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	07-2013 to 07-2014		

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1. Please briefly describe the progress made in the implementation of your agreed workplan as WHO collaborating centre during the past 12 months (or the reporting period listed above). Please report on how each workplan activity was implemented, if any outputs have been delivered, if any results have been achieved and if any difficulties have been encountered during this time. If an activity has previously been completed, has not started yet, or been placed on hold, please indicate this.

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Activity 1

Title: Revision of International Classification of Diseases (ICD-11).
Description: Provision of technical expertise for the ICD-11 revision process until the end of the beta phase and particularly carrying out the following work:
1. To review added concepts, their definition and position in the classification for matching the criteria of a classification element.
2. To work on the transition from ICD-10 to ICD-11 identifying on iCAT the relevant issues raised by URC.
3. To work on the coding rules for morbidity.
4. To review imported definitions for categories for congruency with the meaning of the relevant category of ICD.
5. To work on the application of ICF to the content model of ICD, and propose solutions for alignment on either side, in collaboration with the relevant groups.
6. To review added concepts, and their position in the classification for matching the criteria of a classification element.
7. To review relevant parts of ICD-11 previous to their publication as an alpha draft, for content and structure.
8. To participate TAG Functioning, TAG Mortality and TAG Paediatrics.
9. To support the population of the ICD-11 content model and the development of IT tools.
10. To develop use cases and conduct field trials on ICD-10 to ICD-11 bridge coding and case mix groupings (DRGs, Primary Care, Territorial Groups).

The expertise will made available to WHO by the ItCC according to annual specific agreements.

In 2013 a first prototype of an informatic tool was by the Italian WHO-FIC CC (Vincenzo della Mea & Omar Vuattolo with Francesco Gongolo, Lucilla Frattura, Andrea Simoncello) to help experts in identifying ICD-10 candidate extensions from other available sources, including ICD-11 beta morbidity linearization, national modifications of ICD-10, and possibly other resources such as ICD-9CM translations and the Orphanet inventory. Starting from ICD-10 entities, candidate extensions are prompted from the available modifications, sorted, and when possible, merged according to lexical rules. A web-based interface is available for the user, that shows an ICD-10 tree browser and on its side the set of candidate extensions, identified as above mentioned. For each ICD-10 entity, the user views appropriate candidates for modification, and in a second step, can select subsets of extensions assigning them a code. Imaging to develop a new clinical modification or to maintain an existing one, the set of selected extensions can eventually be submitted via Web Services, in form of an update proposal, to a classification management platform and be adopted in the respective classification. To foster ICD-11 compatibility, ICD-11 entities always appear as first choices among extensions. Considering the possibility to use the tool for the Italian scenario, the English extensions of ICD-10, were linked to the Italian translation of ICD9-CM, currently used for morbidity coding. The tool should enable the development and maintenance of clinical modifications of ICD-10 and facilitates their representation as linearizations of ICD-11. Such representation simplifies the transition from any ICD-10 based system to ICD-11.

Concrete outcomes
A tool was designed to compare different adaptations and different revisions of ICD thus making immediately available existing resources (eg. extensions and translations) for the design of an ICD adaptation that takes into account classification possibilities already explored by other national modifications and at the same time incorporates the novelties of ICD-11.

Dissemination of results
Celik C, Della Mea V, Noselli M, Vuattolo O, ICD URI Model and Supporting Web Services, Meeting of the WHO collaborating centres for the family of the international classification (WHO-FIC Network), Beijing, October 2013
Della Mea V, Vuattolo O, Celik C, Ustun B. Social network integration of the ICD11 Revision Platform. In: Proc. of The 14th World Congress on Medical and Health Informatics, Copehagen, 2013
Gongolo F., Bang S., Sykes C. ICD-11 and the "Factors influencing health status and contact with health services": a test of integration for the Family of International Classifications. WHO-FIC Annual Meeting, Beijing, October 2013
Della Mea V., Vuattolo O., Gongolo F., Frattura L. Smartly up-to-date: an electronic tool to compare ICD, its revisions and adaptations. WHO-FIC Annual Meeting, Beijing, October 2013
Frattura L., Gongolo F., Munari F. Identification and coding of the main condition using ICD: suggested workflows. WHO-FIC Annual Meeting, Beijing, October 2013
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Activity 2
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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.

The Italian CC provides expertise in the International Classification of Health Interventions (ICHI) development procees.

Andrea Martinuzzi leads the Technical Working Group on functioning interventions (TWG). The ICHI alpha2 version which was presented at the annual WHO –FIC meeting in Beijing, October 2013. Work of refinement on specific ICHI items and sections, with the aim of getting to a stabilized axis list and to a complete description of exhisting codes, continued and were synthesized in two meetings to which the Italian CC contributed; the ad hoc ICHI meeting in Freiburg, 30-31 January 2014, in which all the stakeholders' comment on the Alpha2 draft were discussed and taken into account, and the ICHI workshop held in conjunction with the mid year FDRG meeting (May 2014), were specific actions on relevant areas (e.g. exercise, relationship with nursing interventions, mental health interventions) were tackled.

Vincenzo Della Mea has droven the design and development of a ICHI Browser and Authoring tool, possibly aimed at being the official browser for the ICHI classification, and then updated the previously developed ICHI Browser and Authoring tool in order to incorporate the ICHI Alpha2 version.

Concrete outcomes
Updated ICHI Alpha2 version.

