration of new ways of ICF usage by means of knowledge based software.

The actions will be carried out in close cooperation with the Ontology Working Group of the WHO-FIC Informatics & Terminology Committee and the domain experts group provided by the WHO-FIC Functioning and Disability Reference Group.

Status: ongoing

4a) ICHI PLATFORM

The Italian CC continued to work on the ICHI Platform, with the support and collaboration of the Australian Collaborating Center. The current version allows maintenance of the classification, including creation and modification of codes, and also management of multiple versions (including transition from one version to the other). The platform has recently been used at the mid-term meeting of FDC for working on the ICHI classification. To better follow ICHI advancements, Vincenzo Della Mea joined the ICHI Task Force. Concrete outcomes: Substantial contributions to the finalization of the ICHI were provided with new codes and revised descriptions. In the case of mental health interventions, changes to axis categories, and corresponding revision of the tabular list of intervention codes in ICHI Alpha 2016 were done. The ICHI platform is available at the address http://mitel.dimi.uniud.it/ichi/.

4b) Vincenzo Della Mea supervised a Master Thesis in Computer Science on the ontology version of ICF, that focused on the Activities and Participation and on the Environmental Factors components. While preliminary, the work could be considered a basis to start a partial redesign of ICF.

4c) ICF personal factors

In the 2015 WHO-FIC meeting a call for action was launched (poster C523) to address the topic that has been acknowledged as being relevant within the ICF, but defies the necessary qualities of a classifiable concept: Personal Factors (PF). PFs consist of a list of concepts, classified in other classifications, partly within the ICF

itself, but not in many other systems. What is happening is that everywhere in the world new lists of PF keep popping up, underlining the importance of need for the subject and the necessity of coordination and elaboration. The common assumed quality that characterizes a PF (as EF) is to be in relation with the person's functioning modulating it. A dedicated working group including the chairmanships of the involved WHOFIC Network committees and reference groups was constituted and started sharing materials and ideas. Andrea Martinuzzi, Matilde Leonardi and Vincenzo Della Mea were active in it. A working session was held during the FDC mid year meeting 2018 in Geneva addressing the issue of mapping some of the PF (as exemplified PF in the ICF) on other classification systems. The preliminary work identified as obligatory ontological quality of a bone fide PF its relation with the person's functioning and its ability to influence/modulate it. The analysis of the PF listed in the ICF introduction led to positive mapping onto either WHO-FIC members or on other UN classifications. A literature search for papers proposing more detailed lists of PF yielded some items that are now object of analogous mapping. ICF PF systematization may start from an ontological approach to clarify the nature of these concepts and clarify the relation these concepts have with the various domains of functioning described in ICF part 1 (body functions & structures, activity & participation).It could then proceed by a multistep process: identify concepts that are already classified in other systems both within and outside WHO-FIC products suite but not within ICF; single out relevant concepts that not being classified elsewhere and not being present in ICF still can be considered as modulating elements for individual functioning (e.g. free will); identify concepts that are already present in ICF and clarify the relation these categories entertain with the other categories describing that person's functioning (e.g. heart function and running; craving and eating; visual acuity and driving). This work could take advantage from the preliminary work being done for EF.

CONCRETE OUTCOMES:
The ICHI platform is available at the address http://mitel.dimi.uniud.it/ichi/: Master Thesis in Computer Science on the ontology version of ICF, University of Udine.

DISSEMINATION OF RESULTS:
Donada M, Della Mea V, Cumerlato M, Rankin N, Madden R. A System for Supporting Development and Update of the International Classification of Health Interventions (ICHI). Stud Health Technol Inform. 2018;247:895-899.
Cozzi S. Formalization of an Ontology for the International Classification of Functioning, Disability and Health (ICF). Master Thesis in Computer Science, University of Udine, 2018
Cozzi S., Della Mea V., Ten Napel H., Frattura L.. Towards the ICF ontology: preliminary formalization of Activity & Participation and Environmental Factors. Submitted at the 2018 WHO FIC Network annual Meeting
Martinuzzi A., Della Mea V., Ten Napel H., Linton C., Noyaka J., Kraus de Camargo O., Macpherson B., Hanmer L., Almborg AH., Lee H., Leonardi M. Personal factos: a response to the call for action. Submitted at 2018 WHO-FIC Network Annual Meeting
Donada M, Cumerlato M, Rankin N, Della Mea V, Madden R. The ICHI platform. 2017 WHO FIC network annual Meeting Booklet

Activity 5

Title: National work on WHO-FIC.
Description: Translation of WHO-FIC materials into Italian. The Italian WHO-FIC Centre serves as a focal point for translation and publication of WHO classifications and related documents in Italy. It promotes the adoption, on the basis of the work plan agreed with the Italian Ministry of Health, of the translated versions of the WHO-FIC materials of national relevance. The translation of the ICD-10 updates, especially those having an impact on mortality, is carried out in collaboration with ISTAT, institution responsible for cause-of-death official statistics in Italy.

