Summary

During the 2008 WHO-FIC Network Annual Meeting in Delhi, India, the Education Committee held two working sessions, on Monday, October 27 and Wednesday, October 29. This Meeting Report provides a combined summary of both working sessions, which were attended by approximately 50 persons. The participants represented five WHO Regions and at least 13 Collaborating Centers designated and under designation. The Committee also benefited from the participation of several representatives from WHO Headquarters and Regional Offices.

The first working session reviewed the Committee’s Terms of Reference and held an election for co-chairs of the Education Committee, who will serve two-year terms. Results of the evaluation of the International Training and Certification Program for ICD-10 mortality and morbidity coders and trainers were presented, and plans for continuing and expanding the program were discussed. The second session reported on progress under the joint ICF Education Project with the Functioning and Disability Reference Group (FDRG) and endorsed Version 1 of the ICF Curriculum Modules developed by the joint effort. Both sessions included presentations of papers and posters on best practices for ICD and ICF education 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 and training.

WHO staff demonstrated the evolving web-based training tool on ICD-10 coding and certification of cause-of-death and solicited additional review and volunteers to pilot test the tool. The German Collaborating Centre reported on work to develop a web-based training tool to support ICF education in Turkey and agreed to coordinate with the Education Committee and FDRG on its development. The curricula developed by the Education Committee and its partners for ICD-10 and ICF education and training provide the bases for these web-based training tools under development.

The Education Committee maintains a list of abbreviations and acronyms and has developed a brochure on the WHO-FIC Network for use by Network members and WHO. The Committee also maintains a set of slides on the Network for orientation of new annual meeting attendees. The Committee is contributing to the development of the electronic training tool for ICD-10 and is formulating with the Network a tool kit for new Collaborating Centres and Centre Heads. Initial versions of both should be available in 2009.

Since the 2007 Annual Meeting in Trieste, the EC and Joint Collaboration (JC) with the International Federation of Health Records Organizations (IFHRO) had conducted four international teleconferences and held a three-day meeting in Silver Spring, Maryland., USA on May 14-16, 2008. The collaborative relationship with IFHRO began in 2000 to develop the International Training Program for Mortality and Morbidity Coders.

A message from Sue Walker, who was unable to attend, was warmly received.

Aims and Terms of Reference and Election of Co-chairs

The members of the Education Committee (EC) reviewed the Committee’s Aims and its Terms of Reference and confirmed that no changes were needed.

In accordance with the procedures agreed by the WHO-FIC Council for all WHO-FIC Network committees and reference groups, an election was held for co-chairs of the Education Committee. Cassia
Maria Buchalla (Brazil) and Marjorie S. Greenberg (USA) were elected to serve as co-chairs of the Committee for two-year terms.

**Papers and Posters**

The Education Committee and the Joint Collaboration submitted two annual reports for Network consideration, bearing the following titles:

1) **WHO-FIC Education Committee: A Status Report 2007-2008** by Marjorie S. Greenberg
2) **Report of Completion of Pilot Testing the Exam Process for International Training and Certification for ICD10 Underlying Cause-of-Death Coders and Trainers** by Margaret Skurka and Sue Walker

Other papers submitted for the meeting were as follows:

3) **Exploration of an International Morbidity Coding Examination** by Joon H. Hong
4) **Coding Training in Brazil** by Cassia Maria Buchalla
5) **IFHRO Modules in Health Information Management and Community of Coders Concept** by Margaret Skurka
6) **The Elaboration of ICF Curriculum Modules for ICF Training Courses** by Cassia Maria Buchalla and Catherine Sykes

Additionally, members of the Education Committee and JC submitted the following posters for the Poster Sessions in Delhi:

1) International Training and Certification Program by Kathy Giannangelo, Joon H. Hong, Cassia Buchalla, and Rita Scichilone
2) The Problems found in the Implementation of the Pilot Test in Japan by Yukiko Yokobori, Toshio Oi, Kazuhi Yamauchi and Shuzo Yamamoto
3) Top Tips for Coding – a Guide for Clinical Staff by Christine Sweeting
4) Virtually Simple: Using Internet Resources for Terminology and Classification Training by Rita Scichilone
5) Public Domain Videos as ICF Instructional Tools by John Hough