Dissemination of results
Della Mea V., Donada M., Best L., Cumerlato M., Madden R. ICHItool: a prototype system for ICHI development and maintenance. In: WHO - FIC Network Annual Meeting, Beijing, October 2013
Almborg A.H., Salvador-Carulla L., Sykes C., Berg L., Cumerlato M., Madden R., Martinuzzi A. The growing tree of Functioning Interventions within ICHI. WHO-FIC Annual Meeting, Beijing, October 2013
Almborg A.H., Salvador-Carulla L., Sykes C., Berg L., Cumerlato M., Madden R., Martinuzzi A. The development of Functioning Interventions–"updated" ICHI Alpha2 WHO-FIC Annual Meeting, Barcelona, 2014, submitted
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Activity 3
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Title: IT and Ontological development for WHO-FIC.
Description: Provision of technical expertise, in presence as well as through teleworking, to support the IT and ontology-based developments of the WHO classifications, focused on the ontological redefinition of ICF, the building conceptual and operational linkages between ICD-11 and ICF through the modelling of functioning properties, the mapping of ICF to other terminologies or ontologies (SNOMED-CT, FMA, upper ontologies) and the mapping of measurement scales to ICF in OWL format (FIM, FAM, Barthels, and eventually others).
The activity consists in the following actions:
(i) Updating of the analysis of the current status of ICF and discover underlying ontological principles on which is founded with reference to other basic ontologies;
(ii) Design of a ICF-based functioning properties model to be embedded in ICD11 content model;
(iii) Continuity of the Mapping of ICF to other knowledge bases and terminologies and represent mappings in formal languages like OWL;
(iv) Representation, by using formal languages, of the links between measurement scales and ICF;
(v) Exploration of new ways of ICF usage by means of knowledge based software;
(vi) Design of a collaborative project with other WHO-FIC network research centres and fund raising.
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.

In the last year, efforts were directed mainly to IT support for ICD11 revision and implementation, with some strategic involvement in activities related to the ontological development of ICF, as detailed below.

(i) Vincenzo Della Mea continued his work as member of the WHO-IHSTDO Joint Advisory Group (JAG) nominated by WHO-FIC Headquarters. JAG meets once a month through teleconferencing, and twice a year face-to-face. Inside JAG, he also participates into the Common Ontology Joint Working group that works on ICD - SNOMED-CT harmonization. This working group meets twice a month thorugh teleconferencing. V. Della Mea participated to most meetings of both, and is in charge of the development of the software needed to carry out an exploratory mapping and common ontology definition on some test chapters of ICD11. This includes a graphical double browser for mappings (Mappet), a subsystem for collecting and distributing mappings in Excel, XML and SQL format, a subsystem for identifying mapping anomalies, and finally a subsystem for displaying candidate entities for the Common Ontology.

(ii) Della Mea continued his work as co-chair of the Informatics and Terminologies Committee. In this role, he participated in all activities involving committee chairs, including preparing the Strategic Workplan, participating to WHO-FIC Council meetings, and teleconferencing with the co-chair Karen Carvell. To simplify the management of submissions for the annual network meetings, since China the WHO-FIC network is using a submission platform proposed, implemented, hosted and updated by University of Udine (Vincenzo Della Mea).

(iii) Common ontology for ICF: The development of a common ontology for ICF has been acknowledged as a priority item by WHO and will be object of a specific project involving all stakeholders and relying on the FDRG, FDC and ITC expertise for specific elements of relevance. The Italian CC has contributed with the co-chairs of FDRG (Andrea Martinuzzi) and ITC (Vincenzo Della Mea) to the development of the action plan in which the three WHO-FIC groups/committees will be involved. A special session on ICF ontology was organized and chaired by Andrea Martinuzzi within the FDRG mid year meeting, with the participation of the FDC and ITC co-chairs and Lucilla Frattura, as the Italian CC FDRG member. The outcome of that workshop was the shortlist of tasks that will be responsibility of the WHO-FIC to contribute: 1 List use cases, 2.Stocktake/Term beating, 3.Contribute to development of content model. 4. Relationships.

Disseminations of results

Rodrigues Jm, Schulz S, Rector A, Spackman K, Ustun B, Chute C, Della Mea V, Millar J, Brand Persson K. Sharing Ontology between ICD 11 and SNOMED CT will enable seamless re-use and semantic interoperability. In: Proc. of The 14th World Congress on Medical and Health Informatics, Copehagen, 2013

Della Mea et al Report ITC. WHO-FIC Annual Meeting, Beijing, October 2013

Karlsson D., Gongolo F., Robinson M.M., Millar J. ICF- SNOMED CT Harmonization - a gap analysis. WHO-FIC Annual Meeting, Beijing, October 2013

Simoncello A., Girardello M., Della Mea V., Cabroni A., Frattura L . An HL7-CDA2 standard template for the ICF-based electronic biopsychosocial record. WHO-FIC Annual Meeting, Beijing, October 2013

Rodrigues JM, Schulz S, Rector A, Spackman K, Millar J, Campbell J, Ustün B, Chute CG, Solbrig H, Della Mea V, Persson KB. ICD-11 and SNOMED CT Common Ontology: Circulatory System. Stud Health Technol Inform. 2014;205:1043-1047

Schulz S, Rodrigues JM, Rector A, Spackman K, Campbell J, Ustün B, Chute CG, Solbrig H, Della Mea V, Millar J, Brand Persson K. What's in a Class? Lessons Learnt from the ICD - SNOMED CT Harmonisation. Stud Health Technol Inform. 2014;205:1038-1042

V.Della Mea, O.Vuattolo, A.Rector, B.Ustun et al. A web-based tool for supporting the development of a Common Ontology between ICD11 and SNOMED-CT. IEEE International Conference on Healthcare Informatics, 2014, in press

Della Mea V, Carvell K. Informatics and Terminology Committee (ITC) Annual Report. WHO-FIC Annual Meeting, Barcelona, 2014, submitted

Brand-Persson K, Campbell J, Chute C, Della Mea V et al. Architecture for ICD 11 and SNOMED CT Harmonization. WHO-FIC Annual Meeting, Barcelona, 2014, submitted

Activity 4
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Title: Coordination and management of the ICD-10 and ICF update process.
Description: Provision of URC co-chair and secretariat functions, together with the other URC co-chair and secretariat, for 2011-2012 and offer availability for 2013- 2014 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 transformation from ICD-10 to ICD-11.

