WHO-FIC Education Committee: A Status Report 2007-2008

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Abstract

The WHO-FIC Education Committee (EC) was established at the 2003 WHO-FIC Network meeting in Cologne, Germany, as a successor to the Subgroup on Training and Credentialing of the WHO-FIC Implementation Committee. New terms of reference were developed at the Cologne meeting to reflect generic tasks for education and training on the International Statistical Classification of Diseases and Related Health Problems (ICD) and the International Classification of Functioning, Disability and Health (ICF). Specific tasks have been agreed for both ICD and ICF. The Education Committee assists and advises WHO in improving the quality of use of the WHO classifications in member states through the development of training and certification strategies, the identification of best training practices and by providing a network for sharing expertise and experiences on education and training.

The principal ICD tasks relate to an international training and certification program for ICD-10 mortality and morbidity coders; this program is being developed in conjunction with the International Federation of Health Records Organizations (IFHRO), a non-governmental organization in official relations with WHO. A Joint WHO-FIC - IFHRO Collaboration (JC) was established in late 2004 to carry forward this work (see separate paper). The JC held its fourth meeting in Silver Spring, Maryland. in May 2008, in cooperation with the WHO-FIC Education Committee. The major purpose of the meeting was to receive reports on the project to pilot the program for underlying cause of death coders and trainers in Canada, Korea, United States and United Kingdom, and to consider how to initiate a similar program for morbidity coders. As an outcome of the pilots, certificates have been awarded to 60 underlying cause-of-death coders and 19 coders and trainers in the four countries. Seven experts from five countries also received honorary trainer certificates. 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. The final evaluation of the program 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). A core curriculum for training certifiers of cause of death was developed and also is posted on the website, along with previously developed core curricula for ICD-10 mortality and morbidity coding.

The EC also is supporting development of a "reference" web-based ICD-10 training tool with WHO; this tool will include a module for certifiers of cause of death, as well as modules for ICD-10 coders, based on the core curricula. During the May 2008 meeting, the EC and JC agreed to develop two flyers on the uses of coded data – one for mortality data and one for morbidity data.

The Education Committee has worked closely with the WHO-FIC Implementation Committee to gather information, in a standardized format, on ICF applications, educational materials and electronic tools. The EC now is working with the Functioning and Disability Reference Group to develop a document on suggested curriculum modules for ICF training, which will be the basis for web-based ICF training and guide introductory and advanced courses on ICF.

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Introduction

The WHO-FIC Education Committee was established at the 2003 WHO-FIC Network meeting in Cologne, Germany, as a successor to the Subgroup on Training and Credentialing of the WHO-FIC Implementation Committee. The Committee's terms of reference (see appendix 1) include generic and specific tasks for education and training on the International Statistical Classification of Diseases and Related Health Problems (ICD) and the International Classification of Functioning, Disability and Health (ICF). The Education Committee assists and advises WHO in improving the quality of use of the WHO classifications in member states through the development of training and certification strategies, the identification of best training practices and by providing a network for sharing expertise and experiences on education and training.

This paper provides a summary report of the Committee's activities and progress since the 2007 meeting in Trieste, Italy. Separate papers and posters will provide greater detail and recommendations on key aspects of the Committee's work plan. Related documents, including the minutes from the Committee's May 2008 meeting, can be found on the Committee's web site at: http://www.cdc.gov/nchs/about/otheract/icd9/nacc_ed_committee.htm

ICD-10 International Training and Certification Program

The principal ICD tasks of the Education Committee relate to an international training and certification program for ICD-10 mortality and morbidity coders. This program is being developed in conjunction with the International Federation of Health Records Organizations (IFHRO), a non-governmental organization in official relations with WHO. A Joint WHO-FIC - IFHRO Collaboration (JC) was established in late 2004 to carry forward this work (see separate paper by Skurka and Walker). The Education Committee and Joint Collaboration continued to make significant progress in 2007-2008 on establishing this international program. The award of a contract to the American Health Information Management Association Foundation of Research and Education (AHIMA FORE) in August 2006 by the National Center for Health Statistics (NCHS), U.S. Centers for Disease Control and Prevention and the contract's extension in 2007 allowed the EC and JC to finalize the various components of the program and to publicize, pilot and evaluate the program for underlying cause-ofdeath coders. Beginning in 2007, and continuing into 2008, it was possible to conduct five pilots in four countries of the processes for certifying practicing underlying-cause-of-death coders and trainers, complete the review of several training packages, and conduct outreach to coders and trainers. The JC and EC has held four conference calls since the 2007 WHO-FIC Network meeting and a face-toface meeting on May 14-16, 2008 in Silver Spring, Maryland. The calls and meeting were supported by NCHS. Minutes are available for all calls and meetings. The JC and EC have made limited use of Sharepoint to share documents.

