**Education and Implementation Committee**

**Meeting Report**

**Cassia Maria Buchalla**

**Sue Walker**

**Co- Chairs**

**Summary**

During the 2010 WHO-FIC Network Annual Meeting in Toronto, Canada, the Education Committee (EC) and Implementation Committee (IC) were merged and held two working sessions, on Monday, October 18 and Wednesday, October 20 as one Education and Implementation Committee (EIC). This Meeting Report provides a combined summary of both working sessions, which were each attended by approximately 50 persons. The participants represented all six WHO Regions and at least 10 Collaborating Centers designated and under designation. The Committee also benefited from the participation of several representatives from WHO Headquarters and Regional Offices and non-governmental organizations, IFHRO and the World Confederation for Physical Therapy. The EIC also organized an orientation session for new annual meeting attendees on Monday morning, with 24 persons in attendance.

In the first working session, the EC and IC Status Reports for 2009 – 2010 were presented and new terms of reference were approved. The EC co-chairs, Cassia Maria Buchalla and Marjorie Greenberg, and IC co-chairs, Matilde Leonardi and Kenji Shuto, were thanked for their service over the past two years, and elections were held. Cassia Maria Buchalla and Sue Walker were elected as the co-chairs of the EIC for a two year-term. Marjorie Greenberg offered to support the co-chairs in the coming two years as EC Chair Emeritus, and Matilde Leonardi agreed to serve as Task Leader for the ICD and ICF Implementation databases project.

The pre-final ICD-10 Web-based Training Tool and Introductory module of the ICF eLearning tool were presented, and plans for their timely finalization were established. The Committee discussed translation and ongoing support of the tools and development of additional modules for the ICF tool. Matilde Leonardi presented a draft questionnaire and process for establishing the ICF Implementation Database on the WHO-FIC website for comment. Marijke de-Kleijn and Huib ten Napel proposed additional areas where there is a need to share knowledge in a structured way. The previously approved Checklist for Implementation of WHO-FIC at the country level was accepted for posting, distribution and evaluation. Joon H. Hong and Carol A. Lewis reported on the development and pilot testing in South Korea of an international morbidity coding exam, and Cassia Buchalla reported on development of an additional 100 questions for the Underlying Cause-of-death exam. Work on the morbidity exam will continue, and other countries agreed to conduct pilot tests and report experiences at the 2011 mid-year meeting.
Seven finalized Information Sheets were presented: *ICD, ICF, Training and Certification to Promote High-Quality Data, What You Should Know about Clinical Documentation, Uses of Coded Clinical Data, Mortality Cause-of-Death Data, and Civil Registration and Vital Statistics*. The suite of Information sheets will be formatted and made available on the Sharepoint site for EIC members to use as required. The ICF Overview, prepared by the Functioning and Disability Reference Group, has been finalized following EC comment and submitted to WHO for posting. Margaret Skurka and Marjorie Greenberg presented a paper proposing a regional approach to promoting the International Training and Certification Program for Mortality and Morbidity Coders and Trainers and other EIC products, including the Information Sheets and IFHRO Education Modules for Basic Health Records Practice.

The second working session continued discussions from the first and began with a presentation by Rita Scichilone on use of the EC Sharepoint site for posting EIC materials, including the Briefing Kit for Collaborating Centres and a list of abbreviations and acronyms maintained by the Committee. Rita and the co-chairs will work with WHO Headquarters to convert the site to an EIC site and assure member access and participation. Papers and posters on ICD and ICF education and implementation were presented in line with the Committee’s aims to identify best practices and provide a network for sharing expertise and experience on ICD and ICF education, training and implementation.

The EIC developed its strategic work plan for 2011, with a focus on the eLearning tools, international training and assessment, information products for users, ICD and ICF implementation databases and sharing of best practices. This was subsequently confirmed by Council.

Since the 2009 Annual Meeting in Seoul, Korea, the EC and Joint Collaboration (JC) with the International Federation of Health Records Organizations (IFHRO) have conducted three teleconferences and a mid-year meeting in Cologne, Germany. The collaborative relationship with IFHRO began in 2000 to develop the International Training and Certification Program for Mortality and Morbidity Coders. The Education and Implementation Committee will hold a mid-year meeting in Budapest, Hungary on March 28-30, 2011 and will continue to hold periodic teleconferences.

**Welcome and Introductions**

Marjorie Greenberg and Cassia Maria Buchalla, co-chairs of the Education Committee (EC), welcomed participants to the first meeting of the Education and Implementation Committee (EIC). Margaret Skurka, Sue Walker, Marjorie Greenberg, and Lynn Buříka volunteered to serve as rapporteurs for the two working sessions.