**International Training and Certification Program**

*Report of Completion of Pilot Testing and Summary of Pilot Tests*

Neither of the co-chairs of the Joint Collaboration was able to attend the meetings in Delhi, but their report on completion of the pilot tests for ICD-10 underlying cause-of-death coders and trainers was tabled for information. A poster also had been prepared by other EC members (see above). During 2007 and 2008, six pilots in five countries (Canada, Japan, Korea, United Kingdom and United States) were completed. As an outcome of the pilots, certificates were awarded to 60 underlying cause-of-death coders and 19 coders and trainers. Seven experts from five countries received honorary trainer certificates. The list of approved trainers and their availability is posted on the IFHRO website ([www.IFHRO.org](http://www.IFHRO.org)) under the WHO-FIC IFHRO Collaboration. Cause-of-death training materials from Australia, Korea, Sri Lanka and the United States have been recognized, and the JC and EC continue to solicit and review additional ICD-10 training materials. Outreach to coders and trainers included mail and emails, presentations at professional conferences, in-person and on-line training programs, formal educational courses, exhibitor booths and web-site postings. The final evaluation of the program by the American Health Information Management Association, under contract with the U.S. National Center for Health Statistics (NCHS), was received on June 30, 2008 and is posted on the EC website ([http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm](http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm)). Although, the evaluation of the pilot testing is now essentially complete, additional piloting in developing countries would be desirable.
funding is obtained, there are significant plans to move the project forward to a “live” phase, with many sub projects emerging. The latter include:

- Piloting the exam in a developing country where underlying cause-of-death (UCOD) coders have been previously trained, and data are being submitted to the WHO, but it is not of high quality.
- Support of a collaborating center or Health Information Management Association to coordinate with national organizations that wish to conduct the international exam for UCOD coders and trainers.
- Establishing a Community of Practice for mortality coders through IFHRO
- Development of a full package of technical assistance to a developing country in completing morbidity and mortality source documents and coding hospital records and UCOD.

The authors all concluded that training and certification for ground level information workers should be a priority.

The Problems found in Implementation of the Pilot Test in Japan

Japan Hospital Association and Japan Society of Medical Record Administration translated the pilot test materials for underlying cause-of-death coders and trainers and conducted the exam during 2008. It took half a year to translate and confirm all 100 questions, the self-assessment and other documents, as well as to hold planning meetings. There are two types of mortality coding in Japan; one is for mortality statistics conducted by the government, the other is for the needs of hospitals conducted by health information managers (HIM). The pilot test was conducted for the latter, with the clinical point of view. Although the HIM use the Volume 2 (Volume 1 of Japanese version) rules for selecting underlying cause of death, the ACME decision tables developed by NCHS and used in the other pilots, are not used on a daily basis. Thus, only about 50% of the answers were matched with the answer key. This was attributed to the lack of preliminary lectures, the short time for the test, language problems and the sole use of the rules in Volume 2. Other problems also were described and will be useful for future revisions of the exam and its processes. The need for further work on international standardization was recognized.

Mortality and Morbidity Flyers

The EC terms of reference include identifying additional groups requiring education and training about ICD (and ICF) and approaches to address them. For ICD, this consists of statisticians, epidemiologists, policymakers, relevant systems managers, physicians, other clinicians and health sciences educators and students. The list is even broader for ICF. Two subgroups were formed during the May 2008 EC and JC meeting to draft flyers on uses of ICD-coded mortality and morbidity data, respectively. These or other flyers also could address improving the documentation on which coding is based and interpreting the data. A draft of the morbidity flyer was shared with meeting participants and tabled for discussion at the 2009 mid-year meeting because the authors were not in attendance. Participants noted the ongoing need to raise champions for coded data and improve the quality of documentation and felt that such flyers could be a useful addition to any tool kit for implementation of ICD-10. Others mentioned that it is difficult to get clinicians to use this type of information and that more work is needed to identify the most effective outreach and education.