Design and diffusion of WHO-FIC training tools and guidelines to use the WHO-FIC. The Italian WHO-FIC Centre serves as a focal point for translation, publication and training of WHO-FIC training tools. The Italian Centre is also specifically committed to WHO and national and local institutions for the development of training tools and guidelines on how to use ICF in disability assessment and eligibility according to ICF disability/functioning definition. It acts as a national reference point for training on WHO-FIC use.

Software applications for using WHO-FIC in national data collection and analysis. Design and develop software that implement new ways of interacting with FIC-based data, including collection, usage, visualization, decision support. These softwares serve to:
- support social networking-based update of WHO classifications, starting from already available classifications, terminologies and ontologies (e.g. ICD-11 as support for updating ICD-10);
- collect coded data in health and social information systems;
- deliver codes from local information systems to general repositories;
- transcode from one classification to another.
In the design process, exploitation of current standards might be involved, as well as development of specifications for communication standards.

ICD implementation strategy in Italy. On behalf of the Italian Ministry of Health, the Friuli Venezia Giulia Region, acting as Italian WHO-FIC CC, is responsible for the coordination and implementation of a national work plan aimed to introduce ICD-10 in Italy, considering the possibility to develop an Italian Modification. (Government-funded four¬-year project "Progetto di un nuovo sistema di misurazione e valorizzazione dei prodotti delle strutture ospedaliere. New measurement and paying systems for hospital products." IT.DRG). The overall process for updating the Italian version of ICD-10 will be carried out using the web environment for collaborative translation and collaborative update on the Italian Portal of Health Classification, jointly with the web tool developed for considering candidates for updating the current version from some of the available clinical modifications. Together with the Ministry of Health and two other Italian regions, responsible for the set up of the Italian classification of procedures and interventions and the revision of the DRG grouper, an analysis of the current Italian DRG system is being carried out, new case mix applications are under developed, and, upon WHO approval, groupings will be loaded into iCAT. Training programs will be realized focused on the use of the new classifications by clinicians and statisticians starting from field trials to routine.

Implementation of the Italian Portal of Health Classifications and of the web environment supporting collaborative authoring of the electronic Italian version of WHO-FIC, according to the agreement between the Italian Ministry of Health and the Friuli Venezia Giulia Ministry of Health.

National database on the ICF Implementation in Italian regional policies. According to a specific agreement between the Italian Ministry of Health and the Friuli Venezia Giulia Ministry of Health, an implementation database will be set up in order to show the multiple initiatives realized and under realization for ICF implementation. The database has been designed in order

Status: ongoing
5a) ICD-10, 2016 VERSION, OFFICIAL TRANSLATION INTO ITALIAN AND PUBLICATION
In November 2015, an agreement for granting translation and publication rights was signed between WHO and Regional Central Health Directorate, Friuli Venezia Giuli Region. Exibits will be:
International statistical classification of diseases and related health problems, 10 th revison, fifth edition, 2016, Volume 1 (2015);
International statistical classification of diseases and related health problems, 10 th revison, fifth edition, 2016, Volume 2 (2015);
International statistical classification of diseases and related health problems, 10 th revison, fifth edition, 2016,

Volume 3 (2015).
A work group was set up for the full translation of the three volumes replacing the previous translation made in 2000. Lucilla Frattura was the project coordinator. Paula Tonel provided translation. Flavia Munari, Carlo Zavaroni and Lucilla Frattura (three medical doctors), and Giovanni Bassi supported the complete revision of the translation considering current medical language, and cross-checked among the three volumes. In 2016 experts from Istat provided the first external revision to the translation of the cumulative updates 1996-2016 using the collaborative environment on the Italian Portal of Health Classifications; Andrea Simoncello worked on the ClaML file of the Volume 1 (until 2016) with some support frrom Francesco Talin (University of Udine) (20717; Stefano Terreni and Ivano Tomainu implemented the ClaML format on the Italian Portal of Health Classifications.

CONCRETE OUTCOMES:
As of January 2018, the new Italian translation of Volumes 1, 2, and 3 was sent to WHO with the 2016 ClaML file. The first release of these volumes is not for sale. A new release in.PDF was planned with some errata corrige. The incorporation into the Italian Portal of Health Classifications is ongoing, as ICD-10 2016 browser.
ISBN codes were as follows:
ISBN Code Title Addition to title
978-88-943076-0-3 Classificazione statistica internazionale delle malattie e dei problemi sanitari correlati – Decima revisione, quinta edizione, 2016 Volume 1 Elenco sistematico Volume 2 Manuale di istruzioni Volume 3 Indice alfabetico
978-88-943076-1-0 Classificazione statistica internazionale delle malattie e dei problemi sanitari correlati – Decima revisione, quinta edizione, 2016 - Volume 1 Elenco sistematico
978-88-943076-2-7 Classificazione statistica internazionale delle malattie e dei problemi sanitari correlati – Decima revisione, quinta edizione, 2016 - Volume 2 Manuale di istruzioni
978-88-943076-3-4 Classificazione statistica internazionale delle malattie e dei problemi sanitari correlati – Decima revisione, quinta edizione, 2016 - Volume 3 Indice alfabetico