Conduct of Pilots for practicing mortality coders and trainers

During 2007, Statistics Canada and the Korean Medical Record Association (KMRA) agreed to pilot the exam process, which included coder self assessments and trainer

applications, as well as the underlying cause-of-death (UCOD) coding exam developed by the Portuguese Language Centre in Sao Paulo, in collaboration with the Mortality Reference Group. Three more pilots were conducted in 2007 – 2008 by KMRA, the United States (NCHS) and the United Kingdom (Office for National Statistics). The paper by Skurka and Walker and a poster by Scichilone, Buchalla, Hong and Giannangelo provide more details on the pilots, which involved outreach to coders and trainers and developing protocols for translating all of the materials and for conducting and scoring the exams. The successful completion of the two pilots by May 2007 allowed the Joint Collaboration to meet its goal of awarding the first certificates to 12 practicing UCOD coders and trainers at the 15th IFHRO Congress in Seoul, Korea. By the end of the five pilots, 60 coder certificates and 19 coder and trainer certificates had been awarded. Seven experts from five countries also received honorary trainer certificates in recognition of their extensive training experience and contribution to developing the international exam. With their permission, the names of approved trainers and their willingness to conduct international courses will be posted on the IFHRO website.

Review and Recognition of Training Materials

A call for ICD-10 training materials was first issued by the JC in March 2005, and the request continues to be posted on the EC and IFHRO websites. Members of the JC and EC are serving as reviewers of the materials, using the core curricula as a benchmark, assessing adequacy and gaps. Two persons conduct a qualitative review of the "How to Code" modules. Constructive feedback is provided to the developers with a request to revise and resubmit the materials, if appropriate. During the IFHRO Congress, the underlying cause-of-death training materials developed by the Australian National Centre for Classification in Health, the Korean Medical Record Association and the U.S. National Center for Health Statistics were recognized as meeting the JC standard for several knowledge clusters. In 2008, training materials from Sri Lanka also were recognized.

Assessment of New Mortality Coders

The assessment of practicing underlying cause-of-death coders always has been the first priority of the JC. During the May 2007 and 2008 meetings, the EC and JC discussed how to proceed with developing a process for certification of new mortality coders. At the Education Committee's 2004 meeting in Prague it had been decided that an international examination was not feasible and that certification would have to be based on a decentralized process by recognizing coders who had successfully completed approved training programs with recognized trainers in all modules of the core curriculum. Now, however, having successfully conducted pilot tests of the exam process in several developed countries, the possibility of offering an international examination for all UCOD coders is being reconsidered. With this is mind, the working group that was established to resolve problems identified with the exam questions has been accumulating a pool of additional questions for future exams.

The Joint Collaboration is keen to pilot the exam process in one or more developing countries and to move to make the exam available internationally where national organizations exist to support the established process. The IFHRO Executive has agreed to promote the model utilised by the Korean Medical Record Association

amongst its member countries, but other countries that are not members of IFHRO also will be encouraged to support the exam. Significant interest has been demonstrated to date as the process has been described at conferences and meetings. Outstanding issues yet to be resolved are:

- How to assure adequate training of coders, especially in developing countries, so they can be successful when they take the exam?
- What types of refresher courses should be available for those who were previously trained but are not yet prepared to take the exam?
- Should there be an interval between the completion of training by the coder and eligibility to take the examination?
- How will the exam be administered and where will the resources come from
 for the additional training in developing countries and for conducting the exam?
 It is likely that a decentralized approach still will be needed for the exam
 process, but some central administrative coordination, such as that provided
 by AHIMA FORE during the pilot phase, also will be necessary.
- The current exam specifically tests competency in underlying cause of death classification. This was considered appropriate for practicing coders. It is felt that newly trained coders also should demonstrate some level of competency in other knowledge clusters in the core curriculum (e.g., uses, users and sources of mortality data). The self assessment for practicing coders includes questions about knowledge of all clusters, but there is no effort to test competency. Should additional questions be added to the exam for new coders?

Multiple Cause-of Death Coders

The Education Committee also has considered the possibility of certifying multiple cause-of-death coders. This currently is considered infeasible due to the absence of agreed-upon international rules for coding of multiple causes of death to guide development of a training or certification program. However, the Education Committee recognizes that the automated coding system developed by NCHS (MMDS), and enhanced by international partners, has become a de-facto standard for multiple-cause of death coding in an automated environment. The May 2008 meeting was held immediately following the Fourth Plenary of the International Collaborative Effort on Automating Mortality Statistics, where a major focus was on IRIS, an automated coding system being developed and used in France, Sweden and Germany; the advantage of IRIS is that it works with national language dictionaries, not just with the English language, and thus should facilitate adoption of automated coding systems in non-English speaking countries. NCHS has developed an online electronic interactive basic multiple cause coding course. The course is currently available on the Internet.