**Review of the agenda**

Marjorie Greenberg and Matilde Leonardi, co-chair of the Implementation Committee, reviewed the agenda. It was noted that there would be opportunities for country presentations, as time permits, at the second session.
Papers and Posters

The EC and IC members submitted 26 papers and posters for the WHO-FIC meeting – they all are posted at the meeting website

3. ICF eLearning Tool: Field test of the Introductory Module (paper and poster) by Alarcos Cieza et al
4. Time has come to share ICF (-CY) – related Knowledge! (paper) by Huib ten Napel and Marijke de-Kleijn
5. Checklist for Implementation of WHO-FIC Members at Country Level (paper) by Marijke de Kleijn
6. International Training and Certification Program: A Regional Approach (paper and poster) by Marjorie S. Greenberg and Margaret Skurka
7. Report on an International Examination for Morbidity Coders (paper) by Joon H. Hong and Carol Lewis
8. Gaps in disability prevalence between World Health Surveys, census and surveys in WHO regions: Linking data to ICF domains (poster) by Matilde Leonardi et al
9. Using Microsoft SharePoint Collaboration Tools for Committee Productivity (poster) by Rita Scichilone
10. SNOMED CT with ICD: Better Together in Electronic Health Records (poster) by Rita Scichilone
11. ICF in Action: Video Podcasts to Demonstrate ICF Coding (poster) by John F. Hough
12. Getting Started Using ICF Concepts and Codes in the UMLS (poster) by John F. Hough
15. A regional solution to cause-of-death coding? (paper) by Sue Walker
16. Experiences in training ICD-10 trainers (paper) by Sue Walker and Garry Waller
17. ICD-10 coding for causes of death: survey on the quality and effectiveness of training in Italy. How to improve data quality (paper) by Monica Pace et al
18. WHO-FIC Information Sheets: An educational tool for global users (paper) by Marjorie S. Greenberg and Cassia Maria Buchalla et al
19. ICF Knowledge Sharing Collaborative in Canada (paper) by Diane Caulfeild
20. ICF Symposium “Towards Practical Use of ICF”, Education and Implementation of ICF as a Common Language (poster) by Emiko Oikawa et al
21. Disseminating ICF at the Regional Level: the advanced ICF training in the Veneto Region (poster) by Andrea Martinuzzi et al
22. Ten Years of ICF Implementation in the Americas (poster) by Patricia Soliz et al
23. First International Course for Instructors for Using the ICF (poster) by Patricia Soliz et al
24. ICF Applications in the Netherlands and Future Directions (poster) by Coen H. van Gool et al
25. Electronic Data Capture for ICF: New Work on the eFRHOM (poster) by Navreet Bhattal et al
26. The Role of National Advisory Committees in Advancing WHO-FIC Implementation and Priorities (paper) by Marjorie S. Greenberg and Fatima Marinho

Status Reports

The first session started with the Education and Implementation Committee Status Reports for 2009-2010.

WHO-FIC Education Committee: a Status Report, 2009 – 2010

A brief overview of the mission and accomplishments of the WHO-FIC Network Education Committee (EC) during the past year was provided by Marjorie Greenberg, including:

- Progress on the ICD-10 Web-based training tool and Introductory module of the ICF eLearning tool
- Regional Approach for promoting International Training and Certification Program, a Joint Collaboration with the International Federation of Health Records Organizations (IFHRO)
- Development and piloting of international morbidity coding exam
- Finalization of seven Information Sheets
- Posting of briefing kit on Sharepoint
- Orientation session for new participants
- Transition planning with Implementation Committee

Marjorie observed that much had been accomplished by the Education Committee since its establishment and that closer alignment with the Implementation Committee, with which it was originally associated, was very compatible with EC goals.

WHO-FIC Implementation Committee: a Status Report, 2009 – 2010

Matilde Leonardi then presented the mission and accomplishments of the Implementation Committee (IC) during the past year. This included:

- Development of draft questionnaire for the ICF Implementation database
- Completion of WHO-FIC Implementation Checklist
- Analysis of 196 countries’ surveys and census on disability prevalence and mapping to ICF for World Report on Disability
• Disability eligibility meeting in Rome in April 2010, supported by Italian Collaborating Centre

Matilde noted the challenge of reaching and assisting countries not currently affiliated with a Collaborating Centre and the need to develop and strengthen regional and country capacity. She asserted that there is no implementation without education and that it was time to bring together expertise on both for the benefit of the WHO-FIC Network mission. She further suggested that WHO-FIC efforts should concentrate on integration of datasets to have more information, on creating a common language and on thinking local but with more global perspective.

Review Education and Implementation Committee draft Terms of Reference

Marjorie Greenberg reviewed with participants the draft Terms of Reference for the new Education and Implementation Committee, which had been developed by the current EC and IC co-chairs. Several refinements were recommended, including new tasks related to multi-lingual issues and the use of terminologies and classifications together. The terms of reference were approved by acclamation and are attached.

Review EIC Strategic Work Plan

The draft EIC Strategic Work Plan combined projects from both the EC and IC and would be re-visited at the end of the working sessions on Wednesday. The current co-chairs had worked with WHO staff to put the information into the standard format developed in the past year.