(i) The Italian CC provided for the Update and Revision Committee co-chair (Francesco Gongolo), secretariat functions (Paula Tonel), and membership (Lucilla Frattura) together with the other URC co-chair and secretariat. In the timeframe July 2013-July 2014, the Italian CC continued to support the ongoing process of ICF update on the items coming from the ICFCY. Purpose of the Update and Revision Committee (URC) is to support WHO and WHO-FIC Network in keeping the WHO Family of International Classifications "Reference Classifications" up to date in line with current knowledge. The functions of the URC are the development of Update policies, Update coordination & decision making and the participation in the revision work in order to ensure synchronization from one revision to the other and consistency within the members of Family of International Classification. The URC work is mainly conducted through the update and revision platforms 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. Key deliverable of the URC work include the lists of updates for WHOFIC member classifications.
(ii) The ICF update process proceeded during 2013-14, leaving 52 of the 104 proposals in the open discussion layer. The Italian CC contributed to the discussion on the standing proposals easing the process by proposing the clusterization of similar/related proposals in such a way to streamline the commenting and the entire revision.
(iii) An intensive work of restructuring of the content of the ICF update platform was carried In coordination with FDRG. Using the features of the ICF update platform, all the proposals in the Open Discussion Layer were checked for consistency and then clustered together according to the relevant topic/block. Under every cluster, all the comments related to the different proposals were compiled and edited thus greatly simplifying the work of updating ICF carried out by the URC.

Concrete outcomes:

In 2013, 90 updates to ICD and 25 updates to ICF were approved by the URC and endorsed by the WHO-FIC Council at the annual meeting held in Beijing, China 13-19 October, 2013. In 2014, in terms of annual updates to ICD, 77 proposals have been moderated and put to vote by members. In terms of updating ICF, 48 proposals have been reviewed by the FDRG and put to vote by URC members: the majority of these updates still regards ICF-CY items reviewed in order to become part of a foundation ICF. Functions, activities and completeness of deliverables are represented in the latest version of the Strategic Work Plan submitted to the WHO-FIC Council.

Dissemination of results
Gongolo F., Vogel U., Moskal L. URC Annual Report. WHO-FIC Annual Meeting, Beijing, October 2013
Gongolo F., Vogel U., Moskal L. URC Annual Report. WHO-FIC Annual Meeting, Barcelona, 2014, submitted

Activity 5
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Title: National work on WHO-FIC.
Description: Translation of WHO-FIC materials into Italian. The Italian 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.

Design and diffusion of WHO-FIC training tools and guidelines to describe functioning/disability profiles. The Italian 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. This includes software to: - Support social networking-based update of WHO classifications (e.g. ICD-11); - Collect coded data in health and social information systems; - Deliver codes from local information systems to general repositories; - Provide software modules for other WHO -compliant software. In the design process, exploitation of current standards might be involved, as well as development of specifications for communication standards.

ICF implementation in national disability policies and development and deployment of national ICF implementation knowledge database.. This line of work is a national priority. The Italian CC officially supports four national Ministries to introduce ICF in disability evaluation at different levels and in different policies. The Centre ensures adherence and coherence to ICF conceptual framework in multiple application and implementation areas informing the development and product refinement on how to document and code with ICF at national level.
The workline consists of the following:
(i) use of WHO-FIC and health terminologies within the National Health System and the National Health Informative System, in close cooperation with the Italian Ministry of Health;
(ii) set up and implementation of guidelines introducing ICF-CY in primary schools, in close cooperation with the Italian Ministry of Education, University and Research;
(iii) ICF based data collection for job inclusion of persons with disabilities, in close collaboration with the Italian Ministry of Welfare and social Policies and the Italian Workers' Compensation Authority INAIL)
(iv) Definition of ICF based items to use in national administrative data and population survey on children disability, in close cooperation with the Italian Ministry of Education, University and Research.

ICD implementation strategy in Italy. On behalf of the Italian Ministry of Health, ItCC will be responsible for the coordination and implementation of a national work plan aimed to introduce ICD-10 and modify the current classification of interventions and procedures, in order to pay for hospital products through Italian DRGs (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). An analysis of the current Italian DRG system will be carried out, new case mix applications will be 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.

Ádevelopment of a first draft of a children version of WHODAS 2.0 and its validation through the clinical Áactivities of the ItCC research branches Car

During this year, the lines of work were as follows:

The Italian Portal of Classifications

The Italian Portal of Classifications 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).

ICD implementation strategy in Italy.

Mortality coding and implementation
The Italian National Institute of Statistics (Istat) disseminates data on mortality statistics based on the ICD-10 version 2009. Istat provides an electronic version of the ICD which include a web-based browser for the navigation of both the analytical classification (volume 1) and the alphabetical index (volume 3). In the last year, activities were carried out in order to optimize the browsing of volume 3. In particular a tool for the updating of the alphabetical index was developed which facilitates the translation of the official WHO updates. The tool facilitate the alphabetical sorting of the items. The index database was completed with the uploading of section II (external causes) and III (table of drug and chemicals). Moreover, a specific tool was developed in order to take account of the cross references ("see" and "see also") included in the ICD-10 volume 3. These are powerful instruments that allow to expand the search results.

ICD 10 in morbidity coding
On behalf of the Italian Ministry of Health, since 2010 Lucilla Frattura is responsible for the coordination and implementation of a national work plan aimed to introduce ICD10 and modify the current classification of interventions and procedures, in order to pay for hospital products through Italian DRGs (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 Italian Institute for Statistics provides expertises and practical support (Francesco Grippo, Luisa Frova) in the ICD10 updating process. A formal agreement were signed between Ministry of Health, ISTAT and the Italian CC in order to take part in a unique coordinated national group for updating ICD-10.

Concrete outcomes:
Italian guidelines to implement ICD10 in Italy (version as of June 2013, in Italian, Lucilla Frattura as editor)
Volume 1: updated ClaML file (in English and in Italian) of three different ICD10 versions: 2000, 2009, 2013
Online ICD10 versions on The Italian portal of Classifications (www.reteclassificazioni.it)
Online ICD10 version on the ISTAT portal

Tools and data to support transition.
The Italian CC has been signed the agreement with the WHO to translate the ICD-10 training tool.