Evaluation of the International Training and Certification Program for the International Classification of Diseases

The final deliverable from the contract with AHIMA FORE was a report describing the pilot study to evaluate the international training and certification program, with a focus on underlying cause-of-death mortality coders and trainers. The evaluation

report is posted on the EC website and has been circulated to WHO-FIC collaborating centres and WHO Headquarters and Regional offices. The lessons learned from the pilot exams include:

- A sound foundation for the program has been established and the new challenge is to build on this cornerstone.
- International experts can reach agreement on the content of an international exam for underlying cause-of-death coders and trainers and the processes to conduct such an exam.
- The exam process can be carried out successfully at the country level by statistical offices and professional associations.
- A successful process was developed for resolution of all problems with the reliability of answer keys for the exam questions through formation of a committee charged with this responsibility.
- It is difficult to identify and engage coders who would benefit from the Program in some countries gauging by the number of interest forms returned.
- Considerable resources are needed to translate the exam and related materials and to verify that the questions and answers are the same in English and the second language.
- Funding for the process is required for sustainability and creating a system for data integrity awareness and improvement related to the use of ICD-10 for mortality and morbidity classification and reporting. Costs of ongoing support must include indirect costs (overhead and equipment costs) as well as direct costs (labor) as funding sources are explored for sustaining the International Training and Certification Program for ICD.

AHIMA FORE also developed a draft candidate handbook for international ICD-10 training and exam preparation.

Assessment of Practicing Morbidity Coders

The intent of the Joint Collaboration is to build on the processes developed for assessing mortality coders to recommend a process for testing and certifying existing and, eventually new, morbidity coders and trainers. However, again, the lack of internationally agreed rules and standards for morbidity coding is a barrier to developing an international exam or recognizing training materials. The EC and JC have been consulting with the Morbidity Reference Group, which is addressing the need for international coding rules, guidelines and definitions, and held a teleconference with the MbRG co-chairs following the 2007 annual WHO-FIC Network meeting. The co-chairs reported that the MbRG is aiming towards a full revision of the morbidity coding rules in Volume 2 for ICD-11 but recognized that the Education Committee and Joint Collaboration have a mandate to improve the quality of hospital data and the competence of morbidity coders using ICD-10. The general consensus was that the JC should go forward with the international work on training and certification of Morbidity Coders, basing the program on what is in Volume 2 of ICD-10 at present.

The EC and JC further explored these issues during their May 2008 meeting. The PAHO representative to the EC and the MbRG reported that the definition for main

condition in Volume 2 is not universally accepted and there are few standard rules and training methods and materials to support its use. The definitions used are very country specific and thus, it is difficult to compile a database on morbidity because of this lack of comparability. The EC and JC recognized these problems but noted that the Volume 2 definitions are used now in most of the target countries for international certification (i.e., those using ICD-10 without a clinical modification and lacking an established health information management program); further definitional refinements may take several years.

The sense of the group was that there is a need for something tangible as a result of coders being involved in a morbidity coding assessment process. While many felt that an international exam for morbidity coders might not be feasible at this time, standardized coding education and a certificate of completion were considered possible alternatives to show that the bar has been raised in coding. However, the IFHRO JC member from Korea expressed the view that there would be disappointment in Korea if there were no international exam for morbidity coders. She volunteered to attempt to develop an exam for morbidity coders and trainers, being generic enough with regard to use of any coding rules. Several others offered to work with her on exploring the issues involved in testing and awarding international certificates to morbidity coders (see paper by Hong).

Improvement of health records

Participants in the May 2008 meeting also emphasized that there always is a need for good documentation as the basis for quality coding, no matter what rules are used, and that more focus should be placed on the importance of making improvements in the source documents from which coded data is abstracted, namely hospital medical records and death certificates. The EC has addressed the need for improving cause-of-death certification through its core curriculum and best practices for certifiers of cause of death, but to date, no work had been done related to hospital record documentation. Both are included in the EC terms of reference. The UK representative to the JC agreed to prepare a poster for the 2008 annual meeting on top ten tips for good clinical note keeping practice to ensure accurate clinical coding, based on work of the Royal College of Physicians (see poster by Sweeting). The cochair of the JC, who also is President-elect of IFHRO, offered to present a paper on the IFHRO on-line learning modules that address basic health records practice (see paper by Skurka).

Education for Users of Coded Data

The EC terms of reference also 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 need to understand uses of coded data also is included in the core curricula. Two subgroups were formed during the May 2008 meeting to draft flyers on uses of mortality and morbidity data, respectively. These or other flyers also could address interpreting the data. Further discussion of this project will take place in New Delhi.