Exploration of an International Morbidity Coding Examination

Although the principal author was not in attendance, there was a brief discussion of the challenges in developing an international exam for morbidity coders and trainers, parallel to the process for mortality coders and trainers. Issues include the necessity of the exam (some countries already certify morbidity coders); the scope of the exam (inpatient, outpatient, and primary care); variations in coding instructions among countries; procedure coding in the absence of an international classification; definition of related terms; and problems concerning the administration of the exam such as the translation and cost. Several participants suggested that morbidity coders need far more education in medical terminology, anatomy and physiology, patho-physiology and pharmacology to apply the morbidity coding rules than mortality coders who use the ACME decision tables. The paper was tabled for further discussion at the 2009 mid-year
Dissemination of Evaluation report and next steps

The EC Chair had distributed the Evaluation report to all members of the Education Committee and WHO-FIC Network Council and the WHO regional offices. The report also is posted on the EC website (http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm). The EC Chair and JC Co-Chairs had prepared a proposal for resources to continue and expand the International Training and Certification program and support improvement of health records. This proposal was submitted to the WHO liaison to the Health Metrics Network (HMN) and the Executive Secretary of HMN, with whom several positive discussions took place during 2008. Following additional consultation with WHO Headquarters, there are plans to revise the proposal to tie it more closely to the web-based training tool and identify metrics for demonstrating that the program improves the quality of coding and data. A small group met separately during the Delhi meetings to discuss how to proceed.

Curriculum Modules for ICF Education and Training

The Elaboration of ICF Curriculum Modules for ICF Training Courses

In order to help the development of ICF education material for many areas and audiences, a set of Curriculum Modules has been drafted and revised after extensive review by members of the EC and FDRG. The authors began the process by reviewing information collected by the Dutch Centre and then solicited additional information from the ICF network—approximately 30 ICF training materials were collected in all. The content was mapped to the seven modules, which list the relevant items regarding generic education about the classification. They are independent modules and can be selected, ordered and used at a level of detail appropriate to whomever the education is addressed and the length of time available. The Curriculum also includes considerations for educating users and potential users. The EC approved the revised modules document as Version 1; the FDRG also approved the document in Delhi. A brief overview of the ICF also is being developed (previously referred to as the “Two Minute Reader.”) This is intended to be a short, readable document to familiarize individuals with the overall concepts and structure of the ICF.

Electronic Training Tools

ICD-10 web-based training tool

Dr. Robert Jakob introduced the ICD-10 web-based training tool under development at WHO with support from the Department of Foreign Investment in the United Kingdom. Sue Walker and Linda Best are the main authors, and members of the EC are serving as reviewers of the tool, which is intended to replace the Tendon training tool developed in the 1990’s by the United Kingdom. The funding allowed WHO to engage a contractor to create the electronic tool based on the content developed. The tool follows the core curricula developed by the EC for both ICD-10 coding and certification of cause of death. The tool is being developed so it can be accessible by persons with low band widths and easily translated. The introduction to the draft tool was made available during the Delhi meetings for persons to review and provide feedback; Dr. Jakob also solicited volunteers to review the entire tool and to pilot test it when it is completed. Several EC members volunteered. Rita Scichilone and Ok-Nam Kim will explore piloting the tool with HIM students.

Development of a web-based ICF training tool

Alarcos Cieza and Alexandra Rauch presented the work being conducted at the ICF Research Branch in Germany and Switzerland to develop a web-based ICF training tool based on the recently approved curriculum modules. The initial purpose is to train clinicians on ICF in Turkey, where the disability eligibility system is being aligned with ICF. The presenters described several topics they would like to address with this web-based training tool – introduction to the need to describe and assess functioning, use of the ICF for the description of functioning, coding with the ICF to document functioning,
and different use cases. They would like to develop a self-learning course that also can be used by a tutor. A self-assessment following completion of the course will be included. They are developing content by attempting to determine the questions users have in each area and then identifying what content is needed to address those questions. In addition to developing the content for the website, they are identifying the appropriate software application for this use. The intention is to have the material available in multiple languages.