Election of EIC Co-chairs

The EC co-chairs, Cassia Maria Buchalla and Marjorie Greenberg, and IC co-chairs, Matilde Leonardi and Kenji Shuto, were thanked for their service over the past two years, and elections were held. Cassia Maria Buchalla and Sue Walker were elected as the co-chairs of the EIC for a two-year term. Marjorie Greenberg offered to support the co-chairs in the coming two years as EC Chair Emeritus, and Matilde Leonardi agreed to serve as Task Leader for the WHO-FIC Implementation database project.

A question was raised about the fact that only collaborating centres could vote in the election. Marjorie explained that the role of non-governmental organizations (NGO’s) and countries not affiliated with a collaborating center in the Network is under discussion by the WHO-FIC Council and will be addressed before the 2011 annual meeting.

Electronic Training Tools

ICD-10 Electronic Training Tool

Robert Jakob, WHO, provided a generic outline of the ICD-10 web-based training tool and its development for the benefit of new members. The tool is consistent with the core curricula developed by the EC for mortality and morbidity coding with ICD-10 and certification of cause of death. He noted that the tool was developed for a variety of
users and uses. It is possible to select different tracks through the materials, depending on the needs of the user. Altogether, the tool has about 40 hours of training, with about 2000 screens. Recent additions to the tool are pop-up windows with user guides and versions of the three volumes of the ICD-10 for use with the training tool. The tool was designed using the 2010 edition of the ICD-10, but examples and questions have been selected to ensure that they are compatible with earlier versions.

A release candidate version of the tool has been made available on the WHO-FIC website, and there have been various reviews and feedback provided, with considerable support of the Education Committee and Joint Collaboration with IFHRO. These are being used to finalize the tool. The first translation into Portuguese has been done; Cassia reported that the translation took two weeks but there is now the need for technical review and revision. This version can be used to assist in the Spanish translation. A process for user assistance and maintenance was discussed during the EC 2010 mid-year meeting in Cologne, Germany. A Google group has been set for user queries, and a process for management of this and how answers are to be provided is being established by a workgroup under the leadership of Sue Walker. The Google group will be operationalized when the training tool goes live. The workgroup will gather questions and develop answers and will report at the 2011 mid-year EIC meeting on the volume of questions generated by users, the nature of the queries and future plans for user support.

The final version of the tool will be ready before the end of 2010. An .exe file will also be available to enable the tool to be loaded on user PCs and then used without access to the internet. CD-ROMs of the tool will be produced and a downloadable version will be available. Translation guidelines, files and contracts are under development. Robert hopes to have the final version available for demonstration at the 16th IFHRO Congress in Milan, Italy in November 2010.

**ICF eLearning Tool**

Alarcos Cieza introduced the ICF eLearning tool, which is the introductory module in a suite of materials that will also include advanced and specialized modules in the future. The materials follow the curriculum modules for ICF developed by the Functioning and Disability Reference Group (FDRG) with support from the EC in seven chapters. Since the last Network meeting in October 2009, the development team has received extensive feedback from various organizations and groups who have evaluated the tool. A translation into Spanish has been completed and a face-to-face PowerPoint version developed. The development of a download version (similar to the ICD-10 tool) is under discussion. A protocol for the field testing was developed, in conjunction with the FDRG and EC, as was a pre and post-test questionnaire for users of the tool to assess its learning effectiveness. An ethics application was made to the University of Sydney ethics committee to cover the focus groups conducted with persons with disabilities to get their feedback.

The field testing took place from 1 March-15 September 2010, and 330 persons accessed the site and provided feedback. Although most of the respondents were not members of the WHO-FIC Network, there was participation by certain members of the EC, JC and FDRG. Alarcos stressed that this did not mean that they had completed the
whole tool, but at least 60% of it. All WHO regions were represented in the evaluation period. The results of the questionnaire demonstrated significant learning outcomes. The next steps include review of the final tool, followed by posting on the WHO-FIC website; a translation protocol is being developed and several translations are planned. Project groups are being established by the German Centre and WHO for the next two modules, and funds are being sought to support this work. Alarcos will report on the progress during future teleconferences and at the mid-year meeting, when the EIC will discuss its role going forward.

Matilde Leonardi offered the support of her research institute to review the final tool once changes recommended by reviewers have been made. It was also suggested that people who submitted changes should be invited to check to see that these have been appropriately applied. A careful check of spelling and grammar is required, and a suggestion was made to use the WHO list of recommended spellings (based on the English and not US variant). Ros Madden suggested a generic introductory statement be included with the tool to explain the potential uses of the training and to manage the expectations of users. There is currently an email address for queries which is directed to the German Collaborating Centre. However there may be a need for others to assist in providing this level of support. A question was raised about the inclusion of the ICF-Children and Youth (CY) in the tool. Whilst ICF-CY is referenced, there is no specific detail about this version in the tool yet.

Implementation Database

Matilde Leonardi made a presentation on the ICD-10 and ICF implementation database and how to capture, incorporate and use ongoing know-how about how to implement the classifications. Currently the Classification Database on the WHO-FIC website is limited to information on ICD implementation. Matilde has drafted a questionnaire for collecting ICF implementation information, which she distributed to EIC members for comments immediately prior to the Toronto meeting. Members agreed to submit comments to Matilde and EIC co-chairs by the end of November. The goal is to upload the questionnaire on the WHO-FIC website by early 2011 for completion online by member countries. The information collected will ultimately be added to the WHO-FIC Implementation Database. Information will include translations, related legislation, reporting, implementation know-how and available data and metadata and is expected to facilitate information sharing and capacity building. All users will be able to browse the database, and key informants will be able to edit and update the country specific information.