Development of Web-based Training Tool

The EC terms of reference include "support in the provision of a tool for self learning

of ICD-10." The tool will be consistent with the core curricula and use a modular approach. Considerable progress was made on the tool during 2008. Sue Walker, who has contributed to development of the content for the training tool, walked the group through a demonstration of the web based training tool at the May 2008 meeting. The tool is being produced by a WHO contractor and is intended for someone learning how to code. It looks at all 22 chapters of ICD-10 and is to be used in tandem with the ICD-10 books. Members of the EC and JC, some of whom have participated in review of the modules, were impressed with the training tool and saw considerable value for developing countries. It was recommended that information on documentation of hospital records and death certificates be included as a part of the tool. A status report from the WHO ICD officer will be received during the Education Committee working session in Delhi.

Next steps

Margaret Skurka, who serves as Co-chair of the Joint Collaboration and President-elect of IFHRO, provided a report on the EC-JC accomplishments to the June 2008 meeting of the IFHRO Executive Committee. Ms. Skurka discussed with the Executive Committee the possibility of increased involvement of IFHRO with the WHO-FIC JC project, including establishment of a coding community for those who received certificates as coders and other mortality coders who complete an application. Other ideas, as noted above, were to do additional promotion of the IFHRO basic health record educational modules, and add relevant links on the IFHRO web site. The IFHRO Executive is very receptive to additional collaboration, but lacks resources to increase its efforts.

With the successful completion of the five pilots, the EC Chair and JC Co-Chairs have prepared a proposal for resources to continue and expand the International Training and Certification program and support improvement of health records. This proposal has been submitted to the WHO liaison to the Health Metrics Network (HMN), with whom several positive discussions were held during 2008. A teleconference with the Executive Secretary of HMN to discuss the proposal and possible next steps is scheduled for October 2008, prior to the Delhi meetings.

ICF Education and Training

Information Collection and Sharing

The Education Committee continues to support the WHO-FIC Implementation Committee (IC) on a project to share information in a structured way on ICF applications, training materials and electronic tools. The IC annual report will report on progress during 2007 – 2008.

Joint Project with FDRG

Since the 2006 WHO-FIC Network meeting in Tunis, the EC also has been working closely with members of the Functioning and Disability Reference Group (FDRG) to address ICF education needs. In Tunis, the EC agreed to collaborate on Project 5 of the FDRG to develop "a suite of simple and accessible products, to be available on the WHO website, which are suitable as

· an introduction to ICF

an advanced course on ICF"

The Chair of this joint effort from the Portuguese Language Centre has worked with a representative of the Australian Collaborating Centre (see paper by Buchalla and Sykes) to develop a Core Curriculum for ICF training, which has evolved into suggested Curriculum Modules, which will be the basis for web-based ICF training and guide introductory and advanced courses on ICF. The Curriculum Modules draw on the experience of the EC and JC in developing core curricula for ICD-10 coding and certification of cause-of-death training. The Chair of the effort also has solicited ICF training materials previously reported in the Information Sharing project noted above to contribute content to the introductory module on ICF; during a meeting of the FDRG in Quebec City in August 2008, it was learned that the German Collaborating Centre may be able to provide support for development of the webbased ICF training, which will use the same platform as the ICD-10 training tool.

Publicizing the Work of the Network, Committee and Joint Collaboration

Websites

The National Center for Health Statistics continues to host the website for the WHO-FIC Education Committee (see above). During 2007 and 2008, IFHRO also upgraded its website (http://www.ifhro.org/) and has included extensive information on the Joint Collaboration and its products.

Brochures

Following the request of the WHO-FIC Network during the 2005 meeting in Tokyo, the Education Committee developed a brochure for the entire Network with input from the Planning Committee. This brochure was approved during the 2007 annual meeting in Trieste, with a request that it be posted on the WHO-FIC website and broadly disseminated. The Joint Collaboration has developed a separate brochure to assist with marketing and disseminating information about the ICD-10 International Training and Certification Program. This brochure has received extensive dissemination.

Best Practices

Best practices in ICD and ICF training were a focus of the Education Committee sessions during the 2007 annual WHO-FIC Network meeting. This addressed the Committee's aims to identify best practices and provide a network for sharing expertise and experience on ICD and ICF education and training. A panel of presenters described ICD and ICF training experiences conducted in the past year in several WHO regions and suggested advantages and disadvantages of different approaches and other lessons learned. Emphasis also was given to the importance of improving the clinical documentation that is the basis for coding, including training of health information management professionals, clinicians and certifiers of cause of death. The need to develop an empirical basis for the selection of training methods was discussed, with presentation of an assessment tool developed in conjunction with ICF training for clinicians. Details of the six presentations are included in the Education Committee minutes from the 2007 meeting.