DISSEMINATION OF RESULTS:
Frattura L, Bassi G, Della Mea V, Morassutto C, Munari F, Simoncello A, Talin F, Terreni S, Tomainu I, Tonel P, Zavaroni C. Classificazione internazionale delle malattie e dei problemi sanitari correlati. Decima revisione. Quinta edizione, 2016. Volume 1 Elenco sistematico; Volume 2 Manuale di istruzioni; Volume 3 Indice alfabetico. Centro Collaboratore italiano dell'Organizzazione Mondiale della Sanità per la Famiglia delle classificazioni internazionali, Direzione Centrale Salute, Integrazione Sociosanitaria, Politiche Sociali e Famiglia, Regione Autonoma Friuli Venezia Giulia e Area delle Classificazioni, Azienda per l'Assistenza Sanitaria n.2 Bassa Friulana-Isontina. Palmanova: OGV Officine Grafiche Visentin; 2017

Frattura L. Nota introduttiva all'edizione italiana. In: Frattura L, Bassi G, Della Mea V, Morassutto C, Munari F, Simoncello A, Talin F, Terreni S, Tomainu I, Tonel P, Zavaroni C. Classificazione internazionale delle malattie e dei problemi sanitari correlati. Decima revisione. Quinta edizione, 2016. Volume 1 Elenco sistematico; Volume 2 Manuale di istruzioni; Volume 3 Indice alfabetico. Centro Collaboratore italiano dell'Organizzazione Mondiale della Sanità per la Famiglia delle classificazioni internazionali, Direzione Centrale Salute, Integrazione Sociosanitaria, Politiche Sociali e Famiglia, Regione Autonoma Friuli Venezia Giulia e Area delle Classificazioni, Azienda per l'Assistenza Sanitaria n.2 Bassa Friulana-Isontina. Palmanova: OGV Officine Grafiche Visentin; 2017, p. III-IX.

5b) IMPLEMENTING ICD-10 FOR MORBIDITY CODING: IT.DRG PROJECT
On behalf of the Italian Ministry of Health, since 2010 Lucilla Frattura is responsible for the coordination of a work group in order to develop an Italian modification of ICD-10 for case-mix purposes (The government funded four-year project "Progetto di un nuovo sistema di misurazione e valorizzazione dei prodotti delle strutture ospedaliere. New measurement and paying systems for hospital products." IT.DRG). By means of the It.DRG project, the Italian Ministry of Health is going to move from the current DRG system, based on ICD-9-CM, to a new Italian system based on an Italian modification of ICD-10 and an improved procedures classification. The Italian WHO-FIC CC worked on a first draft of ICD-10 Italian modification (IM), for which an innovative approach was chosen. Extensions coming from ICD-11 were considered to modify ICD-10.
In June 2018 Lucilla Frattura was nominated in the Project's Steering committee as expert of the Ministry of Health.

Concrete outcomes: As of December 2017 a provisional version of ICD-10-IM was released. New lists of ICD-10-IM health conditions for case mix were created useful to create new Italian DRGs. A chapter of a book was written and the whole book was co-edited.

Dissemination of results:

L. Arcangeli F. Banchelli, L. Bertinato, F. Carle, A. Del Favero, L. Frattura, L. Lispi, C. Marchetti, L. Merlino, M. Nonis, A. Palinuro E. Verdini, C. Zavaroni (Editors), Rapporto ISTISAN. Il Progetto It.DRG: stato dell'arte", in print

L. Frattura, C. Zavaroni, V. Della Mea. Capitolo 2. Messa a punto della modifica clinica italiana di ICD-10 ai fini della classificazione delle diagnosi, In: Rapporto ISTISAN. Il Progetto It.DRG: stato dell'arte", in print

5c) SUPPORT SYSTEM FOR CHOOSING and CODING MAIN CONDITIONS IN HOSPITAL DISHARGE SUMMARY

A new two-year project was funded in 2017 by the Friuli Venezia Giulia region to develop a support system to code morbidity at hospital disharge using ICD-10. Lucilla Frattura was the project coordinator. Project partners were the National Research Council (CNR) and Bruno Kessler Foundation. The activities were carried out according to the workplan.

5d) ICD-10 FOR MORTALITY STATISTICS

Official mortality statistics are produced in Italy by the National Institute of Statistics (Istat). Until the reference year 2015 Istat used the International Classification of Diseases 10th Revision (ICD-10) 2008 edition (including updates until 2009) supported by MMDS (Mortality Medical Data System) software for causes of death (CoD) coding and for the selection of the underlying cause of death (UCD).

For the reference data year 2016 Istat implemented the 2016 version of the ICD-10 for official mortality statistics. In the reference year 2016 Istat adopted the ICD-10 fifth edition (2016) using the translation performed by Istat, as well as the new coding system Iris, which is currently the most widely used software for mortality coding at international level. Data coded according the new version of the ICD-10 will be disseminated at the end of 2018.