Analysis of Disability Data in WHO Regions

Matilde also briefly described the work carried out by the Italian Collaborating Centre in 2010 to analyze disability data collected by 196 countries either through a census or survey and map these data to the ICF. This was done as background work for the World Report on Disability. The lack of comparable data across countries and regions and the influence on prevalence rates were considerable. The mapping effort demonstrated that the vast majority of questions focused on impairment, rather than activity limitations or participation restrictions.
Additional Information Resources on ICF Implementation

Marijke de-Klein presented “The Time has come to share ICF (-CY) – Related Knowledge. “, which proposed collection and sharing of additional information on ICF implementation in a structured way.

ICF-INFO
The ICF INFO project was established several years ago by the Dutch Centre to gather detailed information on ICF applications, educational materials and electronic tools; the template should be updated to include information on ICF-CY-related activities and re-circulated to countries. It was noted that the WHO-FIC website will link to the Dutch Centre website, and country responses to the WHO-FIC questionnaire on ICF Implementation can serve as a way to screen to identify countries that should be asked to submit more detailed information to ICF INFO.

Approaches to Defining Activity and Participation
The ICF has separate definitions for Activity and Participation, but there is one set of domains. The ICF Annex 3 includes four options for use of the codes in these domains, and the IC and FDRG have previously discussed collecting information from the global community of ICF users on how the different options are being used. The Dutch Centre is preparing a short questionnaire for this data collection to distribute to collaborating centres and other ICF users. The EIC agreed that this inquiry to learn more about ICF use should be conducted with the FDRG.

Use of Personal Factors
A personal factors classification was not included in the ICF, although they are part of the conceptual framework. However, the German Centre has worked on a literature review. The Dutch Centre believes that the next steps for this work include development of a position paper and an inventory to gather information and expertise in the use of Personal Factors codes. The results would be reported to a future meeting. It was agreed that the FDRG should be leading this work with assistance from EIC members. The topic was referred back to FDRG.

Checklist for implementation of WHO-FIC members at country level
The Implementation Checklist developed by the IC over the past several years has been finalized and is recognized as past work. It was been developed as a guide to assist countries with implementation. The Checklist will be posted on the EIC website (which will evolve from the current EC website) and included in materials being offered for the regional approach to promote implementation and education on WHO-FIC classifications. Countries are asked to report on their experience in using the Checklist and its utility.

WHO-FIC – IFHRO Joint Collaboration

Morbidity Exam
Joon H. Hong presented on behalf of the morbidity exam development group, describing an impressive amount of work since the mid-year meeting in Cologne when the group received approval to begin developing an international exam for testing the
skills of ICD-10 morbidity coders. The exam currently is not intended to lead to certification. The group sent a survey to EIC and Morbidity Reference Group members asking about the existence of local morbidity exams and soliciting possible questions for an international exam. A number of questions were reviewed, and a small group discussed standard answers and a marking scheme. This was more difficult than hoped but not unexpected because of the paucity of morbidity rules and guidelines in the ICD-10. The questions for a pilot test were then selected and the exam piloted by 48 coders in Korea in early October. Participants also completed a survey about the time for the exam and the level of difficulty of the questions. Only one participant gained over 80% in the exam, with the average mark being 60%. The challenges identified were:

- Different codes in each version of the ICD-10, with a decision needed on which version to use. Translations often do not keep up with versions in official WHO languages.
- Some coders ignore the WHO updates if they are not mandated by their governments
- Some national and hospital coding instructions exist that cause coding discrepancies

Joon reported that it is planned to use the most recent version of the ICD-10 for the exam, but further development is required. More questions are also needed. The EIC thanked Joon and her group, as well as the Korean Medical Records Association, for their support of this exploratory effort.

**Mortality Exam**

Cassia Buchalla reported that she has received a number of additional questions via Mortality Reference Group (MRG) members for the underlying cause-of-death exam. These are now being formatted and will be sent to MRG members to assess answers and use of coding rules.

**International Training and Certification Program: A Regional Approach**

Margaret Skurka reported on the efforts by the EC, JC and IFHRO to develop a suite of information products for global and regional users to support Health Information System developments and classification implementation and use. The components include:

- Core curricula
- Web-based Training Tools (in conjunction with WHO and the Network)
- Approved training materials developed by countries
- Certification exams and processes for assessing coders and trainers
- IFHRO modules for basic health information management practice
- WHO-FIC Implementation checklist
- Information sheets (seven have been finalized)
  - WHO-FIC-IFHRO JC overview
  - ICD
  - ICF
  - Clinical Documentation
  - Uses of Coded Clinical Data – Acute Care Hospitals
  - Mortality (Cause-of-Death) Data
  - Civil Registration and Vital Statistics

Many of these have been posted on the EC and IFHRO (www.ifhro.org) websites.
The regional approach is designed to improve the status and skills of the health information management workforce and the quality of coded morbidity and mortality data, using the WHO and IFHRO regions for local country support. This idea also will be presented for comments at the IFHRO Congress in Milan, Italy in November 2010, and discussed further with the WHO regional advisors, some of whom attended the WHO-FIC annual meeting. Feedback on utility of the materials is being sought.