Two additional examples of best practices will be presented during the 2008 sessions of the Education Committee in New Delhi (see paper by Buchalla on training trainers and poster by Scichilone on Using Internet resources). Other examples of successful international training on ICD and ICF also have been identified. The Education Committee would like to package these findings on best educational practices into a monograph for those planning training, including lessons learned and types of materials available.

Additional Educational Activities for the WHO-FIC Network

Induction Sessions at WHO-FIC Network Annual Meetings

The EC has organized an "induction session", principally for first-time attendees, since the 2004 WHO-FIC Network annual meeting. This familiarizes attendees with the WHO-FIC, its Network of collaborating centres, committees and reference groups, and the organization of the annual meeting. With the reorganization of the agenda of the 2008 Network meeting into working sessions, followed by plenaries with broader participation, the need and timing for conducting such a session has been questioned. An alternative under discussion is to post updated slides from the previous induction sessions on the meeting website.

Abbreviations, Acronyms and Definitions

The Education Committee is continuing to update the list of abbreviations and acronyms relevant to the WHO-FIC Network, which was first developed in 2004 as an educational tool for participants in Network meetings. The list, which is a "living document" that can be updated and expanded on an annual basis, is contained in appendix 2. The Education Committee again recommends that this document be posted on the WHO-FIC Network website with hyperlinks wherever possible.

Summary

The WHO-FIC Education Committee, in collaboration with IFHRO, continues to make important progress in developing an international training and certification program for ICD-10 mortality and morbidity coders and trainers. The Committee also is making progress in pursuing its ICF education and training activities in collaboration with the Functioning and Disability Reference Group. Although the Committee has proven its ability to carry out considerable developmental work with limited external resources, additional resources will be needed by the WHO-FIC Network, IFHRO and others to execute the plans that are developed and to assure that adequate training and quality assurance in the use of both ICD and ICF are available worldwide. Approaches for expanding resources should be included in the WHO Business Plan for Classifications.

Appendix 1

Terms of Reference

WHO FIC Education Committee

Purpose

Assist and advise WHO and the WHO-FIC Network in improving the level and quality of use of the WHO Family of International Classifications (WHO-FIC) in Member States by developing an education, training and certification strategy for the WHO-FIC, identifying best training practices and providing a network for sharing expertise and experience on training. The first priority will be for the reference terminologies, ICD and ICF.

Background

The Subgroup on Training and Credentialing of the WHO-FIC Implementation Committee was established at the 1999 meeting of Heads of Collaborating Centres in recognition of:

- The critical role of education and training for the successful implementation, use and maintenance of a classification system and for the quality of data produced
- The opportunities for sharing and strengthening education and training in members of the Family of International Classifications through international efforts, and
- The resulting benefits for comparability of national and international statistics

The Subgroup was established specifically to:

- Advise WHO and the WHO Regional Offices on best training practices
- Provide a network for sharing expertise and experiences on training
- Work with WHO Regional Offices in identifying needs for skills and training in countries both covered and not covered by Collaborating Centres
- Address the unique issues concerning mortality medical coders and nosologists in an automated environment
- Explore the possibilities for developing an international training and credentialing program for coders of WHO-FIC classifications
- Make recommendations to WHO and the WHO-FIC Collaborating Centres through the WHO-FIC Implementation Committee.

Following the integration of ICF into the Family in 2001, the Subgroup was expanded to consider parallel and related activities for users of the International Classification of Functioning, Disability and Health. During the 2003 annual meeting, the Subgroup reorganized as the WHO FIC Education Committee to better describe its broad mission and the role of education beyond the implementation phase of a classification.

Functions

The primary function of the Committee is to develop an integrated educational strategy for the

International Classification of Diseases and the International Classification of Functioning, Disability and Health. Other members of the Family of International Classifications will be considered as resources permit. The components of this strategy include the following functions:

- 1. Working with the Implementation Committee, assess the needs of users of the classifications, including those who provide source information, apply codes, conduct research or use the resulting data.
- 2. Identify the learning objectives for educational approaches.
- 3. Maintain an inventory of existing educational materials and capacity.
- 4. Make recommendations for learning content including development of core curricula
- 5. Make recommendations for best practices for promotion and delivery of educational material.
- 6. Develop and harmonize self-learning tools.