In order to evaluate the impact of ICD-10 updates 2016 a bridge coding study has been carried out on a sample of Italian death certificates. Such documatation is useful for measuring the cause-specific shifting in mortality trends due to ICD-10 updates. Compared to the ICD-10 2008, the fifth edition presents several changes in the classification of some diseases and in the guidelines for the selection of the UCD. At 2018 WHOFIC Network meeting a poster was submitted aimed at showing the results of the bridge coding analysis carried out by Istat in order to evaluate the impact of the transition from ICD-10 2008/MMDS to ICD-10 2016/Iris on CoD statistics. The analysis included about 63,000 deaths beyond the first year of age, representing a 10% sample of all death certificates collected in Italy in 2015, which were processed using both coding systems. The resulting UCD as well as the multiple causes (MC) were compared. In order to estimate the effect of the coding transition, comparability ratios were calculated on both UCD and MC data for ICD chapters, groups of causes from the European short list, category and subcategory. A transition matrix with frequencies by chapter was constructed as well. Overall, the two coding systems displayed a percentage of agreement of 95% in assigning the UCD at ICD chapter level. The percentage decreased to about 90% and about 80% at three and four digit level respectively. Some differences emerged for specific groups of causes. A decrease of sepsis was observed in both UCD and MC due to updates in the classification criteria. Other significant changes were observed as the effect of new instructions on acceptable causal relationships or obvious causes: AIDS and renal failure were less frequently selected; viral hepatitis and Parkinson's disease increased as UCD. Some changes were also observed that could be attributed to the implementation of the new coding system Iris. The results presented might support the interpretation of any discontinuity in mortality statistics due to differences in the coding systems between 2015 and 2016.

CONCRETE OUTCOMES:

- A draft coding manual, integrating ICD-10 volume 2, was prepared. The draft is currently under publication in Istat website.
- Istat coders and nosologists provided input for better instructions and better decision tables (issues sent to the MRG and/or Iris group).
- A sample of 2015 data (about 50.000 records) already coded with ICD-10, 2009 version were re-coded using ICD-10, 2016 version. Italy is among the first Countries to adopt the updated version of the ICD for national production. The results of the bridge coding are under publication.

The effect of the application of new 2016 rules in determining the UCD were also evaluated. About 27,000 death certificates were randomly extracted from those automatically coded by Iris software applying the ICD-10 2016 rules. The resulting UCD was considered as a standard UCD. Iris coding log was analyzed in order to measure, for each rule, the occurrence in the selection process as well as the frequency of modification of the tentative UCD. Successively, in order to evaluate the impact of each rule in determining the final UCD, certificates were processed by using a set of modified decision tables produced by suppressing a specific rule each time. The UCD obtained was compared with the standard one, the agreement rate at three and four digit level was calculated and cross-tabulations were produced in order to show the direction of changes. The results showed that some rules have a strong impact in determining the UCD and changing these rules can alter mortality statistics. On the other hand, a possible simplification of the selection algorithm for some other rules would not affect CoD statistics. It should be taken in mind that this study was carried out only on Italian data which might not be representative of the situation in other countries with different certification practices. Nevertheless, the study suggests that such approach, based on the analysis of Iris selection, could be used as a guide during the construction of the rules.

DISSEMINATION OF RESULTS:
Navarra S., Simeoni S., Grippo F. Relevance of ICD-10 selection rules in determining the underlying cause of death. Submitted at 2018 WHOFIC Network Annual meeting

5e) ICD-10 TRAINING FOR MORBIDITY CODING IN MENTAL HEALTH COMMUNITY-BASED SERVICES
Although ICD-10 is not mandatory for morbidity coding in Italy, Emilia-Romagna Region decided to introduce ICD-10 in mental health services to fill the individual personal record. A regional training programme was planned in order to provide basic skills in ICD-10 use in order to code history (using Z codes), medical examination (using R codes), medical diagnosis, taking into account that ICD-9-CM was the current coding system. Different kinds of exercises were submitted aimed at adopting the main morbidity coding rules, coding clinical diagnosis using ICD-9-CM and ICD-10, and distinguishing between making a diagnosis and coding a condition. Different training methods were used: frontal lessons, small group discussions, case studies.
The first part of the training activities were carried out from May to June 2018 in different regional venues to nearly 400 psychiatrists and psychologists. Total teaching time was 91 hours, in 13 training days.

DISSEMINATION OF RESULTS:
Lucilla Frattura (1), Carlo Zavaroni (1), Licia Bruno (2), Alessio Saponaro (3) Implementing ICD-10 in adult mental health services in Emilia Romagna region. Submitted at 2018 WHO-FIC Network Annual Meeting
Frattura L., Bruno L. How to code mental disorders in 0-3 years old children using ICD-10. 2017 WHO-FIC Network Annual Meeting Booklet

5f) ICD-11 EDUCATION
Lucilla Frattura was invited as a teacher at University of Turin, Faculty of Education, to take a 7 hours lesson on ICD-11 and neurodevelopmental disoders (Torino, 13 March 2018).