To evaluate the impact of the ICD-10 introduction in Italy on morbidity statistics, by transcoding historical data, under the "IT-DRG Project", a subset of the the Hospital Discharge Form (SDO) database was provided by the Italian Ministry of Health, including data from 3 Regions (Emilia Romagna, Veneto, Friuli Venezia Giulia) for 2011 and 2012. A specific software tool (TransIT) was developed to make the transition easier for coders that already know ICD9-CM, currently in use in Italy (Frattura, Della Mea, Vuattolo, Munari, Simoncello). The outputs of TransIT can be a single exact ICD-10 code, a single approximate code, a set of codes, or even a number of codes among which to choose. TransIT was used to transcode SDOs ICD-9 codes from the available database. A total of 3374323 SDOs were analysed, of which 3372741 cointained a main condition, and 369247 cointained also one or more secondary conditions. The number of different ICD9-CM codes used was 11035 (88.7% on a total of 12435). Looking at both main and secondary conditions, a large number of SDOs ICD-9 codes (89.91%) was transcoded automatically, that is, transcoding provided just one option, either exact (35.59%), approximate (54.32%) or composite (0.195%). The remaining 9.89% SDOs ICD-9 codes needed manual intervention, since transcoding provided more than one code. 375 codes could not be transcoded (0.005%). When examining the 100 most used ICD9-CM codes, which covered 42% of SDOs, 43 were coded exactly, 47 approximately, and 10 with multiple choices. When analyzing details of codes that could not be transcoded, a number of coding mistakes were found (mostly: intermediate level categories and groups that cannot be used for SDOs coding condiitons according to coding rules). The transition from ICD9 -CM to ICD-10, based on these preliminar data analysis, could be less difficult than supposed, because a large number of ICD9-CM codes can be easily transcoded to one single ICD-10 code, leaving a manageable 10% of codes to be chosen among a small set of options by coders. However, training is needed for coders to understand the differences between the two ICD versions, in particular when involving the dagger/asterisk mechanism, which is not present in ICD9-CM. The lack of the E codes in current SDO's coding rules is an other issue to address in ICD-10 V-W-X-Y codes implementation in Italy.

Concrete outcomes:
TransIT beta version

Dissemination of results
Grippo F., Grande E., Simeoni S., Cinque S., Pennazza S., Rocchi P., Alicandro G., Mistretta A., Navarra S., Orsi C., Di Fraia G., Marchetti S., Pappagallo M., Frova L. Learning how to use Icd10 for cause of death coding. WHO-FIC Annual Meeting, Beijing, October 2013
Capezzuoli A., Grippo F., Saccoccio T., Alicandro G., Frova L., Pace M., D'Angiolini G. ICD10 Online in Italian: new perspectives for users, epidemiologists and coders. WHO-FIC Annual Meeting, Beijing, October 2013
Frattura L., Gongolo F., Munari F. ICD-10 implementation in the health information system of the Piedmont Region (Italy) to overcome WHO multiaxial classification of mental disorders of children. WHO-FIC Annual Meeting, Beijing, October 2013
Frattura L, Della Mea V, Vuattolo O et al. The shift from ICD-9CM to ICD-10 in coding health conditions in Italy: preliminary data on morbidity statistics effects. WHO-FIC Annual Meeting, Barcelona, 2014, submitted

ICF implementation

The Italian CC has been completed the translation into Italian of the WHODAS 2.0 Manual (Lucilla Frattura, Paula Tonel, Flavia Munari). Some minor refinements have to be done before realising it.

The Italian Centre developed software tools and applications for using WHO-FIC in data collection and analysis. New ways of interacting with FIC-based data were implemented, including collection, usage, visualization, and decision support.

Since 2011, the alpha version of FABER, a newICF based web application, has been used in three field trials in Friuli Venezia Giulia Region. FABER uses ICF and other medical terminology systems as a basis for a flexible standards-based bio-psycho-social record. Since 2011, three field trials using the tool have been carried out in the Friuli Venezia Giulia Region. In 2014 a new trial started in Regione Liguria (under a specific agreement), aimed at studyng the feasibility of Faber evaluation in other regional contexts.

Concrete outcome:
www.vilmafaber.eu

ICF and ISO9999

As ISO9999 classification is a related member of the WHO-FIC since 2003 and it was suggested as a more specific and a more detailed classification in addition to the Environmental Factors (EF) listed in ICF, it seems reasonable to combine the two classifications in order to ensure a more precise description of the care and living environment. In order to develop some expanded ICF-EF e1 categories by combining ICF categories with ISO9999 terms, Lucilla Frattura, Giovanni Bassi and Andrea Simoncello have been working on mapping ISO-9999 to ICF. ISO9999classes were mapped to three digit categories of ICF-EF, Chapter 1, and compared with the semantic content of the titles and definitions (including inclusions and exclusions) of the ICF categories. If an ISO9999 class was mapped to more than one ICF category, its subclasses were considered. Combined terms were created (Expanded ICF-EF terms), with the ICF code in first coding position and the ISO-9999 code in second coding position (i.e.: e120 – 12 21[Wheelchair]). Eight hundred forty-one ISO-9999 (ISO) classes were found to fit with 8 ICF categories. The distribution of ISO classes within the ICF categories was the following: 500 ISO classes fitted with ICF - e115, 98 ISO classes fitted with ICF - e120, 125 ISO classes fitted with ICF - e125, 64 ISO classes fitted with ICF - e130, 13 ISO classes fitted with ICF - e135, 21 ISO classes fitted with ICF - e140, and 20 ISO classes fitted with both ICF - e150 and ICF - e155. A total of 841 expanded ICF-EF terms out of 8 ICF-EF categories was thus obtained. Our findings highlight the importance of expanding the granularity of ICF-EF categories in order to describe more accurately the EF involved in the individuals' functioning and disability. The expanded ICF-e1 terms may be considered a new hybrid standard terminology and may be an useful solution instead of updating all e1 categories. Furthermore, the mapping has to be revised using the ISO-9999 updated version. A validation of our mapping is kindly

suggested in the context of the WHO-FIC network. This, may enrich the debate on the actualization of WHO-FIC members, particularly concerning the ICHI development.