The components of the strategy for the ICD include the following tasks:

- 1. Conduct needs assessments about the capacity, skills and responsibilities of ICD coders in member states
- 2. Identify the additional groups requiring education and training about ICD (e.g., statisticians, epidemiologists, policymakers, relevant systems managers, physicians, other clinicians and health sciences educators and students) and approaches to address them.
- 3. Identify groups requiring education and training in the proper completion of source documents (e.g., death certificate, health record) and addresses to approach them.
- 4. Define the skills and levels of education and training required for coders and nosologists, as well as other users of the classification
- 5. Catalogue, characterize (e.g., purpose, subject, language, availability, media and technology) and disseminate information on current educational and training curricula and modules for the ICD, and identify gaps and methods for filling them
- 6. Review existing training materials and the mechanisms for their dissemination and identify best practices
- 7. Gather information from Collaborating Centres and Regional Offices on capacity for ICD-10 training in WHO member states
- 8. Explore national and international organizations (e.g., the International Federation of Health Record Organizations) with which coders and nosologists can affiliate
- 9. Explore the capacity of these organizations to support an international training and certification program
- 10. Identify approaches for assuring that training and certification are dynamic processes, responsive to changes in medical science, technology, coding rules, etc.

The components of the strategy for the ICF include the following tasks:

- 1. Liaise with Functioning and Disability Reference Group concerning applications and intended applications of ICF in order to identify educational needs and how to address them
- 2. Identify the groups requiring education and training about ICF (e.g., coders, statisticians, epidemiologists, policymakers, administrators, relevant systems and program managers,

- clinicians, survey developers, health sciences educators and students, consumers) the objective of the required education and the need for training trainers.
- 3. Catalogue, characterize (e.g., purpose, audience, content, language, availability, media and technology) and disseminate information on existing educational materials for ICF applications.
- 4. Create a database on educational products based on the Framework agreed by the Implementation and Education Committees and provide ongoing maintenance.
- 5. Review existing training materials and the mechanisms for their dissemination and identify best practices. Identify gaps and methods for filling them.
- 6. Provide advice on best practices to developers of ICF educational materials.
- 7. Explore the capacity of Collaborating Centres and Regional Offices for providing ICF education in WHO member states.
- 8. Explore the need for international certification of those trained to use ICF as a coding and classification system or of ICF training materials. Identify a support network or mechanism.
- 9. 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, E-learning.

Structure and Working Methods

The Committee should have an integrated mandate of WHO-FIC education, although the nature and phase of different members of WHO-FIC may differ in different countries. If necessary, different work groups may be formed on specific WHO-FIC classifications so as to address different issues.

The structure of the Committee should involve permanent members from WHO (including the regional offices) and 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. All WHO-FIC centers may nominate participants and beyond the permanent members additional participants may take part in committee meetings as observers.

Preferably there should be a single Chair to emphasize the integration of WHO- FIC implementation.

The Subgroup should develop an annual work plan, which lists in detail aims, activities, deliverables, timelines and responsibilities for addressing the terms of reference.

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

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Appendix 2

WHO Family of International Classifications Education Committee Abbreviations and Acronyms

Term	Meaning
ABS	Australian Bureau of Statistics
ACBA	Australian Coding Benchmark Audit
ACCS	Automated Cause Coding Software
АСНІ	Australian Classification of Health Interventions (Vols. 3 and 4 of ICD-10-AM)
ACME	Automated Classification of Medical Entities
AFRO	Regional Office for Africa of the World Health Organization
AHIMA	American Health Information Management Association
AIHW	Australian Institute of Health and Welfare
AMRO	Regional Office for the Americas of the World Health Organization
ATC/DDD	Anatomical Therapeutic Chemical Classification System with Defined Daily Doses
BIREME	Latin American and Caribbean Center on Health Sciences Information (PAHO)
	Centro Latino-Americano e do Caribe de Informação em Ciências da Saúde (OPAS)
	Centro Latinoamericano y del Caribe de Información en Ciencias de la Salud (OPS)
CAM	Complementary and Alternative Medicine
CAP	College of American Pathologists
CAT	Classifications and Terminology section of WHO Headquarters, Secretariat to the WHO-FIC Network
CBCD	Centro Brasileiro de Classificação de Doenças (Brazilian Collaborating Center)
CC	Collaborating Centre

CCAM	Classification Commune des Actes Medicaux
CCI	Canadian Classification of Health Interventions
CCI	La Classification Canadienne des Interventions
CCSA	Clinical Coders' Society of America
CDC	Centers for Disease Control and Prevention (USA)
CDISC	Clinical Data Interchange Standards Consortium
CEMECE	Centro Mexicano para la Clasificación de Enfermedades (Mexican Center for Classification of Diseases)
CEN	European Committee for Standardization
CEN TC 251	Technical Committee for Health Informatics
CEVECE	Centro Venezolano para la Clasificación de Enfermedades (Venezuelan Center for Classification of Diseases)
CHIMA	Canadian Health Information Management Association
CID (CID-10)	Classificação Estatística Internacional de Doenças e Problemas Relacionados à Saúde
CID-O-3	Classificação Internacional de Doenças para Oncologia – Terceira Edição
CIE	Clasificación Internacional de Enfermedades
CIE-10	Clasificación Internacional de Enfermedades y Problemas Relacionados con la Salud
CIE-O-3	Clasificación Internacional de Enfermedades para Oncología – Tercera Edición
CIE-9-MC	Clasificación Internacional de Enfermedades, 9a Revisión, Modificación Clínica (Spanish version of ICD-9-CM)
CIF	Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud
	Classificação Internationale du fonctionnement, du handicap et de la santé Classificação International de Funcionalidade, Incapacidade e Saúde