5g) ICF IMPLEMENTATION
On July 2018 Lucilla Frattura, as representative of the Italian WHOFIC CC, was nominated as a member of a national working group on disability certification and functioning profiles in children and young. The Italian Ministry of Health, which leads the working group, aims to introduce ICF and ICD in a new process to assess disability and to define individualized plan based on an ICF functioning profile.

5h) THE ITALIAN PORTAL OF HEALTH CLASSIFICATIONS
The Italian Portal of Health Classifications (www.reteclassiifcazioni.it) was implemented to support the collaborative authoring of the updated electronic Italian versions of WHO-FIC, according to the agreement between the Italian Ministry of Health and the Friuli Venezia Giulia Region (www.reteclassificazioni.it).

DISSEMINATION OF RESULTS:
Frattura L., Morassutto C. Improvement in functioning at one-year follow-up assessment: the advantage of the Family of Functioning Indicators (FaFI). Submitted at 2018 WHO-FIC Network Annual Meeting

Frattura L., Morassutto C. Disability determination using WHODAS 2.0 and ICF: first results. 2017 WHO-FIC Network Annual Meeting Booklet
Frattura L., Morassutto C. Comparison between two different ways to calculate disability scores using WHODAS 2.0 and ICF: impact on the disability prevalence. 2017 WHO-FIC Network Annual Meeting Booklet
Frattura L., Morassutto C. Environmental factors in disability assessment: how to combine WHODAS and ICF. 2017 WHO-FIC Network Annual Meeting Booklet

5p) SOFTWARE APPLICATION FOR USING WHO-FIC IN DATA COLLECTION AND ANALYSIS
The Italian CC continued to implement the VilmaFABER system to collect and analyze data on functioning and disability in Italian samples. Some results are showed in posters accepted at the 2017 WHOFIC Network Annual Meetings.
Concrete outcomes: Mapping tables to automatically code information collected in lay language into ICF; algorithms to calculate the Family of Functioning Indicators; implementation of the indicators in an ad hoc web system; new data were collected on 109 outpatients.

5q) ICF IN CLINICAL RESEARCH

The Besta Foundation was active on the implementation of ICF and WHODAS 2.0 based assessment tools in neurosurgical and neurological patients.

a) Idiopathic intracranial hypertension (IIH) is characterised by raised intracranial pressure (ICP) with no established pathogenesis. The disorder is strongly associated with obesity, and most of patients are female of reproductive age. Symptoms of IIH include headaches, often chronic and with associated overuse of symptomatic medications, transient visual obscuration, papilledema and eventually optic nerve atrophy.
To address the predictors of disability a linear regression analysis was run with target the WHODAS-12 total score. To select predictors, we ran correlations between WHODAS-12 and continuous variables, namely BDI-II total score, headache frequency and severity, BMI and ICP, presence of Binge Eating Disorder (BED), episodic headache, chronic headache, visual impairment, papilledema, optic neuropathy. Those variables that were significantly correlated to the WHODAS-12 were retained for the linear regression analysis.
A total of 51 patients, 45 females, mean age 37.4 (SD 12.8) were diagnosed with IIH. Most of them were headaches sufferers, with the latter showing significantly higher disability (25.3±14.3 Vs. 13.5±15.6) and 39% had chronic headache. The level of BMI (33.0±6.7) indicates that most of these patients were obese and seven of them had comorbidity with BED. Two-thirds of the patients had either visual impairment (and reported significantly higher disability: 28.8±14.6 Vs.19.8±14.8) or papilledema and one-third had optic neuropathy. The average WHODAS-12 score (22.8±15.2) is suggestive of a relevant disability level, and the average BDI-II (11.2±7.7) is suggestive of low to mild symptoms of depression. Headache diagnosis, headache frequency, presence of visual impairment, BMI and BDI-II scores were retained as predictors for the regression analysis. The final model explained 32% of WHODAS-12 variation and the independent predictors were headache frequency (β=.264, P=.038) and symptoms of depression (β=.434, P=.001).

b) The Besta team also worked on PATHWAYS project, a EU 3-year project that using the biopsychosocial approach, was trying to developEuropean guidelines for the integration and reintegration in the labour sector of people with chronic diseases. In all research streams, PATHWAYS ("Participation to Healthy Workplaces and Inclusive Strategies in the Work Sector"), focused on chronic diseases selected on their contribution to years lost to disability: mental health conditions, neurological diseases, metabolic disorders, musculoskeletal disorders, respiratory diseases, cardiovascular diseases and cancer.Taking into account the results of 3 years of research and investigations in Europe, i.e. the availability of policies, systems and services' strategies and their effectiveness, the perspective of national and European stakeholders, and the met and unmet employment needs of PwCds, 7 Recommendations and corresponding 34 Actions for reaching an inclusive labor market in all European Countries were developed as final outcome of Pathways project.

c) A new area of work on chronic diseases was opened following PATHWAYS project results and Besta Foundation is coordinating a EU Joint Action CHRODIS Plus. In Joint Action "Chrodis Plus: Implementing good practices for Chrodis Disease", a work package dedicated on employment and chronic diseases will create a training tool for employers, a toolkit for workplace adaptation all for the benefit of employees, employers, and society. The tools will be based on a biopsychosocial approach to health, thus will not be

disease specific but based on and targeting human functioning, person's capabilities and chronic diseases commonalities.