The second EIC working session began with Marjorie Greenberg reviewing highlights from the first session. Action steps on the eLearning tools and other projects were confirmed.

Sue Walker reviewed the agenda for the second session, which she chaired. There was additional discussion on the morbidity examination pilot. Joon Hong explained that multiple-choice coding scenario questions were developed, and the questions were classified to ensure every chapter of ICD-10 was represented. Examinees were allowed 3 hours to complete the exam plus an additional 30 minutes to provide feedback regarding the difficulty of the exam questions. Representatives from Japan expressed interest in conducting the same pilot test as the one conducted in Korea. Representatives from the Netherlands also expressed interest in pilot testing the exam. It is possible that the results can be presented at the 2011 mid-year meeting. Letters of appreciation are being sent to the Korean Medical Record Association and to all the Korean coders who sat for the exam. The long-term goal is to finalize a question bank that can be used for an international morbidity exam. Other countries have expressed an interest in access to the questions for internal training purposes, but the Committee would like to keep the questions for use in this international exam.

Discussion regarding creation of a larger question bank for all countries to access for training purposes occurred. Individuals who submitted questions that were not used for the exam will be contacted to determine willingness to share questions via a database. Before widely sharing, agreement regarding answers will be sought.

It was noted that currently the EIC lacks resources to conduct the mortality and morbidity exams on a global basis. It is hoped that this can be organized on a regional basis and that additional resources can be secured.

**Presentations and Tools**

Authors of papers and posters who were present at the meeting were invited to make brief presentations, followed by short country presentations on ICD and ICF implementation.

**Using Microsoft SharePoint Collaboration Tools**

Rita Scichilone provided a live introduction to the WHO Sharepoint site for the Education Committee. Currently, contents of the Briefing Kit for Collaborating Centres, as well as the Information Sheets and other documents, are posted on the site. The plan is to expand the site to the Education and Implementation Committee. She noted that many useful features of the site exist, which will allow the committee to share information and develop work products more easily. All committee members are encouraged to sign up and explore the site in order to maximize the usefulness of this
technology for the work of the committee. This also can eliminate the need to send documents via email attachment and help with version control.

**SNOMED-CT and ICD**
Rita Scichilone asserted that terminologies and classifications used together strengthen the ability to provide reliable health care data. SNOMED CT reduces the variability in data capture by serving as a reliable input system, while the classifications serve as the output system for statistical and administrative needs. Three phases of data capture and reporting are used in electronic records - direct input from entry terms or natural language, linkage to SNOMED CT as the reference terminology for data capture and storage, and finally links to the classification systems. This allows for multiple uses of data. Rita concluded that the collaboration between the International Health Terminology Standards Development Organization and WHO provides complementary tools for standardizing content in electronic health records around the world.

**WHO-FIC Implementation in the Netherlands**
Huib ten Napel and Coen van Goel reported on implementation of ICD-10 and ICF in the Netherlands. ICD is used for many purposes, but presently the Netherlands is straddling use of both ICD-9 and ICD-10. ICD-10 offers a common classification, and the Ministry of Health is supporting the implementation by funding and involvement. At the level of clinical practice, the ICD-10 is perceived to not offer the level of detail necessary. Additionally, there is no coordination by Ministry of Health regarding implementation, which hampers multiple arenas, including reimbursement.

ICF is being applied in many arenas - health care, research, social security, policy and education – for needs assessment, monitoring, instrument development and documentation (e.g., electronic medical files). The ICF offers a common language for exchange of experiences in multiple disciplines, but the currently used ICF-based instruments are only yielding somewhat comparable results due to methodology differences and other issues. Additionally, the country policy to use ICF is ahead of the implementation and a clear description of the application in social policy areas.

Translations of the classifications in Dutch are essential. Knowledge regarding the development and expertise of ICD and ICF need to be in a central place, such as the collaborating centre.

**eFRHOM**
Catherine Sykes offered a demonstration of eFRHOM (electronic functioning and related health outcomes module), which was developed as a data capture tool by the Australian Institute of Health and Welfare (AIHW) to record ICF-related information for use in health and related information systems. The user interface is easily navigable and allows for patient and provider information, selection of ICF codes and recording of qualifiers; the tool also incorporates two additional qualifiers developed in Australia – assistance with activities and satisfaction with participation. Differences in capacity and performance qualifier ratings can be visually displayed. Different report options are available in the tool, which produces an ICF profile. It is possible to indicate which codes are the focus of the intervention and to modify the record as interventions proceed. The “parsimonious set” of ICF codes that has been identified by the German
Collaborating Centre is also included in eFRHOM. This tool is still a prototype in development by the University of Sydney, which has received the intellectual property from AIHW and is conducting further testing. The testing will emphasize “back-end users” to determine the final form of this electronic tool. Contact Ros Madden (ros.madden@sydney.edu.au) for information on accessing the tool.