Some questions were raised by Education Committee members: First, is this training intended to be an overview for introductory training or is it specific to detailed application and clinical use? It was confirmed that the Curriculum modules are for an introductory overview and are not considered detailed enough for use in clinical applications. Thus, this tool may go beyond the scope of the curriculum modules, on which it is being based. Participants also asked whether the guidelines being developed by FDRG coding guidelines workgroup would be incorporated into the tool; the workgroup chair proposed coordinating an outreach effort to experts. It also was noted that there are points of disagreement in use of ICF and these points need to be presented in a training tool for broad use. In order to address these concerns and assure full review and input by the EC and FDRG, the following persons volunteered to review the materials as they become available – Cassia Buchalla, Lynn Bufka, Marie Cuenot, Marjorie Greenberg, John Hough, Andrea Martinuzzi, Patricia Soliz Sanchez and Huib ten Napel. Dr. Martinuzzi also volunteered to share lessons learned in developing the ICF web-based training tool in Italy, while Dr. Jakob noted that some of the elements in ICF training (e.g., ethics guidelines) are similar to already existing elements in the web-based training tool for ICD-10. He and others especially emphasized the need for a common tooling environment and compatible software applications for international ICD and ICF web-based training. Persons who have developed ICF training materials also were invited to submit case materials and best practices. The presenters welcomed these suggestions and assured the group that, although the initial version was on a tight deadline, there would be opportunity for thorough review and comment on future versions by EC and FDRG and that the product would be consensus-based and go through a formal review process.

Best Practices

Coding Training in Brazil

Cassia Buchalla presented information on a joint collaboration between the Portuguese Language Collaborating Centre in Brazil and the Brazilian Ministry of Health to identify the needs from all five Brazilian regions regarding mortality coders and to prepare trainers from each of the regions. This effort was necessitated by the decentralization of mortality coding to the 5564 municipalities in 1990’s, expanding the number of coders from approximately 30 to more than 2000. To train and oversee all coders in this new situation is an important task in order to maintain the quality of coding. A questionnaire sent to all health departments formed the basis for a Mortality Coder Register, which will be updated periodically. Two three-day workshops were organized for twenty coders each. A trainer’s kit was prepared including manuals, the Brazilian legislation on vital statistics, special conditions to apply the mortality rules, papers on the ICD history, booklet on the Death Certificate, the Brazilian Mortality Information System and PowerPoint presentations of all the training materials. All of the coders were responsible for giving a lecture, so their training skills could be assessed. Half of the coders were considered very good trainers and will form the nucleus of a skilled training corps in the five regions. The others will receive additional training and supervision. A web forum also was established by the Ministry of Health for all of the mortality coders in the country, and the Collaborating Centre is serving as the moderator. The forum allows the Centre to keep in touch with all mortality coders, to disseminate the ICD updates and to include them in the international discussion of the next revision of ICD-10.

IFHRO Modules in Health Information Management and Community of Coders Concept

This paper by Margaret Skurka was not presented because the author was unable to attend. The
work of the EC and JC has underscored the need for making improvements in the source documents from which coded data is abstracted. IFHRO maintains a “learning center” on its website, with a link to educational materials and best practice guidelines for health records/health information management professionals around the world. It is IFHRO’s plan to more aggressively market, and make available to all countries, these modules, with the end result of improving health record documentation practices worldwide. IFHRO also is working with the American Health Information Management Association to assess whether a model curriculum for HIM could be established as a benchmark for existing academic programs, and as a model to build programs where none exist, but are needed. If funding is procured, IFHRO hopes to establish a Community of Practice Network (CoP) that, via the IFHRO web site, would connect the coders and trainers who have been recognized with certificates from the WHO-FIC/IFHRO Joint Collaboration. The objective of the CoP would be to improve communication, help in problem solving, and enhance the global international coding community.