DISSEMINATION OF RESULTS:
Matilde Leonardi, Alberto Raggi, Stefania Bianchi Marzoli, Luisa Chiapparini, Paola Ciasca, Alessandra Erbetta, Giuseppe Faragò, Licia Grazzi, Domenico D'Amico. Predictors of WHODAS-defined disability in patients with idiopathic intracranial hypertension. Submitted at 2018 WHO-FIC Network Annual Meeting
Covelli V., Schiavolin S., Guastafierro E., Leonardi M. Narrative research in the care process in neurology and neurosurgery: the biopsycjological methodological approach based on the ICF classification of OMS. Submitted at 2018 WHO-FIC Network Annual Meeting
Chiara Scaratti, Maria Cabello, Beatriz Olaya et al. Pathways for inclusive labour markets in Europe: how to promote work for Persons with Chronic Diseases in a biopsychosocial approach. Submitted at 2018 WHO-FIC Network Annual Meeting
Fabiola Silvaggi, Chiara Scaratti, Erika Guastafierro, Matilde Leonardi. Employment and chronic diseases: Implementation of practices in the employment sector based on human functioning and person's capabilities. Submitted at 2018 WHO-FIC Network Annual Meeting
Erika Guastafierro, Venusia Covelli, Matilde Leonardi. Employment and disability: assessing working capacities with WHO DAS 2.0 and ICF checklist dedicated to labour policies. Submitted at 2018 WHO-FIC Network Annual Meeting

Activity 6

Title: Support WHO-FIC implementation in EURO and other WHO regions
Description: Plan and implement technical assistance projects in support of WHO-FIC implementation
• Support Euro WHO region in introducing ICD-10 in the health national service and in the health information system. (Albania, Russia)
• Provide resource of persons for WHO-FIC related training and capacity building activities as requested by WHO HQ or Regional Offices.

Status: ongoing
In 2017 WHO Albania and Albanian Ministry of Health decide to ask for support in preparing ClaML of ICD-10. 2016 version, Volume 1. After a study visit sheduled in October 2017 , on July 5, 2018, an Albanian delegation went to Udine to discuss the ClamL file and ICD-10 implementation strategy in Albania with Lucilla Frattura and Vincenzo Della Mea.

Activity 7

Title: Contribution to WHO-FIC network activities.
Description: According to the roles of the WHO-FIC Network to promote the implementation, use, maintenance and updating of WHO reference health classifications and to assist WHO in the revision and development of the reference classifications, the Italian WHO-FIC CC assures contribution to the key products of the WHO-FIC Network Committees and Reference Groups, providing technical expertise, participating actively in the annual and mid-year meetings, chairing working groups and committees, being involved in key projects inside the network.
It currently provides:
Advisory Council: Head, and three Co-Chairs
Small Executive Group: one co-chair
URC: Secretariat (ICF since 2010 – third mandate; ICD-10 since 2014 – first mandate), and two voting members
ITC: Co-Chair (until 2016, second mandate) and one voting member
FIC: one voting member and one observer
EIC: one voting member and one observer
MRG: Co-Chair (until 2016, first mandate)
FDRG: Co-Chair (until 2016, second mandate), one voting member

Status: ongoing
The Italian CC currently provides:
URC/CSAC: ICF Co-Chair (Oct 2016-Oct 2018: first mandate of a new Italian CCmember, after two previous two-year mandate of an other Italian CC member), Secretariat (ICF since 2010; ICD-10 since 2014), and two voting members

ITC: one voting member
FDC:Co-Chair (Oct 2016-Oct 2018: first mandate), one voting member and one observer
EIC: one voting member and one observer
MRG: Co-Chair (since Oct 2016 to Oct 2018, second mandate)
FDRG: Co-Chair (since Oct 2016 to Oct 2018, first mandate of a new Italian CCmember, after two previous two-year mandate of an other Italian CC member), one voting member
MbRG: one voting member, since 2017

The Italian CC has actively participated in leading positions to the WHO-FIC management assuring the progress of the Strategic Work Plan and the participation in the WHO-FIC Network activities (vis-a-vis meetings, teleconferences, annual meeting in Oct 2016 and in upcoming meeting in Oct 2017).

Specifically:
Advisory Council (CC Head and other Co-Chairs: scheduled teleconferences);

URC/CSAC: Lucilla Frattura was elected in Oct 2016 for the first term as Co-Chair of the Update and Revision Committee (URC) for the ICF side. Paula Tonel supported the URC (ICD-10 and ICF) in the steps before and after the 2016 meeting, and worked with the new URC/CSAC Co-Chair, Lucilla Frattura, to accompany the ICF update process in 2017 and 2018. See Activity 3 of this report.