Regional Solution to cause-of-death coding
Over the past 16 years the National Centre for Health Information Research and Training (NCHIRT, formerly NCCH Brisbane) has been conducting training courses for morbidity and mortality coders throughout the Pacific Islands. Sue Walker described this experience and how originally Volume 2 of ICD-10 was used for teaching mortality coding but students (especially those who were not physicians) found it difficult to generalize from examples in Volume 2 to causes of death on real death certificates. Most problems were with interpreting sequences and application of rule 3. Decision tables helped, but in the Pacific Islands region, additional difficulties accrue. Often times, there are few mortality coders and sometimes these individuals also do morbidity coding, and the “rules” for coding vary in these instances. Given country differences in coding practices, it is not always practical for coders to train in other countries. Sue’s paper explored options for further assisting Pacific Island countries, including consideration of the pros and cons of establishing a regional centre that would process death certificate data, code the certificates and provide reports to the governments of countries interested in this service. The ultimate aim should be to educate and encourage local coding capacity so that eventually the requirement to engage a coding expert or a regional coding facility is reduced. As coders in the small countries become more familiar with mortality coding and more confident in applying their skills, they should be encouraged to consider sitting for the mortality coding exam developed by the Joint Collaboration between IFHRO and the WHO-FIC Education Committee. This would give them the opportunity to demonstrate their competence to senior officials within their own country.

Australian Train-the-Trainer Program
NCHIRT has been conducting an annual introductory ICD-10 coding program in Brisbane for seven years. In 2008, the Centre introduced a new initiative, inviting potential trainers to participate in a one week train-the-trainer workshop prior to the regular coder training. The new trainers are provided with the opportunity to practice their new skills with the support and assistance of the NCHIRT trainers during the subsequent introductory program. The train the trainer (TTT) program includes principles of adult learning, including experiential learning, planning a training program, developing assessments and so on. The TTT participants continue on with the one-week mortality and morbidity courses and help to teach those courses (if it becomes evident that they do not have enough coding knowledge, they then “take” the course rather than participate in leading the course). To date, 27 individuals have participated in the Trainer program, 21 of whom agreed to complete a survey about their training experiences prior to, and after the NCHIRT train the trainer program.

Nearly forty-three per cent of respondents reported that they had not undertaken any morbidity or mortality coding training since their attendance at the Train the Trainer program. The other respondents had taught 2374 students since 2008 in WHO Western Pacific, Eastern Mediterranean and African regions, those regions with the most difficulty in maintaining a suitable coding workforce. Production of standard materials for the TTT program proved very useful, although trainers appreciated the ability to
modify to suit their local environment. Participants also reported finding the US Mortality Medical Data System (MMDS) decision tables very useful for teaching mortality coding. The NCHIRT educators believe that future training for ICD-11 could be accomplished using this model of training experienced coders as trainers, and then selecting the most skilled of those to be resource persons and trainers in their own country or potentially in their region. All of the respondents who reported that they now conduct their own training courses in coding are interested in being part of a network of trainers to support the implementation of ICD-11.

Expanding Annex 4: An Opportunity for ICF Implementation

A paper by John Hough proposed changing Annex 4 of ICF to include codes with the case examples. The current Annex 4 is a compendium of 14 text-based vignettes describing the ICF conceptual framework among individuals. The Case Examples provide neither any ICF coding, nor any connections between ICF and ICD coding. John suggested several approaches for addressing the untapped potential of Annex 4 and developing more efficient methods for teaching about ICF coding. One simple approach would be to add more text to the existing Annex, to “flesh out” the 14 text-based vignettes with their relevant ICF codes; the paper proposes such text. Another approach would be to accentuate existing ICF-oriented teaching tools on the Internet, by providing hypertext links within Annex 4 to help the learner find answers to their ICF coding questions. This approach would take most advantage of the ICF coding examples now available within the WHO ICF eLearning Tool. Yet another approach might involve adding photographs or graphical “clip art” with superimposed ICF coding, along with text explanations about the selected codes and coding strategies. For example, the Japanese ICF Illustration Library could be linked to Annex 4.

Discussion included concerns that using pictures with codes may stigmatize people rather than underscore the coding of characteristics. Additionally, it was noted that in training, the entire situation for the individual should be presented so that potential users understand the ICF context. While acknowledging these concerns and emphasizing the importance of respectfully utilizing photographs and clip art in the public domain, John noted that, in his experience, showing graphic images is the best way to teach new learners.