ICF granularity and its "expansion"

Lucilla Frattura and her team have been active on the ICF expansion and to verify its utilily in data collection and analysis. A first naturalist study was carried out with the aims: i.to describe the expanded ICF-EF codes; ii.to study the distribution of expanded ICF-EF codes in a selected outpatients sample; iii.to suggest the use of the expanded ICF-EF codes in epidemiological studies The ICF provides a functioning descriptive model useful to describe the interactions between an individual with a health condition and his/her contextual factors. A great novelty is about its Environmental Factors (EF) component. Unfortunately, the poor EF granularity compared to other standard terminologies may discourage this ICF component use by who is meticulous or on the contrary to facilitate its use to throw the baby out with the bath water by who is harried. Moreover, we don't have standard terminologies to indicate all kind of factors the ICF actually classifies. Specific standard terms on care and living environment were collected using international and national nomenclatures and standards (ISO-9999, Italian Essential Levels of Health Care (ELHC), Italian Social Care Services nomenclature) and automatically mapped to ICF. The expanded ICF-EF maintained the ICF code in the first coding position and the standard nomenclature in the second coding position. The data were collected on the 2011 field trial carried out in Friuli Venezia Giulia Region. The sample (N = 213) was divided in 3 groups, depending on the belonging Healthcare Service (Child and Adolescent Neuropsychiatry Servicies (N = 53), Mental Health Departments (N = 51) and Healthcare Districts (N = 109)). Twenty-nine uncoded family members, health and social professionals, trustees, friends and colleagues were matched to 8 ICF items in e3. Fifty-six ISO-9999 codes were matched to 7 ICF items. Twenty-five different ELHC were matched to ICF code e580. Eighty Italian Social Care Services nomenclature were matched to ICF code e575. The distribution of expanded ICF-EF codes was different between groups, except in e580 ELHC items and e575 Social Care Services items . The expanded granularity of ICF-EF items permitted a deepen description of EF underlining the functioning of the outpatients sample. The fact that almost 200 expanded ICF-EF codes, out of only 17 ICF-EF items were used, may support this figure. A different distribution of expanded ICF-EF in the three groups was found, suggesting a different pattern of the individual "functioning/disability balance", starting from different expanded ICF-EF involved. Expanded ICF-EF codes may lead to a new way of collecting, analyzing and interpreting epidemiological data.

New tools for interviewing about the environmental factors role in functioning.
In 2014, a first version of a web questionnaire to facilitate the performance decription was developed by Lucilla Frattura and Giovanni Bassi, taking into account ICF, the difficulties in collecting information to code, and in assessing the barriers. WAPP.In is an acronimus meaning "web activities participation performance inventory". The questionnaire is part of the VilmaFAber system to describe functioning and disability considering them as "outcome" indicators. The starting point was a previous VilmaFABER version of the assessment schedule and the selection of the activities assessed combined to the Environmental Factors. The WHODAS 2.0 questions structure was particularly analysed. TheWAPP.In foresaw the assessment of 63 items, in the 9 AP chapters. The list of EF to combine to each activity was firstly collected, using the "Assessment of Living and Care environment (ALICE) Inventory". Information were collected in natural language, the Faber web application combining each of them to ICF-EF terms, creating a list of expanded ICF -EF terms. The WAPP.In questions were asked in natural language, using a five level Likert scale to explore the level of problems in doing activities and the level of facilitator and/or barrier effects. An automated ICF coding was developed, the performance values as well as the facilitators and barriers values corresponding to the five Likert scale options. An instruction manual was written to administer WAPP.In. A special attention was given to the self-determination to don't act a specific activity. It was possible to explicitely collect information on performance, facilitators and barriers using the WAPP.In. Field trials were planned to test it in selected samples. Inside the VilmaFABER system, a suite of tools for assessing functioning on web is growing.

ICF and chidren with disability inclusion policies

Since 2011, Lucilla Frattura was appointed as a member of the National ICF Technical Group set up at the Italian Ministry of Education, University and Research (MEUR) under the "ICF Project". The aim was to support the use of ICF in the assessment of educational environments for their ability to accommodate diverse

student populations and facilitate participation for all children. The goal was to collect inputs to recommend how to use ICF, especially in order to identify educational barriers and facilitators in participation, thus avoiding the risk of a Babel of languages, and how to better accommodate diverse students.Guidelines for using ICF-CY in the Italian education system are in progress by the national ICF technical group.

Specific children-youth core-set
There are no automated tools to describe functioning and disability in children taking into account the need to collect information on impairments, limitations and restrictions which consider explicitly the Environmental Factors (EF) role. In order to define a web tool to facilitate the description of the individual functioning/disability balance in children, which combines BF and AP categories according to specific assessment criteria, and take into account the EF role, the starting points were the Italian administrative rules for school inclusion of children with disabilities and specific educational needs. These rules suggest to assess children in 9 areas: cognitive, relational, communication, language, sensorial, motor, neuropsychological, personal and social autonomy, and learning. Thirty professionals were selected among those who had taken part in the VilmaFABER field trial during 2013 and who had a specific background on neurological and psychiatric problems of children. Formal assessment documents prepared by the professionals were collected and information on functioning written in natural language was backcoded to ICF. A list of BF and AP ICF categories was thus created. The professionals were then asked to group the information mapped to these categories into the 9 suggested assessment areas, avoiding to put a category in more than one assessment area. A web children and youth core set was created as a part of the Vilma-FABER system, which foresaw the assessment of 101 categories, comprising 24 from BF Chapters 1-3 and 77 from all 9 AP Chapters. After grouping the items in the suggested 9 assessment areas, taking into account the professionals' suggestions, and after three rounds of consultations, a final combination of categories was approved and the VilmaFABER system was updated with this new core set. Field trials were planned to test the core set in selected samples in order to reduce the number of the chosen dimensions to assess and to verify how the information on the role of EF jointed to each category changes the meaning of the sentences written in natural text An automated output was designed in order to release a specific valid document, written in both natural and ICF language, presenting the individual functioning/disability balance.

ICF and children with disability inclusion policies.
Starting from the database of a CCM national project (C. Francescutti, L. Frattura, R. Troiano, et al., Towards a common disability assessment framework: theoretical and methodological issues for providing public services and benefits using ICF, Disabil Rehabil 31, 2009, S8–S15), Leonardi and her team examined the prevalence of difficulties in performing different activities among a group of Italian children and adolescents who have been enrolled in a disability survey. A protocol based on a selection of 55 categories taken from the Activity and Participation components of the ICF-CY was used. Problems were represented dividing children by age groups, and categories were selected as relevant if reported by 20% of the cases as very severe/complete problems. A count-based methodology was chosen and categories were counted at the level of domain, showing differences related to age groups. Count-based complexity and severity indexes were calculated, reflecting the global amount of problems and the portion of very severe/complete ones.