FDC: The FDC Co-Chairs are Lyn Hanmer (South African CC) and Andrea Martinuzzi (Italian CC – elected for the first term at the Tokyo Meeting, October 2016). The secretariat function is provided by Brooke Macpherson (Australian CC).The Family Development Committee (FDC) was established in 1999 to ensure that the WHO-FIC has a logical structure so that health classifications needed for each health parameter and setting within the health system can be identified. The Committee assesses potential new member classifications that could fill a gap in the WHO-FIC. During the year, the FDC met three times. The mid-year meeting was held in conjunction with meetings of the International Classification of Health Interventions (ICHI) and the Functioning and Disability Reference Group (FDRG) in Hamburg, April 2018. The FDC has been re-drafting the 2007 WHO Family paper, which describes the Family, principles of classification and the processes for adding, updating and maintaining classifications in the Family. At the Tokyo meeting in 2016, a shorter document focused on the reference classifications in the ICD-11 era was tabled for discussion by the FDC. It was anticipated that this document would complement the 2007 Family paper. A small writing group was formed to concentrate on amending and finalising the document, that was presented at the Network in Mexico City in October 2017. Previous mapping exercises by the FDC have assessed which reference classifications could be useful to monitor the UHC indicators and the 13 targets of the Health SDG. This year the FDC expanded the mapping to include the 100 Core Health Indicators identified by WHO, which contain indicators for health status, risk factors, service coverage and health systems – all seen as vital elements that contribute to UHC. Each reference classification has a role to play in assisting the monitoring of these indicators. The FDC will continue to pursue this topic at its 2018 mid-year meeting, with a focus on ensuring alignment with other WHO activities related to UHC. The FDC acts as the focal point for the WHO-FIC Network for the ICHI development work. In order to facilitate communication and coordination, FDC and ICHI development meetings have been co-located for several years, including the 2018 mid-year meetings.

ITC: In 2018 Vincenzo Della Mea became member of the newly founded Mapping WOrking Group, aimed at establishing guidelines for mapping to and from WHO classifications. The Working Group meets in teleconference twice a month.

MRG: Francesco Grippo is at the end of his second term as Co-Chair of the Mortality Reference Group (MRG) together with Kaori Nakayama (Japan CC). The main objective of the MRG is to contribute to the harmonization of the application of the ICD in mortality. In order to achieve this goal the MRG clarifies the application of consolidated international rules, discusses practical examples and proposes updates of the ICD if necessary. The issues to be discussed in the MRG derived from the Mortality Forum; enquires from MRG members, ICD users for mortality and users of automated coding systems. Since 2017 the main focus of MRG is ICD-11. Multiple activities are carried out around this new classification, especially for adapting the coding algorithm to the structure of the new revision of the ICD. The practical application of ICD-11 is encouraged in order to find out possible improvements for better mortality statistics. One of the major tasks of the MRG is to

make recommendations for the updating of the decision tables and this task is performed by a subgroup of the MRG referred as to Table Group (MRG-TG). Decision tables, consisting of lists of relations between ICD codes (about 30 million relations), are used by automated systems (especially Iris) and are fundamental support for manual coding as well. The recommendations are especially directed to the Iris Group wich practically manages the tables for Iris use. The decision tables are still based on ICD-10, nevertheless, in 2018 mid-year meeting was proposed that the elaboration of updates for the tables will take account of possible impact on the structure of tables for ICD11. The MRG was also informed that the Iris group will be interested in projects for developing decision tables in ICD-11 and the MRG-TG could play an important role in such process wich will be lasting for some years after ICD-11 adoption by WHA.

FDRG: 1. Matilde Leonardi (Italian CC) was elected as Co-Chair for the first term in 2016 with Hae-Jung Lee (Korean CC), and Olaf Kraus de Camargo as Secretariat (North American CC). Several teleconferences were set up along the year. At the Mexico WHOFIC Network annual meeting, October 2017, results of a survey on ICF use were presented, showing that: a) ICF is not yet recognized as a relevant tool for policy and administration; b) despite not being classified, c) the majority of users integrates Personal Factors in the assessments; d) there is lack of clarity of how to use Activities & Participation; e) neither Core-sets, Checklists or Qualifiers are commonly used, except Core-sets by new adopters; f) WHO-DAS is not known among users of ICF. A mid-year meeting was held in Hamburg, 11-14 April 2018 jointly to EIC and FDC. The activities carried out in the last year were:
a) ICD-11 reference guide: With regards to the Reference Guide for the use of ICD 11, FDRG members made suggestions for corrections and clarifications related to harmonize the definitions of functioning in the ICF and ICD. Some case vignettes were prepared together with MRG to support the use of the ICD 11 including its Functioning Entities that are new in ICD.
b) ICF updates: With regards to the continuing ICF update process on the update platform https://extranet.who.int/icfrevision/, a close collaboration with URC/CSAC, was ongoing so as to include all proposals. FDRG since 2017 has been requesting that the ICF Practical Manual is published as Version 0.9, and the wording DRAFT is deleted from the website. As of now WHO, despite agreed to do so, is still working on this. The ICF 2017 is on line and the differences between the previous version and the present version are listed on the WHO website.
c) ICF education: The ICF Education website and teaching repository continues to grow. It can be accessed at http://icfeducation.org. FDRG members and other ICF experts have been invited to share their materials on the platform. The website also has an online Forum to discuss questions related to the use of ICF and WHODAS .
d) ICF Global Implementation: Implementation of ICF at national level is a complex task as countries where it has to be implemented are very different. Uniform approach can not be recommended as ICF is used for different purposes and every implementation needs to be tailored taking into account local, best practices. FDRG annual zooming on ICF use however shows in 2017/2018 an increase on ICF use.