**Virtually Simple: Using Internet Resources for Terminology and Classification Training**

The use of the Internet creates new ways to provide education and resources to health care workers collecting data using standard clinical terminologies and classification systems. Training programs are needed around the world for healthcare providers and support staff working with ICD, ICF, ICPC and other coded data systems. Using the Internet is one way to leverage free or low cost resources for distance education. Rita Scichilone illustrated the internet resources for coding and documentation and information management that she identified during a two hour session on Google and Yahoo search engines and through literature review. She found useful materials in several unexpected places (e.g., YouTube has presentations on how to use classification systems and iTunes U has university lectures in health care and science). She also noted that Moodle, a free open-source software package designed to help educators create effective on-line courses, is being looked at by universities to launch small courses.

**Top Tips for Coding – a Guide for Clinical Staff**

The Royal College of Physicians Health Informatics Unit (London) has produced a guide using hospital activity data and designed to support clinicians from any specialty (medical or surgical) in the interpretation and use of routinely collected data held in their name. The guide, which was described in a poster by Christine Sweeting, who also was not able to attend, contains top ten tips for good note keeping practice to ensure accurate clinical coding. The guide provides an excellent example of clinician and coder working in partnership to ensure an accurate record of patient activity. The poster also noted the many ways in which coded data are used in the UK. For further copies of this booklet, one can email the Publications Department of the Royal College of Physicians at publications@rcplondon.ac.uk

**Public Domain Videos as ICF Instructional Tools**

John Hough described his poster as a “skills-building” poster, demonstrating that inexpensive disability-oriented videos are available either in the public domain or within permitted legal use, which can be easily adapted into instructional tools to illustrate ICF concepts and coding. He explained that new methods are needed for efficiently familiarizing learners with the ICF and ICF coding, but funding is constrained for developing such methods. He asserted that videos with accompanying ICF coding can convey much more didactic value than texts. Video resources, primarily documentaries, are available for low cost and can be edited easily using popular, inexpensive video editing software. However, he cautioned that “free use” does not imply or grant “free distribution” rights. During a later session, John presented a video, “All Ways Welcome” (Ontario Ministry of Recreation and Tourism, 1990) that he had adapted, which attracted considerable interest.

**Next steps**

The Education Committee will continue to identify innovative and best practices for ICD and ICF education and would like to package these findings for those planning training, including lessons learned and types of materials available. The market would include the Health Metrics Network, non-governmental
organizations, the Collaborating Centers and Statistics Offices.

Other Business and Discussion of Future Work

Presentation from Mozambique

Colleagues from Mozambique made a brief presentation about their efforts to implement the WHO classifications, which began in 2006. Challenges to comprehensive use of the classifications include the following:

- Most diagnoses are attributed by technicians,
- 50% - 99% of the country does not have electricity
- Relatively few health clinics have laboratories
- Record systems are 90% paper based

Training must be simplified for users; most methodologies and reference documents are too complex. It has been very complicated to introduce the classifications as much of the education and training materials have been developed for countries at a different level of development. When developing international training models, it is imperative that the range of needs and resources available to countries is considered.

WHO-FIC Collaborating Centre Tool Kit

The Education Committee has been developing a “Tool Kit” to bring together a set of materials for use by new WHO-FIC Collaborating Centres or Centre Heads to facilitate their development and integration into the WHO-FIC Network. The latest draft outline was shared with participants during the meeting. The Co-Chairs will follow up with new Centres (recently designated and under designation) to get their further input. The plan is to work with WHO HQ to have all materials and links provided on a WHO-FIC SharePoint site also make them available on a CD-ROM or in hard copy, as needed. It is hoped that the Education Committee increasingly will be able to make use of SharePoint for distributing and commenting on documents.

Mid-year Meeting

The Chair announced that the EC and JC will hold a mid-year meeting in Raleigh, North Carolina on April 1-3, 2009. As in the past, this will be in conjunction with meetings of the International Collaborative Effort on Automating Mortality Statistics Planning Committee and the Mortality Reference Group. An agenda has not been set, but it is hoped that there will be an opportunity to review both the ICD and ICF electronic training tools. The EC and JC also will continue to hold periodic teleconferences.