Collection of functional status information in school settings.
Based on funds from the Ministry of Education, University and Research, a collaboration with the school district of Arluno (Lombardia Region) was established to develop a schedule to collect and systematize functional information in school setting. A preliminary version of the ICF-PEI Schedule was published in early 2014.

ICF and job inclusion policies

ICF-based data collection for job inclusion of persons with disabilities, in close collaboration with the Italian Ministry of Welfare. In 2013, a new national programme was launched on the evaluation of functioning/disability of persons with disability in order to support their inclusion in the labour market by Italia Lavoro, the governmental body responsible for the programme on behalf of the Italian Ministry of Labour. On the basis of a specific agreement, the Lucilla Frattura, Giovanni Bassi and Andrea Simoncello supported Italia Lavoro in the review and development of specific ICF-based assessment tools. During this cooperation, a first

version of a "workplace assessment schedule" was developed, taking into account ICF and its limits regarding the Environmental Factors component. The starting point was a previous version of the assessment schedule and the areas it assessed. The characteristics of the workplace to describe were as follows:
• General workplace characteristics
1. Workplace accessibility
2. Work spaces and company services
• Specific workplace characteristics
1. Task and workstation characteristics
2. Technologies and work equipment
3. Protective clothing and devices
4. Persons related to the workplace
The information foreseen by the assessment tool was mapped to ICF using a semantic and/or conceptual similarity method. ISO9999 was also used, where possible.
The tool foresaw the assessment of 87 items, in the 6 aspects mentioned above. The 87 items were mapped using 11 ICF categories from the following domains:
3 categories from e1: e120, e135, e150
3 categories from e2: e 225, e240, e250
3 categories from e3: e325, e330, e340
2 categories from e5: e520, e590
The possibility to use other standard terminologies to expand the ICF categories used was also considered. It was found that only categories from domain e1 could be expanded using a more specific standard terminology. The standard used was ISO9999. The expansion of the other ICF-EF categories was done using the general terminology already present in the assessment tool. The list of expanded ICF-EF terms can be used to describe a worker functioning profile in a workplace described using the new tool. This new tool will be used jointly to a "Questionnaire on the employer's expectations 1.0", which was also defined. This other questionnaire, through the exploration of 8 AP chapters (except D6, Domestic life) and 54 items, will be useful to match the professional functioning profile requested by the employer with the functioning profile of the candidate. Field trials were planned to verify their feasibility.

Coteam Project

The collaborative project named "COTEAM" (scientific coordinator: Andrea Martinuzzi) which gathers partners involved in various stages/levels of care provision for this population in different Italian health service providers was launched Nov 2012 and in 2013-2014 entered in its most active phase. Subjects with any of the selected 39 ICD diagnoses typically associated with long-term care needshave been contacted and interviewed (directly of through the care-givers) to evaluate their functional status with special attention at the environmental determinants. The ICF based assessment method (protocol/web application), which has been developed by Lucilla Frattura and her team at the Italian WHO-FIC CC, was employed in order to verify its usability in describing the functioning profile of each subject and of a whole sample.The balance between functioning and disability will be evaluated for persons below age 18 and compared to that obtained for persons aged above 18, will now be analyzied and will provide a proxy for met and unmet needs. The results of this project will provide the first systematic recognition of the functional profile of persons with disability transitioning from adolescence into adulthood. By offering a reasoned view of met and unmet needs it may be used as a guide in designing models of care minimizing gaps and obstacles in this critical phase.

Matilde Leonardi and her team has been active on:
- the implementation of ICF-based assessment tools in neurosurgical patients: validation of the WHODAS-12 in patients candidate for neurosurgery.
- the implementation of the MG-DIS, an ICF-based assessment instrument for myasthenia gravis: a qualitative study was employed to select core themes, then questions have been developed and the assessment instrument is currently on a validation process.
- CQ-NCH Project (Complications and Quality of Life in Neurosurgery): A clinical study in which data on clinical outcomes and complications of surgical procedures will be jointly evaluated with patient-reported outcomes, namely quality of life, disability and well-being.
- Identification of severe disability in adults applying for disability certification. Starting from the database of a CCM national project (C. Francescutti, L. Frattura, R. Troiano, et al., towards a common disability assessment

framework: theoretical and methodological issues for providing public services and benefits using ICF, Disabil Rehabil 31, 2009, S8–S15), we examined the degree to which sociodemographic factors and factors related to number and type of comorbidities are predictors of severe disability in a population of adults applying for disability certification.

- Description of functioning and disability in patients with disorders of consciousness. Two observational multicentre studies named "Functioning and disability in patients in Vegetative State and Minimally conscious state" and "PRECIOUS" were carried out using ICF for describing disability levels in a cohort of patients with disorder of consciousness. Differences in functioning between patients in Vegetative state and Minimally conscious state were analysed and an ad-hoc checklist for patients with DOC was developed.

Disability Manager University Course has been organized by Matilde Leonardi and her team in collaboration with the Bioethics Centre of the Catholic University in Milan, based on bio-psychosocial model of ICF the 3 weeks training intensive course develops new ICF based professional skills for professionals in the fields of health, welfare, labour, education, policy, environmental architects, bioethicists. 20 new case managers were trained in 2013/ 2014.