EIC: On 13 April 2018, the 3rd International Symposium on ICF education took place in Hamburg, Germany. A multidisciplinary group of almost 100 persons from 32 nations of all 6 WHO world regions attended the symposium. This unexpectedly large and diverse turn-out underscores the growing interest in the ICF and its implementation all around the world. A poster was submitted at the 2018 WHOFIC Network Annual Meeting aimed at presenting some of the discussion topics, impressions and take-aways from the symposium.

DISSEMINATION OF RESULTS:
Note:The specific posters presented or submitted at the 2017 and 2018 WHO-FIC Network meeting are distributed in this report in relation to specific activities. In this section, the posters related to the Network activities are listed.
Frattura L., Italian WHO-FIC CC annual report. Submitted at 2018 WHO-FIC Network Annual Meeting
Frattura L., Hargreaves J., Tonel P. Update and Revision Committee (URC/CSAC) Annual Report. Submitted at 2018 WHO-FIC Network Annual Meeting
Hoyert DL, Grippo F, Johansson LA. Mortality Reference Group Annual Report, 2017-2018. Submitted at 2018 WHO-FIC Network Annual Meeting
Simon L., Selb M., Leonardi M., Martinuzzi A., Ten Napel H., Snyman S., Sykes C., Yokobori Y., Coenen M. 3rd International Symposium on ICF education 2018. Submitted at 2018 WHO-FIC Network Annual Meeting
Frattura L., Italian WHO-FIC CC annual report. 2017 WHO-FIC Network Annual Meeting Booklet

Hanmer L., Martinuzzi A., Macpherson B. Family Development Committee annual report 2017. 2017 WHO-FIC Network Annual Meeting Booklet

Hanmer L., Martinuzzi A., Macpherson B., Linton C, Denny K. WHO-FIC Family paper: Progress on revision for the ICD-11 era. 2017 WHO-FIC Network Annual Meeting Booklet

Hargreaves J., Frattura L., Tonel P. Update and Revision Committee (URC) Annual Report. 2017 WHO-FIC Network Annual Meeting Booklet

Hoyert DL, Grippo F, Johansson LA. Mortality Reference Group Annual Report, 2016-2017. 2017 WHO-FIC Network Annual Meeting Booklet

Martinuzzi A., Hanmer L., Macpherson B., Jakob R.The WHO-FIC as a tool to monitor and promote Universal Health Coverage (UHC). 2017 WHO-FIC Network Annual Meeting Booklet

Martinuzzi A., Hanmer L., Macpherson B. Assessing the actual and potential future joint use of the WHO-FIC. 2017 WHO-FIC Network Annual Meeting Booklet

2. Annual report on other activities requested

Should WHO have requested activities in addition to the agreed workplan, please describe related actions taken by your institution [maximum 200 words]. Please do not include in this report any activity done by your institution thatwas not requested by and agreed with WHO.

3. Resources

Indicate staff time spent on the implementation of activities agreed with WHO (i.e. those mentioned in questions no. 1 and no. 2 above). Do not include any data related to other activities done by your institution without the agreement of WHO. Please indicate staff time using the number of "full-day equivalents" – a day of work comprising 8 hours (e.g. 4 hours work per day for 7 days should be recorded as 3.5 full-day equivalents).

Number of staff involved (either partially or fully)

Senior staff	Mid-career staff	Junior staff, PhD students
2	3	3

Number of full-day equivalents, total for all staff involved

Senior staff	Mid-career staff	Junior staff, PhD students
100	180	60

Implementation of the agreed workplan activities (i.e. those mentioned in questions no. 1 and no. 2 above) normally require resources beyond staff-time, such as the use of laboratory facilities, purchasing of materials, travel, etc. Please estimate the costs of these other resources as a percentage of the total costs incurred (e.g. if you incurred costs of USD 100 and the value of your staff time was USD 50 which makes the total of USD 150, please report 33.3% and 66.7%).

Percentage of costs associated with staff time	Percentage of costs associated with other resources	Total
90.00	10.00	100.00

4. Networking

Describe any interactions or collaboration with other WHO Collaborating Centres in the context of the implementation of the agreed activities If you are part of a network of WHO Collaborating Centres, please also mention the name of the network and describe your involvement in that network [maximum 200 words].

The center is part of the WHO-FIC Network. Activity 7 "Contribution to WHO-FIC network activities" well describes the agreed networking activities carried out.