Role of National Advisory Committees

Marjorie Greenberg and Fatima Marinho asserted in their paper that national advisory Committees can play an important role in advancing WHO-FIC implementation and priorities. The paper was written in conjunction with the 60th Anniversary observance of the U.S. National Committee on Vital and Health Statistics (NCVHS) and reviews the various roles and functions of a national advisory committee, the history and accomplishments of the NCVHS and its contributions to advancing international classifications, and preliminary results from a country survey. WHO had recommended the establishment of such committees in 1948, but little is known about the current existence of national committees on vital and health statistics and related topics in other countries. In order to begin to address this knowledge gap, the authors conducted a survey of countries in the Pan American Health Organization (PAHO) region and the WHO-FIC Network about their experiences with similar advisory committees. Thirty countries, 22 in the PAHO region, responded to the survey; 19 reported on at least one national committee on health information policy. Most of the 27 committees identified had been established in the past 10-15 years, and many are established in law. About
half address health classifications, and more than half address electronic health records, vital statistics, health indicators, health data standards and health information technology. Although a national advisory committee, especially one with membership principally from the private sector, can be resource intensive for the government agency that supports it, the authors conclude that establishment of such committees should be considered as a tool in the implementation armamentarium.

**Quality and effectiveness of ICD-10 training in Italy**

Three regional training courses on ICD-10 coding for causes of death have occurred in Italy in the past three years. Physicians have been the primary trainees, but nurses and others also have received the training. Monica Pace reported on a follow-up questionnaire that was sent to the trained coders in order to assess the course effectiveness, relevance, content and organization and applicability to the trainees’ professional activities. Use of U.S. decision tables, Italian National Institute of Statistics (Istat) instruction manual and ICD-10 updates were reported as very useful by trainees. Respondents endorsed more training on external causes of death, neoplasms and multiple causes, as well as information on bridge coding. Respondents also reported that the criteria for application of Rule F were very useful as well as the transport accident table. Trainees were especially enthusiastic to learn about multiple cause coding. Monica noted that the courses helped create a network among professional coders.

**Manual on Indian experience**

Dr. Ashok Kumar shared a document on Indian experiences between 2004 – 2010 in planning, organizing, conducting and evaluating training programs for the WHO Family of International Classifications. The Central Bureau of Health Intelligence (CBHI) decided in 2004 to create a pool of trained manpower on ICD-10 from among the officers drawn from various States and Union Territories and other Central, as well as State, governmental organizations, who could function as State Coordinators and Master Trainers. After ratification of the use of ICF by the government for coding functioning and disability, CBHI took a number of initiatives for advocating and promoting use of this classification. In 2009, a five-day training course was initiated with 3 days focus on ICD-10 and 1.5 days on ICF and evaluations and examinations. There are two courses, one for non-medical personnel and one for master trainers. Dr. Kumar suggested that these experiences of conducting training in a vast country like India may serve as a guideline for other developing countries having more or less similar socio-economic and geographical conditions. The full report is available from Dr. Kumar.

**Implementing ICD-10 in Mozambique**

Dr. Alessandro Campione updated the participants on implementation of ICD-10 in Mozambique. He reported that, overall, there were few improvements in terms of overall health status and other resources and concerns. However, some gains have been made since the 2008 WHO-FIC Network meeting in India. A strategy for implementation in rural areas (a reduced list of conditions for paper based systems) was developed. Simplified references, books and other materials have been developed in order to provide some education to potential users. Brazil has provided some support to Mozambique with access to training materials. Mozambique has limited informatics infrastructure so paper based materials and local software become essential. The National Death Certificate has been completely reviewed and a new one has been
approved and distributed; over 200 health workers have received some basic training in ICD-10 and cause-of-death certification. One thousand sets of ICD-10 have been purchased and distributed to all hospitals. Some software has been developed for use in hospitals, and a Hospital Death Register was deployed in thirteen hospitals. A basic training course for mortality coders has been instituted, and medical doctors also have participated, resulting in over 400 individuals trained. A regional network to support development of e-health and standards and architecture is being developed. Data is beginning to be used at local and national level.

**EIC Strategic Work Plan**

The EIC co-chairs will update the Committee Strategic Work Plan with the action items agreed during these meetings and include the additional information requested by WHO. This updated plan will be available for the next EIC teleconference.

**Mid-year meeting**

The EIC will hold a mid-year meeting in Budapest, Hungary on March 28-30, 2011. As in the past, this will be held in conjunction with meetings of the Mortality Reference Group, International Collaborative Effort on Automating Mortality Statistics Planning Committee and the IRIS Group. The EIC also will continue to hold periodic teleconferences.

Attachment
Terms of Reference

WHO FIC Education and Implementation Committee

Purpose
Assist and advise WHO and the WHO-FIC Network in implementing the WHO Family of International Classifications (WHO-FIC) and improving the level and quality of their use in Member States. Track implementation of the classifications and develop implementation, education, training and certification strategies for the WHO-FIC, identifying best training and implementation practices and providing a network for sharing expertise and experience on training and implementation. The first priority will be for the reference classifications, ICD and ICF.

Background
The Implementation Committee was established in 1999 with a Subgroup on Training and Credentialing. In 2003, the Subgroup became a separate Education Committee. The two committees were merged into the Education and Implementation Committee in 2010.