Dissemination of results

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Activity 6

Title: Awareness building and implementation support of WHO-FIC in WHO regions.
Description: Promotion of the WHO-FIC members as reference framework in disability assessment, data collection and eligibility, including monitoring of the UN Convention on the Rights of Persons with Disabilities within international initiatives on health and disability policies.
The main networks in which the present activity is executed are the following:
(i) The Assembly of European Regions: attendance as a WHO-FIC reference to Committee n. 2 Social Policy and Public Health (current president: the Friuli Venezia Giulia Minister of Health and Social Policies, V. Kosic).
(ii) Alps Adriatic Working Community. It counts 10 member Countries and Regions: Friuli-Venezia Giulia Region, Baranya (AUT), Burgenland (AUT), Carinthia (AUT), Croatia, Lombardy (ITA), Slovenia, Styria (AUT), Vas (HUN), Veneto Region (ITA).
(iii) Network promoted by the RHETI Project and financed by the EU PROGRESS Programme on the implementation of the objectives of the European Union in employment, social affairs and equal opportunities.
(iv) The Eastern European Countries (primarly Albania and Kosovo) involved in the implementation of the Friuli Venezia Giulia Operational Plan 2010 - 2013 "The international dimensions of FVG Regional Health Policy" on five priority fields of action: a) disability; b) social and psychosocial disadvantage; c) motherhood and childhood; d) advanced biomedical technologies; e) healthcare management.
(v) EUREGHA: open network of regional and local authorities, including the Friuli Venezia Giulia regional Ministry of Health and Social Policies, focused on public health.
(vi) Clinical Network of "Eugenio Medea" Scientific Institute for Research in extra- European Countries.
Serve as resource of persons for WHO-FIC related training and capacity building activities as requested by WHO-HQ or Regional Offices.
The Italian Collaborating Centre takes part in the COURAGE Project in Europe, for development and validation in three European countries of ICF-based measures of health and health-related outcomes for an ageing population.

Measuring Disability and Health in Emergencies: implementing a disability survey using WHODAS 2.0 in the Typhoon Yolanda affected areas of the Philippines

Matilde Leonardi has been active on the first disability survey in the Philippines. In response to the massive devastation caused by Typhoon Yolanda on November 8, 2013 in the Philippines, the WHO Regional Office for the Western Pacific, in consultation with the UN Humanitarian Inter-Cluster Coordination Group decided to conduct a survey on post-typhoon disability and health profiles of people affected. It was the first time ever that - within the context of an UN lead humanitarian response effort - disability was officially recognized as a key outcome indicator and WHO committed to do a disability survey in the Yolanda affected areas of the Philippines in May, to be repeated 9 months to one year later. The Survey Protocol includes socio-demographic questionnaire, household questionnaire and WHO DAS 2.0-Disability Assessment Schedule. WHO DAS 2.0 was provided by WHO HQ, and modified for field application by WHO Regional Office, the Manila University and Neurological Institute Besta of Milan. The survey protocol, including Household Questionnaire and Consent Form, has been translated in Cebuano, Samarnon and Waray local dialects. The interviewers were 40, men and women from Tacloban area, Leyte island, and some had previous experiences on surveys. There were teachers, social workers, psychologists, nurses and community workers among the field staff. Survey preparation, which included recruitment and hiring, was done in May 2014. The field training was held in Tacloban City in May 2014 and performed by a WHO expert in the area of disability studies and by researchers of Manila University. Data collection was conducted from May 25 to June 30, 2014. A sample of 2000 people has been interviewed. The main aim of this survey is to provide detailed information on affected populations' ongoing health and disability problems, that require formal treatment or assistance, as well as to provide a broader base for humanitarian support to people affected. Focusing on these vulnerable affected populations through an innovative approach that considers functioning and disability profiles together with tailored socio demographic information, allows better public health planning and improvement in policies and interventions.
Multicenter study inside the WHO-FIC network using the FABER assessment method: the launch of the WFABER project.
Currently, no common collaborative study is undertaken inside the WHO-FIC network on health outcomes at community level to facilitate decision-making, continuity of care and welfare planning. Lucilla Frattura and her team aim to launch a WFABER (Worldvide Friendly Alimenting Biopsycosocial Electronic Record) project, to

carry out a WHO-FIC based multicenter naturalistic outcome study using the international version of the web application FABER, developed by the Italian WHO-FIC collaborating center. The FABER application integrates the WHO-FIC members with national terminologies and standards into an individual electronic record. Its information model uses the ICF environmental factor (EF) component as a "superstandard" terminology, automatically creating new terms made by a ICF code in the first position and other standard terms (where existing) in the second position. This expanded ICF-EF list of terms is used to explore the role (as a facilitator or a barrier) of the environmental factors in individual functioning/disability assessment. As there are currently no commom international service classification, a great work was made to list the country-specific terminologies on services to provide country specific expansion to the ICF EF categories e575 General social support services, systems and policies and e580 Health Services, systems and policies. The preliminary results were provided by a first three country cooperation, among Finland, South Africa and Italy. The FABER information model was revised. FABER was enriched with two new country specific terminologies regarding health and social services and systems, in order to create new expanded ICF-EF terms valuable in Finland and in South Africa. The first part of the collection information form was completed. A demo of the international FABER was realized. A preliminary draft of the WFABER study was made.
This preliminary work revealed that is possibile to launch a WFABER project. There are huge differences between countries as to how the services are termed and described in the national contexts. The current ICF-EF terms are insufficient to describe such diversity, being the new expanded ICF-EF terms able to do. The expanded ICF-ED terms may be considered in the development of the ICHI, in the ICF-EF ontology and update purposes and for the mICF development. The WFABER project is open to all other interested WHO-FIC network countries.

mICF and Collaborative project Italy-South Africa
Technology is increasingly being utilized to collect and organize health information, facilitate decision-making, and support continuity of care. Mobile health (mHealth) solutions can increase efficiency of health service delivery and administration, enhance the monitoring of patient health, and facilitate health data collection for clinical practice and other applications. At this time mobile applications incorporating ICF do not exist, only emerging prototypes. In 2014 a Collaboration between the Italian CC and the South Africa CC was made aimed at investigating the development of a user-friendly mobile application to (1) assist providers and users of health services in the front line (e.g. patients, healthcare providers) to identify a person's problems in terms of the ICF (functional status and contextual information), and (2) to amalgamate ICF-related data centrally. The first aim focuses on ensuring accurate and efficient capture of functional status and contextual information to facilitate person-centred decision-making and continuity of care, whereas the second aim is to ensure reporting for administrative and research purposes. Each aim has objectives and activities linked to it. The objectives of the first aim are (1) to ensure the accurate and efficient capture of the functional status and contextual information of users to understand the biopsychosocial issues related to the problem and to (2) provide a means for providers and users of health services to collect and transfer ICF-related information to facilitate the continuity of care. The second aim to investigate the development of a mobile application to amalgamate ICF-related data centrally.

The Besta Institute has been developed and continued in 2013-4 the participation in the EU RICHE project (Research Into Child Health in Europe) aimed at t implementing a process to find gaps in European child health research. This project used ICF to shift from a categorical, impairment-based approach to a continuum approach where disability is measured as a level of functioning in multiple domains.