CIHI	Canadian Institute for Health Information
CIM (CIM-10)	Classification statistique internationale des maladies et des problèmes de santé connexes
CIM-10-CA	Classification statistique internationale des maladies et des problemes de sante connexes dixieme version, Canada
ClaML	Classification mark-up language
CPT	Current Procedural Terminology (U.S.)
CRAES	Comité Regional Asesor en Estadísticas de Salud (PAHO Regional Advisory Committee on Health Statistics)
CTNERHI	Centre Technique National d'Études et de Recherches sur les Handicaps et les Inadaptations (France)
DATASUS	Departamento de Informática do Sistema Único de Saúde (Brazil)
DG SANCO	Directorate General for Health and Consumer Affairs, European Commission
DIMDI	Deutsches Institut für Medizinische Dokumentation und Information
DPI	Disabled Peoples International
DRG	Diagnosis-Related Groups
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – 4 th Edition
EBM	Evidence-based Medicine
EBP	Evidence-based Practice
EC	Education Committee (WHO-FIC)
EDI	Electronic data interchange
EHR	Electronic Health Record
EIP	Evidence and Information for Policy (WHO cluster)
EMRO	Regional Office for Eastern Mediterranean of the World Health Organization
ETC	Electronic Tools Committee (WHO-FIC)

EU-HDP	European Union Hospital Data Project
EURO	Regional Office for Europe of the World Health Organization
FAQ	Frequently asked questions
FDC	Family Development Committee (WHO-FIC)
FDRG	Functioning and Disability Reference Group (FDRG)
FIC	Family of International Classifications
Forum-CIE	Group for discussions by e-mail of issues related to mortality and morbidity coding and related themes (in Spanish)
GIS	Geographic Information Systems
HDP2	Hospital Data Project (European Union)
HIMAA	Health Information Management Association of Australia
HL7	Health Level Seven - one of several American National Standards Institute (ANSI) -accredited Standards Developing Organizations (SDOs) operating in the healthcare arena. Health Level Seven's domain is clinical and administrative data.
HMN	Health Metrics Network
НОС	Heads of WHO Collaborating Centers for the Family of International Classifications
HRG	Healthcare Resource Group – used in the UK for casemix grouping
IARC	International Agency for Research on Cancer
IC	Implementation Committee (WHO-FIC)
ICD	International Classification of Diseases
ICD-9-CM	International Classification of Diseases, Ninth Revision, Clinical Modification (USA)
ICD-10	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification

ICD-10-CA International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada ICD-10-CM International Classification of Diseases, Tenth Revision, Clinical Modification (USA- not yet in use) ICD-10-GM International Classification of Diseases and Related Health Problems, Tenth Revision, German Modification ICD-10-PCS International Classification of Diseases, Tenth Revision, Procedural Coding System (USA – not yet in use) ICD-10-XM International Statistical Classification of Diseases and Related Health Problems, 10 th Revision, International Clinical Modification (under discussion) ICD-DA-3 Application of the ICD for Dentistry and Stomatology, 3 rd Edition ICD-Forum Group for discussions by e-mail of issues related to mortality and morbidity coding and related themes (in English) ICD-NA International Classification of Diseases, Neurology Application ICD-O-2 or 3 ICD for Oncology, 2 nd Edition; 0-3, 3 rd Edition ICE International Collaborative Effort [on automating mortality statistics, on Injury Statistics] sponsored by NCHS ICECI International Classification of External Causes of Injuries ICF International Classification of Functioning, Disability and Health ICF-CY International Classification of Health Interventions ICHI International Classification of Health Interventions ICHI International Classification of Impairments, Disabilities, and Handicaps (Revised in 2001 and published as International Classification of Functioning, Disability and Health) ICIS Institut canadien d'information sur la santé (also CIHI) ICN International Classification of Pormary Care ICPC International Classification of Primary Care		
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ICNP International Classification for Nursing Practice	ICIS	Institut canadien d'information sur la santé (also CIHI)
	ICN	International Council of Nurses
ICPC International Classification of Primary Care	ICNP	International Classification for Nursing Practice
	ICPC	International Classification of Primary Care