Functions
The primary functions of the Committee are to develop strategies for the implementation of the WHO-FIC with an integrated educational strategy for the Reference Classifications. Other members of the Family of International Classifications will be considered as resources permit. The components of this strategy include the following functions:

1. To conduct through the WHO HQ and ROs an international stocktake of WHO-FIC implementation in a timely, systematic and comprehensive manner:

   1.1 Review periodically the planned or existing use of classifications in both the public and private sectors in terms of: areas and purposes of use, version in use, coverage, coding method (automated, physician coders, clerical coders etc.);

   1.2 Prepare a periodic summary of the global implementation status in Member States;

   1.3 Work with WHO in the development and refinement of mechanisms for collecting and analyzing WHO-FIC implementation data (by conventional questionnaire and web-based applications);

   1.4 Monitor and make proposals for improvement of the technical and scientific quality of implementation-related studies presented to the annual WHO-FIC meetings and other international meetings.

2. Assess the needs of users of the classifications, including those who provide source information, apply codes, conduct research or use the resulting data.
2.1 Identify the learning objectives for educational approaches.

2.2 Maintain an inventory of existing educational materials and capacity.

2.3 Make recommendations for learning content including development of core curricula

2.4 Make recommendations for best practices for promotion and delivery of educational material.

2.5 Develop, harmonize and maintain self-learning tools.

3 Assist WHO in the development and application of implementation guidelines.

4 Provide WHO with guidance on user needs in terms of instruments, tools, training materials, and other references.

5 Act as an international support network for countries, through the WHO and ROs, on issues relating to implementation and best practices in the use of the WHO-FIC.

6 Act as advocates both nationally and internationally to obtain high level support and financial commitment to develop and implement improved information systems using WHO-FIC, particularly in developing nations.

7 Work with the other WHO-FIC Network committees and reference groups in the creation of methodologies for the joint use of WHO-FIC members in health information systems and surveys and development of educational products.

The components of the education and implementation strategies include the following tasks:

1. Inventory the use of ICD and ICF in member states
2. Inventory the availability of the classifications in multiple languages and translation strategies
3. Gather information from collaborating centres and regional offices on use and capacity for implementation of ICD and ICF in WHO member states
4. Develop a Checklist for implementation of WHO Family of International Classifications
5. Identify groups with interest in the implementation of WHO-FIC and approaches to address them
6. Gather information from collaborating centres and regional offices on capacity for ICD-10 and ICF training in WHO member states
7. Conduct needs assessments about the capacity, skills and responsibilities of ICD mortality and morbidity coders and ICF coders in member states. Define the skills and levels of education and training required for coders and nosologists, as well as other users of the classifications.

8. Identify groups requiring education and training about ICD and ICF (e.g., coders, statisticians, epidemiologists, policymakers, administrators, relevant systems and program managers, clinicians, survey developers, health sciences educators, students and consumers) and in the proper completion of source documents (e.g., death certificate, health record) and approaches to address them.

9. Catalogue, characterize (e.g., purpose, audience, content, language, availability, media and technology) and disseminate information on current educational and training curricula and modules for the ICD and ICF and identify gaps and methods for filling them.

10. Review existing training materials and the mechanisms for their dissemination and identify best practices. Provide advice on best practices to developers of ICD and ICF educational materials.

11. Promote the multi-lingual development of educational materials on ICD and ICF

12. Work with ITC and IHTSDO and other relevant groups on educational materials and implementation strategies for the joint use of classifications and terminologies

13. Collaborate with national and international organizations (e.g., the International Federation of Health Records Organizations) with which coders and nosologists can affiliate.

14. Continue to explore the capacity of these organizations to support an international training and certification program for ICD coders.

15. Explore the need for international certification or assessment of those trained to use ICF as a coding and classification system or of ICF training materials. Identify a support network or mechanism.

16. Identify approaches for assuring that training and certification are dynamic processes, responsive to changes in medical science, disability policy, technology, coding rules, etc. Explore different approaches to training, e.g., face-to-face, eLearning.

**Structure and Working Methods**

The structure of the Committee should involve permanent members from WHO (including the regional offices) and from each collaborating centre who will primarily devote their time to developing and, to the extent possible, carrying out strategies for addressing the functions specified above.

Membership is open to regional offices and all collaborating centres with national and regional responsibilities for WHO-FIC implementation and education. All WHO-FIC Centres may nominate two official members per country (up to a maximum of four members) and additional “collaborators”, who can participate fully but do not participate in voting. Beyond these permanent members, additional participants may take part in committee meetings as observers. The Committee will elect co-chairs for a two year term from its membership in a closed ballot during even-numbered years at an annual meeting of the network.
The Committee will develop a biennial work plan, which lists in detail goals, objectives, activities, deliverables, timelines and responsibilities for addressing the terms of reference. If necessary, different work groups (sub-committees) may be formed for specific tasks or WHO-FIC classifications to address different issues.

Working methods include e-mail, conference calls and face to face meetings, including an annual meeting during the WHO-FIC Network annual meeting. Official meetings of the committee must be held in conjunction with international WHO-FIC meetings.

October 18, 2010