Dissemination of results

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survey using WHODAS 2.0 in the Typhoon Yolanda affected areas of the Philippines WHO-FIC Annual Meeting, Barcelona, 2014, submitted

Activity 7

Title: Strengthening of Italian WHO-FIC Network and contribution to WHO-FIC network activities.
Description: Italian CC maintains, on the basis of an institutional agreement, an Italian network between the institution designated as WHO-FIC Collaborating Centre and three research branches, throughout two steering bodies: the Italian WHO-FIC CC network Scientific Committee, made by the Italian CC Head (coordination) and the three scientists delegated by the three institutions; the Italian WHO-FIC CC Steering Committee, made by the legal representatives of the four parts of the ItCC network and coordinated by the legal representative of the Institution designated as ItCC. The Italian WHO-FIC CC Network Scientific Committee organizes annual face to face meetings, in order to verify, prior reporting to WHO, full adherence to the WHO vision and scopes in the different planned activities.

Contribution to the key products of Committees and Reference Groups. Providing technical expertise to assist WHO in the development, testing, implementation, use, improvement, update and revision of WHO-FIC members within the WHO-FIC network.
More in detail this activity allows the ItCC members to contribute through all the ItCC planned activities and in particular the following are not already mentioned in other relevant activities of the present form: statistical implementation of ICF classification according to international and national experience on health and social statistics; development of contents and statistical implementation of ICD according to international and national experience on mortality statistics; dissemination and training in mortality statistics.
ItCC members actively participating in the network activities, through face-to-face and on-line meetings as well as remote work, according to the specific work plans of each group and specific agreements.

The Italian CC contributed to the key products of Committees and Reference Groups and provided technical expertise to assist WHO in the development, testing, implementation, use, improvement, update and revision of WHO-FIC members within the WHO-FIC network.

Moving from the 2011-2015 terms of reference of the Italian WHO-FIC Collaborating Centre, a performance monitoring plan (PMP) was defined in order to yearly assess the Centre's performance.

The Italian CC is actively participating in leading positions to the WHO-FIC management. Specifically: Advisorsy Council (CC Head: Lucilla Frattura 5 teleconferences); FDRG CoChairmanship: Andrea Martinuzzi (8 teleconferences, 1 mid year meeting, London May 3-5 2014); SEG participation: Andrea Martinuzzi (7 teleconferences, 1 SEG mid year meeting, Geneva April 29 2014); ITC Cochairmanship: Vincenzo Della Mea; URC Cochairmanship: Francesco Gongolo: FDRG member: Lucilla Frattura and Matilde Leonardi, FDRG mid-year meeting, London May 2014, Lucilla Frattura 1 teleconference.

MRG participation: The selection of the underlying cause of death is a complex process which implies a deep knowledge of the ICD and a rigorous application of the rules provided by the Classification. Due to this complexity, the mortality coding can be affected by variations which lower the comparability of data across time and space. Besides this the interpretation of medical certification, due to the lack of specific instructions, is an additional source of variation. For this particular aspect, Francesco Grippo provided a specific contribution to the MRG, consisting in the analysis of specific cases of death certificates with complex terminology. The analysis was finalized to the development of international rules for handling complex medical text such as connectors between conditions (causal and independent connectors). Other activities mainly focused on the development of methods for the systematic application of ICD rules and guidelines. These methods should promote the implementation of the ICD updates. Moreover activities have been carried out for the evaluation of the impact on mortality statistics of the proposed updates to the ICD rules and guidelines.

All the research partners have been involved by the Italian WHO-FIC CC head in the delivering of the work plan through teleconferences and mailing so as to follow the WHO-FIC implementation activities in particular of ICD, ICF, ICHI, WHO DAS.

New projects inside the WHO-FIC network were launched:
(i) launch of the WFABER project; (ii) coordination of and active participation in mICF ; (iii) involvement in SNOMED-CT and ICF common ontology efforts; (iv) Iso9999 mapping to ICF; (v) software development.
Updates at national level: the CC is formally engaged, as leader of the ICD-10-related line of work, in the national project of revision of the Italian case-mix system (IT-DRG project); ICD-10 cumulative updates were translated into Italian and the relevant ClaML file was maintained both in English and Italian through the Italian Portal of Classifications, which was restyled.
Updates at regional level: a third VilmaFABER field trial was carried out in the Friuli Venezia Giulia Region and a fourth field test was started in the Liguria Region.
The communication power was evaluated considering presentations, seminar and meeting organization, and active users of the Italian Portal of Classifications.
The activities of the Italian Collaborating Centre are linked to the relevant lines of work of the WHO-FIC SWP according to the CC's TORs. All activities of the Centre were made possible thanks to regional and national funding.

Dissemination of results
Frattura L., Gongolo G. Updates on the performance monitoring plan of the Italian WHO-FIC Collaborating Centre. WHO-FIC Annual Meeting, Beijing, October 2013
Frattura L: Updates on the performance monitoring plan of the Italian WHO-FIC Collaborating Centre, WHO-FIC Annual Meeting, Barcelona, 2014, submitted

2. Please briefly describe your collaboration with WHO in regards to the activities of the WHO collaborating centre during the past 12 months (e.g. means of communication, frequency of contact, visits to or from WHO). Please feel free to mention any difficulties encountered (if any) and to provide suggestions for increased or improved communication (if applicable).

See the activities as described above for a full specification of the persons and time made available to WHO at WHO-HQ and to WHO-EURO for other missions. As far as the means of communication are specifically concerned, the collaboration took advantage of e-mails (contacts on average on a daily basis), shared work-spaces (iCAT collaborative platform for ICD-11, iCAT users' group, RSG shared workspace, ICF Update Platform, ICD Update Platform and telephone including conference calls facilities used on average on a biweekly basis.

3. Please briefly describe any interactions or collaborations with other WHO collaborating centres in the context of the implementation of the above activities (if any). If you are part of a network of WHO collaborating centres, please also mention the name of the network, and describe any involvement in the network during the last 12 months.

The interactions with other WHO Collaborating Centres took place almost completely within the general framework of the WHO-FIC Network Strategic Work Plan as illustrated per every single above described activity.