ICPM	International Classification of Procedures in Medicine (WHO 1978)
ICTM	International Classification of Traditional Medicine
IFHRO	International Federation of Health Records Organizations
IHRIM	Institute of Health Record and Information Management (UK)
IHTSDO	International Health Terminology Standards Development Organization
IMIA	International Medical Informatics Association
IND	International Nomenclature of Diseases (Not currently maintained)
INSERM	Institut National de la Santé et de la Recherche Medicale
INTERCOD	Computer-assisted program for self-instruction for coding mortality and morbidity with ICD-10 developed by the Mexican Center for the Classification of Diseases and PAHO.
interRAI	Collaborative Network; see RAI
IPSEC	International Patient Safety Event Classification
IRIS	A language-independent coding system based on MMDS
ISO	International Organization for Standardization
ISO 9999	Technical aids for persons with disabilities. Classification and terminology
JHA	Japan Hospital Association
JSMRA	Japan Society of Medical Record Administration
KMRA	Korean Medical Record Association
LOINC	Logical Observation Identifiers, Names and Codes™
MbRG	Morbidity Reference Group (WHO-FIC)
MDG	Millennium Development Goals
MedDRA	Medical Dictionary for Regulatory Activities
MF	Mortality Forum - Group for discussions by e-mail of issues related to mortality coding (in English)

MICAR	Mortality Medical Indexing, Classification and Retrieval
MIKADO	Swedish automated coding system
MMCB	Mortality Medical Classification Branch, NCHS
MMDS	Mortality Medical Data System (US automated coding system)
MRG	Mortality Reference Group (WHO-FIC)
NACC	North American Collaborating Center
NCCH	National Centre for Classification in Health (Australia)
NCECI	NOMESCO Classification of External Causes of Injuries
NCHS	National Center for Health Statistics (USA)
NCRA	National Cancer Registrars Association
NCSP	NOMESCO Classification of Surgical Procedures
NGO	Non-governmental organization
NHS	National Health Service (UK)
NIC	National Interventions Classification – currently under development but will ultimately replace OPCS-4 for surgical procedures and intervention for the UK
NLM	National Library of Medicine (U.S.)
NOMESCO	Nordic Medico-Statistical Committee
OECD	Organization for Economic Cooperation and Development
OMS	Organisation mondiale de la Santé Organización Mundial de la Salud Organização Mundial da Saúde
ONS	Office for National Statistics (UK) Formed in 1996 by a merger of the Central Statistical Office (CSO) and the Office of Population Censuses & Surveys (OPCS)
OPCS-4	The Office of Population Censuses and Surveys' Classification of Surgical Operations 4 th Revision. The current surgical procedures classification used in the UK

OPS (OPAS)	Organization panaméricaine de la Santé
	Organización Panamericana de la Salud
	Organização Pan-Americana da Saúde
PACC (UK)	Professional Association of Clinical Coders (UK)
РАНО	Pan American Health Organization
PHR	Personal Health Record
PROMIS	Patient-Reported Outcomes Measurement Information System
RAI	Resident Assessment Instrument
RI	Rehabilitation International
RIVM	National Institute of Public Health and the Environment (Netherlands)
RSG	Revision Steering Group
RUTENDON	Computer-based ICD-10 coding training, in Russian
SCB	Seleção de causa básica (automated system, Brazil)
SEARO	Regional Office for South East Asia of the World Health Organization
SEG	Small Executive Group of WHO-FIC Council
SNOMED	Systematized Nomenclature of Medicine
SNOMED CT	SNOMED Clinical Terms
SNOMED RT	SNOMED Reference Terminology
STC	Statistics Canada
STYX	French automated coding system
SWP	Strategic Work Plan (WHO-FIC)
TAG	Topical Advisory Group
TENDON	Computer-based training package for ICD-10 produced by the WHO Collaborating Centre for the Classification of Diseases, London.
TM	Traditional Medicine

TRANSAX	Translation of axes – used to create data appropriate for either record-based analysis or person-based analysis
TRG	Terminology Reference Group (WHO-FIC)
UC or UCOD	Underlying cause of death
UMLS	Unified Medical Language System (NLM)
UN	United Nations
URC	Update and Revision Committee (WHO-FIC)
WCPT	World Confederation for Physical Therapy
WFOT	World Federation of Occupational Therapists
WHO	World Health Organization
WHO CAT	World Health Organization Classification, Assessment, Surveys and Terminology
WHO CC	World Health Organization Collaborating Center
WHO-FIC	World Health Organization Family of International Classifications
WICC	WONCA International Classification Committee
WONCA	World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (The short name is World Organization of Family Doctors.)
WPA	World Psychiatric Association
WPRO	Regional Office for Western Pacific of the World Health Organization
XML	Extensible Mark-up Language
YLD	Years of life lived with disability
	Years of life lost through disability
YLL	Years of life lost
YLL	Years of life lost

May 2008